All proposed animal-based research, teaching, and testing activities must be clearly described in an animal use protocol, and approved by the President’s Committee on Animal Care before any animal-based work begins. This includes wildlife, herd and colony animals, animals used outside of Canada by UofR researchers, as well as animals in courses including those not associated with a degree, diploma, or certificate (e.g. professional development/ continuing education workshops) provided by faculty or other institutional personnel under the aegis of a certified institution.

[CCAC Requirement for Submitting an Animal Protocol](https://ccac.ca/Documents/Standards/Policies/Requirement_for_submitting_an_animal_protocol-ADDENDUM.pdf)

[CCAC Term of Reference for Animal Care Committees](https://ccac.ca/Documents/Standards/TORs/CCAC_Terms_of_Reference_for_ACC.pdf)

[CCAC Guidelines on: Animal Use Protocol Review](https://ccac.ca/Documents/Standards/Guidelines/Protocol_Review.pdf)

**Section 1 Project Personnel**

**Principal Investigator**

Last NameClick or tap here to enter text. First Name Click or tap here to enter text.

Department/FacultyClick or tap here to enter text. Position Click or tap here to enter text.

Email Click or tap here to enter text. Emergency Telephone Click or tap here to enter text.

**Personnel** *Complete for all individuals handling animals*, including PI.

1. Name Click or tap here to enter text. UofR ID Click or tap here to enter text.

Animal Care Course Click or tap to enter a date. Evidence of Practical Training Click or tap to enter a date.

List each of the animal related activities performed by this person, the [training](https://ccac.ca/Documents/Standards/Guidelines/CCAC_Guidelines_on_Training_of_Personnel_Working_With_Animals_in_Science.pdf) obtained, additional training required and how it will be obtained, and whether each of the activities will be performed independently or under supervision.

Click or tap here to enter text.

2. Name Click or tap here to enter text. UofR ID Click or tap here to enter text.

Animal Care Course Click or tap to enter a date. Evidence of Practical Training Click or tap to enter a date.

List each of the animal related activities performed by this person, the training obtained, additional training required, and whether each of the activities will be performed independently or under supervision.

Click or tap here to enter text.

3. Name Click or tap here to enter text. UofR ID Click or tap here to enter text.

Animal Care Course Click or tap to enter a date. Evidence of Practical Training Click or tap to enter a date.

List each of the animal related activities performed by this person, the training obtained, additional training required, and whether each of the activities will be performed independently or under supervision.

Click or tap here to enter text.

Are additional personnel added on the Personnel Appendix?  Yes  No

**Section 2 General Information**

Project Title Click or tap here to enter text.

Proposed Start Date Click to enter a date. Proposed End Date Click to enter a date.

Select the Purpose of Animal Use: Choose an item.

Provide key words (as per [Animal Use Data Form](https://ccac.ca/Documents/AUD/Instructions_for_Completion_of_the_CCAC_Animal_Use_Data_Form-Nov_2023.pdf))

Click or tap here to enter text.

**Lay Summary**

Using non-scientific terminology summarize the primary objective(s) and benefit(s) of the study

Click or tap here to enter text.

**Section 3 History of Procedures**

Does this protocol replace an existing AUP? Yes No *If no skip to Section 4*

*\* A final report (Closure Form) must be submitted and will accompany this AUP for review.*

Does this protocol propose procedures used in a previous AUP Yes No

Describe the effectiveness of the humane intervention and scientific endpoints including any proposed refinements to the endpoints.

Click or tap here to enter text.

Describe any complications, animal welfare, disease, that were encountered with the previous protocol or procedure.

Click or tap here to enter text.

List and explain the reason for any modifications or refinements to the protocol or procedure.

Click or tap here to enter text.

**Section 4 Funding and Peer Review**

**Funding**

Internal Funding  External Funding  Source and Program Click to enter text.

Funding Proposal Title

**Scientific Merit Review**

*Scientific peer review is a CCAC requirement. For protocols that have not received scientific peer review by the funding source, contact* [*Director.Research@uregina.ca*](mailto:Director.Research@uregina.ca) *to initial the peer review process. Scientific Peer Review must be completed before the AUP can be reviewed by the President’s Committee on Animal Care.*

Status of Peer Review Choose an item.

