University of Victoria

Office of Research Services
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Animal Use Protocol (AUP) Application Help Sheet – Research
Research Administration Information System (RAIS)

Before You Begin

This document provides instructions and guidance specifically for **new** AUP applications created and submitted via RAIS. If you have an approved AUP (PDF format), refer to the PDF AUP Help Sheet for guidance for amendments and renewals.

If this is your first AUP submission, we advise you to contact the Veterinary Director (ascvet@uvic.ca) and/or the Animal Ethics Liaison (animalethics@uvic.ca) to discuss your project and to request an application pre-review before you submit to the ACC. Review the pre-review FAQ for more information.

Acronyms

AUP - Animal Use Protocol
ACC - Animal Care Committee
CCAC - Canadian Council on Animal Care
PI - Principal Investigator
AEL - Animal Ethics Liaison (animalethics@uvic.ca)
SOP - Standard Operating Procedure
RAIS – Research Administration Information System

Policies and Guidelines, ACC Requirements and Deadlines

Policies and Guidelines

- Visit the Applying for animal ethics approval website to review all of the ACC policies and procedures.
- Visit the CCAC website to review national guidelines and policies.
- The ACC follows CCAC Guidelines on Animal Use Protocol Review.

ACC Requirements

- All required sections of the AUP application must be completed (required items are marked with an *).
- After approval, additional procedures or revisions to your AUP must be submitted as an amendment and approved by the ACC before the work is undertaken.
- Animal-based research must comply with Canadian Council on Animal Care (CCAC) and UVic guidelines and policies.
- Teaching protocols must be reviewed for pedagogical merit prior to submission.
- Research protocols must be peer reviewed for scientific merit prior to submission.

Deadlines

- ACC meetings are held on the second Friday of each month (third Friday in September and January); the ACC does not meet formally in July or August.
- Meeting dates and submission deadlines are set for the current academic year.
- Incomplete applications or those received after the deadline date will be deferred to the next meeting.

New Lab and/or Field Research Applications

- Use the research application for:
    - animal-based research projects conducted in a lab environment (Animal Care facilities and/or researcher lab facilities)
    - for projects that will combine lab and field components, or
    - for projects that are fully field research based.
- When you submit your AUP application on RAIS your designated signatory (departmental Chair/Dean) is notified to review your application and provide sign-off.
- After signatory sign-off, your application is submitted directly to the Animal Ethics Office via RAIS.

New Teaching Applications

- Use the teaching application for:
    - animal-based projects conducted for teaching and training programs
- When you submit your teaching AUP application on RAIS your designated signatory (departmental Chair/Dean) is notified to review your application and provide sign-off.
- After signatory sign-off, your application is submitted directly to the Animal Ethics Office via RAIS.

Regular Amendment of an Approved RAIS AUP Application

- RAIS AUPs can be amended with the "+Update" button on the AUP summary page.
- A PI must initiate the amendment.
- Re-submit your amended AUP via RAIS to the Animal Ethics Office.
- Sign-off by a signatory is not necessary for amendments.
- For detailed guidance see RAIS Updates Helpsheet.

Expedited Minor Amendment of an Approved RAIS Application

- The Veterinary Director can approve expedited minor amendments on behalf of the ACC.
- Expedited minor amendments can be initiated when the PI selects the "+Update" button on the AUP summary page.
- Re-submit your amended AUP via RAIS to the Animal Ethics Office for review by the Veterinary Director.
- Sign-off by a signatory is not necessary for expedited minor amendments.
- For detailed guidance see RAIS Updates Helpsheet.

Renewal of an Approved Application (With or Without Amendments)

- RAIS AUPs can be renewed with the "+Update" button on the AUP summary page.
- Approved protocols expire after their third renewal and must be submitted as “new” at the end of every fourth year (a new protocol ID will be assigned).
- For detailed guidance see RAIS Updates Helpsheet.

Team Member Changes to an Approved Application

- Researchers, lab members, and/or teaching assistants who intend to handle animals must complete all required animal research education and training components **before** beginning work**.**
- New team members must complete the required animal education and training before they may be added to the AUP application (Section A).
- To initiate training for new team members, contact animaltraining@uvic.ca.
- Team member training will be recorded to the team member’s profile on RAIS.
- Submit an expedited minor amendment to make changes to your team members on an approved AUP.
- For detailed guidance see RAIS Updates Helpsheet.

Starting and navigating a RAIS AUP application

How to start a RAIS AUP application

- Refer to the "*Create an AUP application"* quick guide for visual instruction
- Sign in directly to RAIS using your NetLinkID and password, or access via Online tools.
- Access from off-campus requires use of the UVic VPN for remote access. If your computer or laptop is not connected to the VPN, you will receive an "Access Unavailable" message.
- From the RAIS homepage you can access funding, human ethics or animal ethics; choose *Go to animal ethics* to get started.
- To start a new research AUP application, select the *Start new application* button (top right corner of the screen) and then choose *Start research AUP application.*
- Only faculty may start a new application and act as a PI for a research project. If you are faculty and you do not see the Start new application button, contact animalethics@uvic.ca for assistance. Your RAIS permissions may need to be updated.
- If you have any issues accessing RAIS or questions about the research application, email animalethics@uvic.ca for guidance.