**Pedagogical Merit Review**

For teaching, training or course based protocols

Pedagogical merit review is a CCAC requirement. *For protocols that have not received pedagogical merit review, contact* [*Research.Ethics@uregina.ca*](mailto:Research.Ethics@uregina.ca) *to initial the pedagogical review process. Pedagogical Merit Review must be completed before the AUP can be reviewed by the President’s Committee on Animal Care.*

Has this this protocol received pedagogical merit review?

Yes  No

**Section 5 Category of Invasiveness**

[Categories of Invasiveness in Animal Experiments](https://ccac.ca/Documents/Standards/Policies/CCAC_Policy_statement_on_categories_of_invasiveness_in_animal_experiments.pdf) or [Wildlife Studies](https://ccac.ca/Documents/Standards/Guidelines/Categories_of_invasiveness.pdf)

A Experiments on most invertebrates or on live isolates

B Experiments which cause little or no discomfort or stress

C Experiments which cause minor stress or pain of short duration

D Experiments which cause moderate to severe distress or discomfort

E Procedures which cause severe pain near, at, or above the pain tolerance threshold of unanesthetized conscious animals

\*Category of Invasiveness will be changing to Category of Welfare Impact in 2030

<https://ccac.ca/Documents/Standards/Guidelines/CCAC_guidelines-Categories_of_welfare_impact.pdf>

**Section 6 The Three Rs**

As per the CCAC “Animals should be used only if the researcher's best efforts to find an alternative have failed. Those using animals should employ the most humane methods on the smallest number of appropriate animals required to obtain valid information” Refer to the CCAC microsite: [Three Rs](https://ccac.ca/en/three-rs/) & [Replacement, Reduction Refinement](https://ccac.ca/en/three-rs/replacement-reduction-refinement.html)

**Replacement**

Justify why sentient animals must be used for the project and how the applicant arrived at this conclusion.

Click or tap here to enter text.

Describe the possible replacement alternatives (non-animal methods, cell/tissue culture, computer simulations, audio-visual teaching methods, the replacement of sentient animals with animals of lower sentiency, etc. and justification if these are not to be employed.

Click or tap here to enter text.

**Reduction**

Provide a justification for the species and number of animals to be used over the course of the year and project emphasizing reduction of animal use within an appropriate experimental design while ensuring that sufficient numbers of animals will be used to fulfill requirements for statistical significance/scientific validity.

Click or tap here to enter text.

**Refinement**

Describe each of the refinements to be employed to protect and enhance animal health and welfare. Refinements may include:

- anesthesia and analgesia, including dosages and methods of use, for all invasive protocols; strong scientific justification must be provided for not using for invasive protocols:

-other medical treatments as appropriate, as indicated through veterinary consultations

-housing and husbandry methods, and environmental enrichment as a means to refine animal care; any limitations on environmental enrichment from that normally offered to animals in the institution, based on CCAC guidance, must be justified

- refinements to the procedures to be employed on the animals

- refinements to the length of time that animals will be held/used

Click or tap here to enter text.

**Section 7 Procedures**

See the following resources:

CCAC [General Guidelines](https://ccac.ca/en/guidelines-and-policies/the-guidelines/general-guidelines.html), [CCAC Types of Animal Guidelines](https://ccac.ca/en/guidelines-and-policies/the-guidelines/types-of-animal-guidelines.html)

[CCAC guidelines: Scientific procedures (Part A – Administration of substances and biological sampling)](https://ccac.ca/Documents/Standards/Guidelines/CCAC_Guidelines-Scientific_procedures-Part_A.pdf)

[CCAC guidelines: Scientific procedures (Part B – Analgesia, anesthesia, and surgery)](https://ccac.ca/Documents/Standards/Guidelines/CCAC_Guidelines-Scientific_procedures-Part_B.pdf)

Describe in DETAIL all procedures carried out on the animals. Refer to appropriate SOPs as much as possible. Include experimental groups, each specific procedure, and a timeframe for the sequences of procedures.

Click or tap here to enter text.

List and append all Standard Operating Procedures (SOPs) followed for this study.

Click or tap here to enter text.

**Section 8 Animals to be Used**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Animal Species &  Common Name | Source | Total # Animals/Year | Location of Animals | Location of Experiment and or Surgical Suite |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
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For additional species attach *Species Appendix.*

**Section 9 Wildlife /Field Studies**

*Complete this section if you are conducting field work or research with wildlife.*

*See the following* [*CCAC Guidelines: Wildlife*](https://ccac.ca/Documents/Standards/Guidelines/CCAC_Guidelines-Wildlife.pdf)

Describe how animals will be captured. If traps will be used include the plan for monitoring and the frequency. Include any procedures implemented for the capture of pregnant or lactating females.