Navigating the RAIS application

- Sections:
  - The research application includes sections A – N. An overview of the questions and what information the ACC requires is detailed below, section by section.
  - To open each section and access section questions, click on the section row header.
  - Each section row header includes the section title and a status (e.g., not started, in progress, complete).
  - You may expand (open) or collapse (close) each section as needed by clicking on the section row header.
  - Commands to *Collapse all* or *Expand all* are located at the top right of the screen and will affect all sections.
  - We recommend working through each section in the order presented; however, in the pre-submission phase you may return and edit any section, in any order.
  - Refer to Research AUP – How to move from PDF to RAIS for instruction on how question information can be transcribed between AUPs in PDF format to RAIS applications.
- Saving your information:
  - You may save each section "in progress" or "as complete".
  - In pre-submission, you may return to sections saved as complete and make additional edits.
  - As you are working on the application, save your information often.
- Team member access:
  - To provide immediate access to the AUP application by your team members: go to Section A, list your Co-PI (if you have one), emergency contact and other research team members, designate their access (view or edit) and save as complete.
- Required information:
  - Required questions are indicated with an *.
  - If you miss a required question, you will receive an error message when you save as complete.
  - A summary of all information missing in the section is provided at the top of the section. The affected questions within the section are also highlighted in red, along with a prompt beside the question to clarify what is missing.

The AUP, section by section…

A. Research Team

1. Principal Investigator
    - Provide the name, position, and contact information of the UVic faculty member who is the Principal Investigator (PI) on the project.
    - Contact information for the PI must be provided.
    - PIs must complete all mandatory animal care education and training before working with animals; to initiate mandatory training contact animaltraining@uvic.ca.

2. Co-PI
    - One additional faculty member (internal or external to UVic) may be listed as Co-PI on the project.
    - The Co-PI will be able to view and edit the AUP application, view all team member training profiles, and give these same privileges to other members.
    - To be listed on the application, the Co-PI must have an active NetLink ID and must have completed all the mandatory animal care education and training.
    - Provide contact information for the Co-PI.

3. Emergency Contact (EC)
    - Designate a team member as your primary EC and provide their contact information.
    - Email animaltraining@uvic.ca for assistance with registering new team members, if not found in options list. Personnel must have completed mandatory animal care training to be listed.
    - Indicate whether the EC should have read or edit access to the AUP.
        - Edit access allows the EC to edit this application, view all team member training profiles, and give these same privileges to other members.
        - Read access does not allow the EC to view team member training profiles.
    - Alternate emergency contacts may be identified in A.4. Other research team members.

4. Other research team members
    - List all individuals involved in conducting this research project (e.g., additional co-investigators, research assistants, UVic students).
        - Edit access allows a team member to edit this application, view all team member training profiles, and give these same privileges to other members.
        - Read access does not allow a team member to view other members' training profiles.
    - Do not re-list the Co-PI in A.2. or EC in A.3.
    - Alternate emergency contacts may be identified by checking the box below the phone icon for the listed team member in the table.
    - To initiate animal care training for new research team members email animaltraining@uvic.ca for assistance.

B. Project information

1. Project title
    - Include the major species being used (e.g., rat, Atlantic salmon etc.) in the title.
    - The title must be unique and should provide a brief, succinct description of the project.

2. Provide a brief description of the study (2-3 sentences)
    - Use concise, lay (plain) language that the general public will understand (grade 8 reading level).
    - Do not use jargon (i.e., avoid technical, scientific or obscure terms).
    - Describe why it is important that the work you are proposing is performed, and why animals must be used.
    - Examples of helpful information to include: the species being used, diseases being considered, medicines being tested, the long-term impact on the environment, information about climate change, impacts of agricultural/aquaculture practices, and previously unknown information about the species under study.
    - This information may be used in response to media or other inquiries.

3. Research timelines
    - Provide the proposed start and end dates for the research described in this AUP application.
    - Normally, research occurs when funding is active (i.e., starts with the funding start date and ends before or at the funding end date).
    - No research may be undertaken until ACC approval is provided regardless of proposed start dates noted in the application.
    - Note: ACC review and approval timelines are generally four to six weeks from the submission date or possibly longer depending on the complexity of the application.
    - Enter dates in YYYY/MM/DD format (e.g., 2023/06/01).

4. Select Canadian Council on Animal Care (CCAC) keywords from each category for your project
    - From the options provided in the drop-down lists for each category, select all keywords that apply to your project.
    - If none apply, select *N/A*.

5. Is this a pilot project?
    - A pilot project is a relatively short and/or relatively small project required to gather information prior to a full study.
    - Pilot projects may be used to:
        - clarify the study design, endpoints, or testing procedures
        - establish the feasibility of working with a piece of equipment, a strain, a species, in a new remote location or using a new technique.
    - Pilot projects typically use fewer than 20 animals.
    - If you are unsure whether your project meets the criteria for a pilot project, contact animalethics@uvic.ca for additional information or guidance.