Click or tap here to enter text.

Describe how animals will be restrained.

Click or tap here to enter text.

Describe how animals will be transported.

Click or tap here to enter text.

Describe any samples that will be collected or devices affixed to animals, including considerations for their weight.

Click or tap here to enter text.

Describe how animals will be housed or held and for how long.

Click or tap here to enter text.

Describe how animals will be assessed for release,

Click or tap here to enter text.

Describe considerations made for the capture of non-target species, ecological impacts, and potential injuries or mortality.

Click or tap here to enter text.

Does the study involve or have the potential to involve the capture of any animals which are listed as endangered, threatened, or a special concern under the [Species at Risk Act](http://laws.justice.gc.ca/eng/acts/S-15.3/)? [Species at Risk Public Registry](https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/species-list.html)

Yes  No

If yes, describe the measures taken to protect these species.

Click or tap here to enter text.

Under Saskatchewan’s [The Wildlife Act, 1998](https://pubsaskdev.blob.core.windows.net/pubsask-prod/1513/W13-12.pdf), a permit is required to conduct academic research or to survey wild species for purposes such as development pre-screening, baseline data collection or habitat assessments.

Will you be applying for an Academic Research Permit from the Government of Saskatchewan?

Yes  No

If yes, please forward the permit to [Research.Ethics@uregina.ca](mailto:Research.Ethics@uregina.ca)

If no, please justify why a permit is not required.

Click or tap here to enter text.

**Section 10 Survival Surgery**

*Complete this section if you are conducting a surgical procedure from which the animal is expected to recover*.

See the [CCAC guidelines: Scientific procedures (Part B – Analgesia, anesthesia, and surgery)](https://ccac.ca/Documents/Standards/Guidelines/CCAC_Guidelines-Scientific_procedures-Part_B.pdf)

Describe the procedure for preparation of the surgery subject.

Click or tap here to enter text.

Describe the surgical procedure. Include instrumentation, suture material, gauge of needle, level of asepsis

Click or tap here to enter text.

Describe the post-operative care provided.

Click or tap here to enter text.

Describe the duration, frequency and personnel responsible for monitoring the animals after surgery.

Click or tap here to enter text.

What criteria must be met to end monitoring?

Click or tap here to enter text.

If applicable, list any antibiotics to be administered including dosage, route of administration and justification.

Click or tap here to enter text.

Describe the procedures to be followed if an emergency occurs during surgery (e.g, fire alarm, chemical spill)

Click or tap here to enter text.

**Section 11 Endpoints**

[CCAC guidelines: Identification of scientific endpoints, humane intervention points, and cumulative endpoints](https://ccac.ca/Documents/Standards/Guidelines/CCAC_guidelines_scientific_endpoints.pdf)

What is the anticipated baseline mortality rate for each species? Describe how this was determined.

Click or tap here to enter text.

*Scientific endpoints are the earliest point at which the stated objective of the study will be reached (e.g. collection of data or biological material over a given time frame or achieving a learning objective).*

List the scientific endpoints for each species. For each species and endpoint include who will monitor the animals, the schedule for monitoring, appending any checklists (e.g. signs, symptoms), who will apply the endpoint, and the records that will be kept.

Click or tap here to enter text.

*Humaine intervention points describe the criteria (i.e. observable health impacts, physiological changes, or behavioural signs) that when reached, require an intervention to address negative welfare states. Humaine intervention points protect animal welfare and are not necessarily euthanasia. Examples include changing an animal’s physical or social environment; providing supportive care (e.g., suspend handling, hydration, nutritional support), antibiotics; pain relief; removing individual animals from the scientific activity temporarily, or euthanasia.*

List the humane intervention points for each species. For each species and endpoint include who will monitor, the schedule for monitoring, appending any checklists (e.g. signs, symptoms), who will apply the endpoint, and the records that will be kept.

Click or tap here to enter text.

Endpoints must be readily available and/or posted in the area where the animals are held or animal work takes place.

Describe how and where information regarding endpoints will be made available or posted.

Click or tap here to enter text.

Attach any documents or diagrams that will be posted with the AUP submission.

**Cumulative Endpoints**

Cumulative endpoints are the points at which individual animals should be considered to have reached their lifetime maximum involvement in scientific activities.