6. Field research
    - For field or wildlife research questions see:
        - Field research with animals UVic FAQ
        - Wildlife research CCAC FAQ
        - CCAC guidelines: Wildlife

    a. Is there a field component to the research?
        - A field component is research with live animals carried out in locations other than UVic facilities.
        - Confirm whether there is a field component to your research.
    b. Will the research be conducted exclusively in the field (no lab component)?

- Confirm whether the research will be conducted exclusively in the field.
- This application supports lab and/or field research exclusively.

c. Indicate the type of wildlife project.
   - Select from options available.

d. Provide licences and or permits permitting the work or capture.
   - Use the document upload to attach licenses or permits obtained.
   - It is the responsibility of researchers to ensure that all required licenses and/or permits are in place prior to conducting field research.
   - License and permit requirements vary widely between locations; researchers are encouraged to start this process early.
   - Examples of field licences and/or permits include (but are not limited to):
     - First Nations Consultations (e.g., Work plan agreement, etc.)
     - National Wildlife Area Permit
     - Species at Risk Act (SARA) Permit
     - Fisheries & Oceans Canada SARA Permit (for prohibited aquatic species)
     - DFO Scientific Licence
     - BC Introductions and Transfers Licence
     - BC Ministry of Environment Scientific Fish Collection Permit
     - Parks Canada's Research and Collection Permit
     - Wildlife Act Permit, Ministry of Forests, Lands and Natural Research Operations
     - CRD Parks Research Permit

C. Project funding and peer review for scientific merit

1. What is the primary funding agency/project sponsor?
   - Select the primary funding source (e.g., NSERC, CIHR, etc.) from the list provided.
   - If primary funder is not listed, choose *other* and provide the name of the agency/project sponsor.

2. What is the funding status?
   - If you have received notification that you are to receive funding, or the funding is already in hand, select *Awarded*.
   - If you have applied for but not yet been awarded funds, select *Pending*.

3. Has the research been peer reviewed for scientific merit?
   - Indicate whether the research has been peer reviewed.
   - All research and teaching involving animals must be peer reviewed for scientific merit.
   - All Tri-Council agencies (SSHRC, NSERC, and CIHR) and many other organizations (e.g., MSFHR, The Arthritis Society, Heart and Stroke Foundation of Canada) provide a peer review for scientific merit.
   - This assessment is done independently of the Animal Care Committee.
   - If your research has not been peer reviewed, the ACC cannot review the AUP application. Contact animalethics@uvic.ca for direction.
   - See Instructions to Faculty Regarding Peer Review for Scientific Merit for additional information.

D. Purpose of animal use

1. Purpose of animal use
    a. Indicate if the application will include breeding.
    b. Select the nature of the research from the list provided.
        - Choose only one.
        - If more than open option seems relevant, see examples in the Instructions for the completion of the CCAC Animal Use Data Form: Appendix A for guidance.

E. Replacement alternatives and reduction

1. Describe why sentient animals must be used for this project and how you came to this conclusion.
    - The CCAC requires researchers to implement CCAC: The Three Rs (Replacement, Reduction, Refinement) when preparing animal-based research projects
    - See EQIPD for guidance on the principles of rigor and robustness in animal experiments
    - See NC3Rs for guidance on identifying, developing and using 3Rs technologies and approaches
    - Include references to databases you have used to confirm the presence or absence of alternatives

2. Are any replacement alternatives available for any aspect of the research project?
    - Replacement refers to "technologies or approaches that directly replace or avoid the use of animals"
    - For more information on replacement, see the CCAC website: The Three Rs – Replacement, Reduction, Refinement.
    a. Select available replacement alternatives from the list provided or choose other and provide details.
    b. Indicate whether you are planning to use any of the available replacement alternatives.
        - If yes, select the alternatives which will be used from the list provided.
        - If you are not using available replacement alternatives in the project you must provide a scientific justification.

3. Are any reduction-related approaches available for any aspect of the research project?
    - Reduction refers to "methods that help obtain comparable levels of information from the use of fewer animals"
    - For more information on reduction, see the CCAC website: The Three Rs – Replacement, Reduction, Refinement, Reduction strategies in animal research, or the PREPARE guidelines checklist
    a. Select available reduction approaches from the list provided or choose other and provide details.
    b. Indicate whether you are planning to use any of the reduction-related approaches.
        - If yes, select the approach which will be used from the list provided and provide some general information.
        - If you are not using reduction approaches in the project, you must provide a scientific justification.

F. Animal use numbers

1. Indicate which protocol year the animal number information is applicable to?

- New protocol applications – select *Year 1* from the list and provide animal use numbers in F.2. for the first year of the research only.
- Renewals – select the next protocol year and update animal use numbers in F.2. for the year ahead.
- Amendments – do not change the protocol year.

2. Provide requested information for animals required for research
    - The ACC expects that experiments are designed carefully to provide both realistic and justifiable numbers.
    - The ACC encourages the implementation of strategies to reduce the number of animal experiments conducted and the number of animals needed.
    - Researchers are encouraged to review the CCAC: The Three Rs and the NC3Rs Experimental Design Assistant.
    - Choose the appropriate category(ies) for your research animals (a. mammals, b. aquatic/amphibian, or c. field) and click *Add new* below the category to add records.
    - For each record, respond to all the questions for the relevant species/strain.
    - Each record can be collapsed after all questions in the record are answered. When collapsed, the header row will contain critical information pertaining to each animal/strain.
    - Records can be re-ordered by "grabbing the row" – click on the three horizontal rows on the left-hand side of the header row and drag up or down to re-order as necessary.

    a. Mammalian species used in the lab
        i. Choose species from options (mouse, rat, or rabbit). Common name and scientific name will auto-fill. Provide strain information and indicate if transgenic, knockout or mutant (complete and upload a transgenic information sheet if applicable).
        ii. Describe the rationale for using this specific species/strain.
            - Why did you choose this species/strain for your project? Consider characteristics that influenced the selection like body size, relevant genetic modifications, naturalized species in the area, data from previous studies, and unique anatomic or physiological features etc.
            - Keep rationale brief (under 2000 characters).
            - Animal cost is not an appropriate rationale for choosing a species/strain.
        iii. Total number of animals acquired within this year of the protocol from all sources.
        iv. Supplier/source
            - Indicate source by clicking the box, choose all that apply, and answer follow up questions for each source box selected.
        v. Preferred housing locations
            - Indicate the preferred location for housing your animals (BWC, MSB or a lab). Note that if you plan to house animals outside of purpose-built space for more than 12 hours, scientific justification must be provided in Section I.4.
        vi. Special housing requirements
            - Detail special housing requirements like containment, biosafety or modifications from standard practices. Note that welfare assessment and scientific justification for restrictions must be described in-depth in sections H. and I. and do not need to be discussed here.
        vii. Maximum number of cages used to house animals at the same time
            - This information assists with the management of the animal housing facility.
            - Be sure to include animals kept for any purpose.
            - Contact acshouse@uvic.ca if you need assistance determining the # of cages.

viii. Experimental location(s)
    - Choose all that apply.

ix. Number of animals used within this year of the protocol
    - Indicate females/males used for breeding, experiment and/or euthanized.
    - If the same animals are used for breeding and experiment, count them under one category here and explain in x.
    - Total animals used is auto calculated based on your inputs.
    - If total animals used does not match total acquired (iii.) describe the purpose of extra animals (e.g., held for future years' use) or sources of additional animals in your explanation of usage (x.)

x. Explain how you calculated your animal usage numbers.
    - Explanations involving multiple related animal groups may be provided in F.2.d below and referenced here (e.g., "See F.2.d for explanation involving this species/strain"). No need to duplicate explanations. Provide an explanation here or in F.2.d. whichever is most appropriate for your project.
    - Statistical power calculations are encouraged.
    - If you wish to attach related documents, use the upload provided.
    - Show the number of experimental and control groups, expected failure rates, cull rates, and repetitions that factor into your calculated total.
    - Describe your reduction strategies.
    - Provide an estimate of the percentage of experimental animals is being calculated as a "buffer" for each aspect of the experimental timeline, if applicable, and explain how you arrived at these estimates.
    - If sourced from breeding within this protocol, include the expected percentage bred that will be suitable for use.

b. Aquatic and amphibian species used in the lab

i. Species
    - Provide common name, scientific name, and strain information if applicable
    - Choose developmental stage(s) from list or provide a range (e.g., "fry to adult" by typing the information. Create a separate record for each group acquired at a different developmental stage.
    - Indicate if transgenic, knockout or mutant (complete and upload a transgenic information sheet if applicable).
    - Indicate if this species is protected under the Species at Risk Act or a similar international law.
        1. See Schedule 1 of the Species at Risk Act for reference and upload all relevant licences and permits to Section B.7

ii. Describe the rationale for using this specific species/strain.
    - Why did you choose this species/strain for your project? Consider characteristics that influenced the selection like body size, relevant genetic modifications, naturalized species in the area, data from previous studies, and unique anatomic or physiological features etc.
    - Keep rationale brief (under 2000 characters).
    - Animal cost is not an appropriate rationale for choosing a species/strain.

iii. Provide total number of animals acquired within this year of the protocol from all sources.

iv. Supplier/source
    - Indicate source by clicking the box, choose all that apply and answer follow up questions for each source box selected.
    - Indicate the preferred location for housing your animals (OAU, Petch or Lab).