Will any animals be held long term Yes No

Will any animals undergo multiple scientific experiences Yes No

*If you have responded with a yes to either of these questions, the animals require a record of their lifetime experiences to assess their welfare and eligibility to continue in a renewed or new protocol. This will be part of the review process for the AUP. PCAC will work with you to develop and apply the relevant cumulative endpoint SOP(s) tailored to the species and scientific activities performed.*

[*CCAC Guideline on Categorizing Example Procedures by Welfare Impact*](https://ccac.ca/Documents/Standards/Guidelines/Categorizing_Example_Procedures_by_Welfare_Impact.pdf)

If animals will be held long term or undergo multiple scientific experience, list each of the experiences an animal will encounter (refer to the CCAC guidance linked above), providing a category of impact. (A-Positive, B-Mild Negative, C-Moderate Negative, D-High Negative, E-Severe Negative).

Click or tap here to enter text.

**Section 12 Euthanasia**

[CCAC Guidelines on Euthanasia of Animals Used in Science](https://ccac.ca/Documents/Standards/Guidelines/Euthanasia.pdf) & [Addendum](https://ccac.ca/Documents/Standards/Guidelines/Additional-Information-on-Effects-of-Euthanasia-Methods-on-Research-Results.pdf) & [FAQ](https://ccac.ca/Documents/Standards/Guidelines/Euthanasia_FAQ.pdf)

[CCAC Revised guidance on Euthanasia Using Carbon Dioxide](https://ccac.ca/Documents/Standards/Guidelines/CCAC_Revised_Guidance_on_Euthanasia_Using_Carbon_Dioxide.pdf) & [Implementation](https://ccac.ca/Documents/Standards/Guidelines/Implementation_of_the_CCAC_Revised_Guidance_on_Euthanasia_Using_Carbon_Dioxide.pdf)

For each species specify the name of the person performing euthanasia and the method of euthanasia.

Animal Species Person Performing Euthanasia Method of Euthanasia

Click or tap here to enter text. Click or tap here to enter text. Click or tap here to enter text.

Click or tap here to enter text. Click or tap here to enter text. Click or tap here to enter text.

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Does the method of euthanasia deviate from those described in the CCAC Guidelines on Euthanasia of Animals Used in Science?

Yes  No

If yes, provide a justification for the method of euthanasia.

Click or tap here to enter text.

If animals are not to be euthanized at the end of the study, describe the fate of the animals and the length of time that they are to be held.

Click or tap here to enter text.

SOPs are required for any methods of euthanasia used. List and append the SOPs for any euthanasia methods used.

Click or tap here to enter text.

**Section 13 Health and Safety**

Hazardous Agents

Specify each agent used or Not Applicable *(If not applicable skip to part 14)*

Biohazardous Click or tap here to enter text.

Infectious Click or tap here to enter text.

Biological Click or tap here to enter text.

Chemical/Carcinogen Click or tap here to enter text.

Radioactive Click or tap here to enter text.

Other: Click or tap here to enter text.

For each agent used describe the approval obtained for its use. Append any documentation of approvals.

Click or tap here to enter text.

Describe how the agent be securely stored, and how access will be limited.

Click or tap here to enter text.

Describe the precautions used by personnel in handling of hazardous agents.

Click or tap here to enter text.

Describe how the agent(s) and materials (eg animals) that have contact with the agent(s) will be disposed of.

Click or tap here to enter text.

Describe the emergency procedures in place.

Describe the potential zoonoses or physical injuries related to working with the target species.

Click or tap here to enter text.

Describe the protective measures that will be used for the prevention of zoonoses and or injury.

Click or tap here to enter text.

**Section 14 Declaration**

By submitting this protocol, you acknowledge:

All animals in this protocol will be maintained and used in accordance with the guidelines of the Canadian Council on Animal care and the University of Regina Care and Use of Animals Policy.

You have considered alternative procedures that do not involve the use of living animals.

You will use the minimum number of animals consistent with the objectives of the described research project.

You have carefully selected the species that you propose to use.

You will use care and handling techniques and facilities that are in accordance with CCAC guidelines.

You will notify the President's Committee on Animal Care of any revisions to this project.

You will keep copies of all approved protocols, revisions, and amendments in an accessible file.

Submit this AUP Form as a word document (do not convert to a PDF) and all associated SOPs from your URegina.ca email address to [Research.Ethics@uregina.ca](mailto:Research.Ethics@uregina.ca) with a CC to your department head.