Choose all that apply. Note that if you plan to house animals outside of purpose-built space for more than 12 hours, scientific justification must be provided in Section I.4.
    - If you will hire someone to do field collection of the target species on your behalf, choose the "*Collected in the field…*" option and provide the name of the contractor in the details of your collection procedures in section H.3.
v. Special housing requirements
    - Detail special housing requirements like containment, biosafety or modifications from standard practices. Note that welfare assessment and scientific justification for restrictions must be described in-depth in sections H. and I. and do not need to be discussed here.
vi. Maximum number of animals housed at the same time.
    - This information assists with the management of the animal housing facility.
    - Be sure to include animals kept for any purpose.
    - Total housed at the same time will be auto calculated based on your prior inputs.
vii. Experimental location(s)
    - Choose all that apply (OAU, Petch or Lab).
viii. Number of animals used within this year of the protocol
    - Include animals used for experimentation, breeding and/or euthanized for wrong sex, health problems etc.
    - Total animals used is auto calculated based on your prior inputs.
    - If total animals used does not match total acquired (iii.) describe the purpose of extra animals (e.g., held for future years' use) or sources of additional animals in your explanation of usage (x.)
ix. Explain how you calculated your animal usage numbers.
    - Explanations involving multiple related animal groups may be provided in F.2.d below and referenced here (e.g., "See F.2.d for explanation involving this species/strain"). No need to duplicate explanations. Provide an explanation here or in F.2.d. whichever is most appropriate for your project.
    - Statistical power calculations are encouraged.
    - If you wish to attach related documents, use the upload provided below the text box.
    - Show the number of experimental and control groups, expected failure rates, cull rates, and repetitions that factor into your calculated total.
    - Describe your reduction strategies.
    - Provide an estimate of the percentage of experimental animals is being calculated as a "buffer" for each aspect of the experimental timeline, if applicable, and explain how you arrived at these estimates.
    - If sourced from breeding within this protocol, include the expected percentage bred that will be suitable for use.

c. Animals used in the field
i. Species
    - Provide common name and scientific name.
    - Choose developmental stage from list. Create a separate record for each group acquired at a different developmental stage.
    - Be sure to include separate records for each species that may be encountered as by-catch.
ii. Indicate if the species is protected under the Species at Risk Act or similar international law.
    - For reference, see Schedule 1 of the Species at Risk Act
    - Licenses and permits must be uploaded in Section B.6.

iii. Provide observation / experimental location(s).
iv. Indicate if these animals are required for your project or are they encountered as by-catch only?
    - If bycatch is selected, outline the that precautions will be taken to avoid capturing vulnerable animals and what action will be taken if these animals are captured.
v. Provide number of researcher-animal interactions likely to occur over one field period.
    - Include all animals that you expect to observe, capture and release, experimentally manipulate, or capture and euthanize in the field, over one field period.
vi. Provide total number of research-animal interactions within this year of the protocol.
    - Include all animals that you expect to observe, capture and release, experimentally manipulate, or capture and euthanize in the field, over the full year of the protocol.
vii. Explain how you calculated your animal usage numbers.
    - Explanations involving multiple related animal groups may be provided in F.2.d below and referenced here (e.g., "See F.2.d for explanation involving this species/strain"). No need to duplicate explanations. Provide explanation here or in F.2.d. whichever is most appropriate for your project.
    - Statistical power calculations are encouraged.
    - If you wish to attach related documents, use the upload provided.
    - Show the number of experimental and control groups, expected failure rates, cull rates, and repetitions that factor into your calculated total.
    - Describe your reduction strategies.
    - Provide an estimate of the percentage of experimental animals is being calculated as a "buffer" for each aspect of the experimental timeline, if applicable, and explain how you arrived at these estimates.
    - In the case of field studies there may be incomplete observations. Considerations such as these should be incorporated in your calculation of the number of animals you will need per year.
    - Field researchers may find the NC3Rs Experimental Design Assistant helpful as a reference

d. Explanation of animal usage numbers that apply across multiple animal species/strains (be sure to reference in the strain records in F.2.a/b. or c).
    - If the animal usage explanation applies across multiple animal species/strains then provide one explanation here and reference this explanation in the individual strain records above.
    - No need to duplicate effort, if you have already provided explanations for individual strains/species, then indicate this in F.2.a/b/c. e.g., "explanation of animal usage numbers provided above."

3. Will you require ACS housing for invertebrates, embryos/eggs, or other animals not governed by CCAC guidelines?
    - If ACS housing is required, contact acshouse@uvic.ca as soon as possible to discuss your housing needs and to ensure space is available.

G. Facility and husbandry procedures

1. Select all of the Animal Care Services (ACS) facility and husbandry procedures that apply to your research project.
    - Click on a category heading (a. – g.) to open and select all facility and husbandry procedures that apply from that category by checking the boxes.

- Invasive procedures on live animals are not included in this section. These will be detailed in Section H.
- For reference, see the entire library of Approved SOPs.

2. List any additional facility or husbandry SOPs to be used in the project not listed and selected in G.1.
   - New SOPs are being developed all the time and may not have been added to the checklist above yet. List them here. Include the SOP # and the title of the SOP.

3. If ACS Staff will be assisting with the listed procedures, check "yes" and describe the role of the ACS staff in the performance of the procedures.

H. Description of Procedures

***IMPORTANT**: Questions in Section H have changed effective December 2024. If you are starting a new research AUP application after this date, your application will include the revised version of Section H., proceed to guidance below (page 16) for **H. Description of Procedures (Revised – December 2024)**.*

1. Does the protocol involve multiple research components or objectives?
   - Identification of the components or objectives of this project should not be confused with experimental procedures. You will be asked to list your experimental procedures in H.3. This question helps the ACC to understand the complexity of your project.
   - If the project includes one set of experiments focused on a single objective choose *one component/objective*.
   - If the project is "omnibus" in nature, i.e., has multiple branches or investigative questions, choose *multiple components/objectives*.
   - *Note:* Breeding is its own separate component.
   - If you selected multiple components or objectives then name and briefly describe each component in the table.
   - New rows may be added to the table by clicking *+Add new*.
   - For each added row, the component name is pre-filled with a letter identification (A, B, C etc.); you may use these letters for identification or add a more descriptive name if you wish.
   - Component descriptions should be brief and focused.
   - Respond to the final part of this question by confirming whether the project components are interrelated and conditional or whether they are fully independent of each other.

2. Provide an overview of your experimental plan by describing the experimental pathway for your research animals.
   - For this overview, focus on the experimental pathway of your research animals by detailing the most invasive sequence any individual animal would experience, and include an experimental timeline.
   - The overview should provide the ACC with the context for the experimental procedures which you will describe in H.3 below.
   - If you are breeding animals, include details on breeding as they impact the experimental plan.
   - If your protocol includes multiple research components (identified in H.1.) clearly describe any interdependences between the components.
   - An experimental timeline and/or diagrams may be provided as separate documents and uploaded via the upload button below the text box. These are very helpful for the ACC.

3. Describe all procedures or techniques performed by your team on live animals.
   - This question has two parts: part a. covers standardized procedures and part b. covers lab-specific or other procedures.
   - You may need to access the Approved SOP Library to review the standardized SOPs available.
   - Facility and husbandry procedures are covered in Section G, do not include them here.
   - Euthanasia procedures are covered in Section K, do not include them here.
   - For field studies, include observation events in H.3.b.

   a. Standardized procedures
      - These are standardized procedures performed on live animals which are detailed in UVic SOPs.
      - Choose all that apply to your project from the list provided.
      - Important: To select a standardized procedure, click on *Select standard procedure* to open the drop-down list (procedures are listed by animal, procedure, and SOP#).
      - Scroll down the list and select the appropriate procedure, the title and SOP# will auto fill to the row.
      - Each standardized procedure selected has 3 additional questions to answer:

      i. Are there exceptions or lab-specific modifications to the procedure as written in the SOP for any of your research components?
         - If so, provide details in the text box provided when you select *yes*.

      ii. Indicate the category of welfare impact for this procedure.
         - Formerly called “categories of invasiveness”.
         - If you are unsure, review the linked CCAC document, many examples are provided.

      iii. Select who will perform this procedure.
         - Team members listed in Section A of the AUP application will show here.
         - Select a team member by checking the box beside their name.
         - By selecting a team member you are confirming that they have the appropriate training to conduct the procedure.
         - You can verify training by clicking on the profile link beside the team member’s name and reviewing the completed ACS training (training is listed under the training tab).

   b. Lab-specific and other procedures
      - List all lab-specific procedures performed on live animals here, in the order they will be performed.
      - Click *+Add new* to add a procedure
      - SOPs are an excellent way of standardizing and refining procedures, facilitating training, and expediting AUP submissions - contact animalethics@uvic.ca for more information and guidance on how to develop lab-specific SOPs.
      - Each procedure row has 4 questions:

      i. Provide a procedure name (should be brief and specific).

      ii. SOP approval status - indicate whether there is an SOP for this procedure or not. If so, indicate the status: ACC approved, new SOP under review by the ACC or an amended SOP under review by the ACC. If you have an SOP#, provide it where indicated. If the status is approved, this is all that is necessary. For any of the other options, provide a brief summary of the procedure.

      iii. Indicate the category of welfare impact for this procedure.
         - Formerly called “categories of invasiveness”.
         - If you are unsure, review the linked CCAC document, many examples are provided

which will help you assess the welfare impact.

iv. Select who will perform this procedure.
   - Team members listed in Section A of the AUP application will show here.
   - Select a team member by checking the box beside their name.
   - By selecting a team member you are confirming that they have the appropriate training to conduct the procedure.
   - You can verify training by clicking on the profile link beside the team member's name and reviewing the completed ACS training (training is listed under the training tab).
   - Please provide a name for the commercial contractor, if selected.

4. Are you withholding anesthesia for any normally painful procedures in any of your research components?
   - It is expected that appropriate anesthesia is provided for procedures that cause pain. If your project requires withholding (not giving) anesthesia, you must provide a scientific justification to the ACC.

5. Are you withholding analgesia for any normally painful procedures in any of your research components?
   - It is expected that appropriate analgesia is provided for procedures that cause pain. If your project requires withholding (not giving) analgesia you must provide a scientific justification to the ACC.

6. Scientific endpoints
   a. What is the maximum experimental duration or scientific endpoint for any single animal?
      - A scientific endpoint is the earliest point at which the stated objective of the scientific activity will be reached. This could be a terminal procedure, an age, a set time after initiating the experiment, achievement of particular values of a biological variable, etc. For reference, the PDF version of the application, the terminology used for this was "experimental endpoints".
      - See CCAC guidelines: Identification of scientific endpoints, humane intervention points, and cumulative endpoints: section 2.1.1 for guidance on determining scientific endpoints.
      - Describe the duration/endpoints for each research component/objective, and for both male and female breeding animals.
      - Include number of matings, number of births, age, body condition, breeding complications, etc.
      - If this is an aging study, indicate maximum age at which an endpoint will be reached.
      - Include cumulative endpoints for animals involved in multiple research components.
   b. Are your chosen endpoints consistent with CCAC guidelines?
      - If your endpoints are not consistent with CCAC guidelines, you must provide a scientific justification to the ACC.

7. Describe signs, symptoms, behaviours, measurements, etc. that will initiate humane intervention points and describe the interventions?
   - Interventions may include medications, additional health supports, euthanasia, etc.
   - Include details for breeding animals, if applicable.
   - See CCAC guidelines: Identification of scientific endpoints, humane intervention points, and cumulative endpoints: section 2.1.2 for definitions and guidance on choosing humane intervention points.

- Attach supporting documentation such as morbidity scoring charts, templates, assessments, rubrics, etc. using the upload button below the text box.
- A list of signs/symptoms and human interventions are provided in the application, click on *See examples*.
- Indicate what treatments will be authorized, by whom they will be authorized and undertaken, and how that decision will be made.

8. Animal welfare assessment
    a. Describe your plan for monitoring and assessing the welfare of animals in experiments.
        - For further information on welfare assessment see CCAC guidelines: Animal welfare assessment and CCAC guidelines: Wildlife, section 11.
        - Welfare assessment can be combined with other monitoring or experimental activities.
        - Include details on who is responsible, frequency/duration of monitoring, what is assessed, and how, where and by whom assessment data will be recorded.
        - Checklists or templates including species-specific welfare parameters and monitoring points are encouraged, these may be uploaded via the upload button below the text box.
        - Welfare assessment plans for breeding or stock animals must be provided separately in part c. below.
        - The ACS veterinarian and technical staff can assist with the development of an animal welfare assessment plan.
        -
    b. Is your animal welfare assessment plan for experimental animals consistent with CCAC guidelines?
        - If animal welfare assessment plan for experimental animals is not consistent with CCAC guidelines, you must provide a scientific justification to the ACC.
    c. Describe your plan for monitoring and assessing the welfare of breeding and/or stock animals not currently in an experiment.
        - See CCAC guidelines: Animal welfare assessment.
        - Welfare assessment can be combined with other monitoring or experimental activities.
        - Include details on who is responsible, frequency/duration of monitoring, what is assessed, and how, where and by whom assessment data will be recorded.
        - Checklists or templates including species-specific welfare parameters and monitoring points are encouraged, these may be uploaded via the upload button below the text box.
        - The ACS veterinarian and technical staff can assist with the development of an animal welfare assessment plan.
    d. Is your animal welfare assessment plan for breeding and or stock animals consistent with CCAC guidelines?
        - If animal welfare assessment plan for breeding and/or stock animals is not consistent with CCAC guidelines, you must provide a scientific justification to the ACC.

9. List anticipated complications and % of animals expected to experience complications.
    - Be specific when describing anticipated complications.
    - For each research component/objective, provide separate estimates for different animal types: experimental, breeding, stock, and by-catch animals by adding table rows for each type.
    - Examples of complications related to experiments and unrelated to experiments are provided in the application. Click on *See examples* to open the list.
    - Include health conditions that are purposefully induced by experiments.
    - This number can be estimated based on your experience, from data in the literature,

experience of ACS staff members or the veterinarian, or other means.

10. What is the baseline mortality (%) for each research component, objective, or other group of animals described in the protocol?
    - Mortality refers to animals found dead, animals euthanized as an intervention point, or animals that died or were euthanized as a result of complications from experimental procedures.
    - Include mortality rates for experimental, breeding and stock animals.
    - Excess healthy animals that are euthanized and all animals euthanized at the end of the study (experimental endpoints) should not be included in mortality estimates.

11. Will any animal experience more than one Category D or E welfare impact procedure in its lifetime?
    - Category D: Experiments which cause moderate to severe distress or discomfort.
    - Category E: Procedures which cause severe pain near, at or above the pain tolerance threshold of anesthetized conscious animals.
    - If you are unsure, review the linked CCAC document, for explanations and examples.
    - If any animal will experience more than one Category D or E welfare impact procedure in its lifetime, choose *yes* and provide a scientific justification.

H. Description of Procedures (Revised version – December 2024)

1. Provide an overview of the experimental pathways in your project.
    - An experimental pathway is a specific sequence of procedures that an animal will experience. Your project may have one pathway or many, and there may be connections from one pathway to another.
    - Create a separate row in the table for each distinct pathway that may be experienced by an animal.
    - A pathway ID is automatically assigned for each row added to the table (A, B, C etc.); if an alternate ID designation is preferred (1, 2, 3 etc. or other), the Pathway ID may be edited; if creating alternate IDs, ensure that they are used consistently throughout this section, as pathways IDs are related to questions H.2., H.8 and H.9 as well.
    - Create a separate row for breeding, and ensure to record which other pathways will use bred animals in the “connections to other pathways and early endpoints” column.
    - In the “sequence of procedures column”, summarize the series of events experienced by an animal:
        - Include non-invasive steps such as growth, aging, and procedure recovery, as well as euthanasia or release
        - Provide detailed descriptions of the procedures below in H.2
        - Provide relevant SOP numbers here to aid in cross-referencing.
    - In the “connections to other pathways and early endpoints column”, describe situations where an animal will be transferred between pathways or may not experience the complete sequence of procedures.
    - Experimental timelines and other diagrams are encouraged and may be attached as supporting documents using the upload feature.
    - For reference, see detailed examples of various animal pathways provided in the application, click on *See examples*….

2. Describe all procedures or techniques performed by your students and/or teaching team on live animals.

- This question has two parts: part a. covers standardized procedures and part b. covers lab-specific or other procedures.
- You may need to access the Approved SOP Library to review the standardized SOPs available.
- Facility and husbandry procedures are covered in Section G, do not include them here.
- Euthanasia procedures are covered in Section K, do not include them here.
- For field studies, include observation events in H.2.b.

a. Standardized procedures:
   - These are standardized procedures performed on live animals which are detailed in UVic SOPs.
   - Choose all that apply to your project from the list provided.
   - **Important**: To select a standardized procedure, click on *Select standard procedure* to open the drop-down list (procedures are listed first by animal, then procedure, and then SOP#).
   - Scroll down the list and select the appropriate procedure, the title and SOP# will auto fill to the row.
   - Each standardized procedure selected has the following additional questions to answer:
     i. Are there exceptions or lab-specific modifications to the procedure as written in the SOP for any of your experimental pathways?
        - If so, provide details in the text box provided when you select *yes*.
     ii. Indicate the category of welfare impact for this procedure.
        - Formerly called “categories of invasiveness”.
        - If you are unsure, review the linked CCAC document, many examples are provided.
     iii. What is the maximum number of times, with what frequency and over what total duration will a single animal experience this procedure?
        a. Provide details on the number of times per day, and over how many days an animal will experience this procedure.
     iv. Which experimental pathways make use of this procedure?
        a. See pathway IDs you provided in H.1
        b. Example response: “*This procedure is used in pathways A, C and F*.”
     v. Who will perform this procedure?
        - Research team members listed in Section A of the AUP application will show here in the list.
        - Select a team member by checking the box beside their name.
        - By selecting either specific team member(s) or selecting students, you are confirming that they have the appropriate training to conduct the procedure.
        - You can verify training by clicking on the profile link beside a team member’s name and reviewing the completed ACS training (all verified training is listed under the training tab).
     vi. Provide any other relevant procedural details that are not included in the responses above or in the SOP.

b. Lab-specific and other procedures
   - Detail all lab-specific or other procedures performed on live animals here, in the order they will be performed.
   - These will be procedures referenced in H.1 that have not already been listed in H.2.a

above.

- Click *+Add new* to add a procedure
- SOPs are an excellent way of standardizing and refining procedures, facilitating training, and expediting AUP submissions - contact animalethics@uvic.ca for more information and guidance on how to develop lab-specific SOPs.
- Each procedure row has several questions:
  i. Provide a procedure name (keep brief and specific).
  ii. SOP approval status.
    a. Indicate whether there is an SOP for this procedure or not.
      - If so, indicate the status: ACC approved, new SOP under review by the ACC or an amended SOP under review by the ACC.
      - If you have an SOP#, provide it where indicated.
      - If the status is approved, this is all that is necessary. For any of the other options, provide a summary of the procedure.
  iii. Indicate the category of welfare impact for this procedure.
    - Formerly called "categories of invasiveness".
    - If you are unsure, review the linked CCAC document, many examples are provided which will help you assess the welfare impact.
  iv. What is the maximum number of times, with what frequency and over what total duration will a single animal experience this procedure?
    a. Provide details on the number of times per day, and over how many days an animal will experience this procedure.
  v. Which experimental pathways make use of this procedure?
    a. See pathway descriptions provided above in H.1, list all that apply.
    b. Example response: "*This procedure is used in pathways A, C and F.*"
  vi. Who will perform this procedure.
    - Research team members listed in Section A of the AUP application will show here.
    - Select a team member by checking the box beside their name.
    - By selecting either specific team member(s) or selecting students, you are confirming that they have the appropriate training to conduct the procedure.
    - You can verify training by clicking on the profile link beside the team member's name and reviewing the completed ACS training (verified training is listed under the training tab).
  vii. Provide any other relevant procedural details that are not included above responses or in the SOP.

3. Are you withholding anesthesia within any experimental pathway where anesthesia would normally be required?
   - It is expected that appropriate anesthesia is provided for procedures that cause pain.
   - If yes: If your project requires withholding (not giving) anesthesia, you **must** provide a scientific justification to the ACC.
   - If no: If you are not going to be withholding anesthesia, provide a very brief description of anesthesia use.

4. Are you withholding analgesia within any experimental pathway where analgesia would normally be required?
   - It is expected that appropriate analgesia is provided for procedures that cause pain.

- If yes: If your project requires withholding (not giving) analgesia, you must provide a scientific justification to the ACC.
- If no: If you are not going to be withholding analgesia, provide a very brief description of analgesia use.

5. Scientific endpoints
    a. Describe the scientific and cumulative endpoints for each experimental pathway in your project.
        - A scientific endpoint is the earliest point at which the stated objective of the scientific activity will be reached. This could be a terminal procedure, an age, a set time after initiating the experiment, achievement of values of a biological variable, etc. For reference, in the PDF version of the teaching application, the terminology used for this was "experimental endpoints".
        - See CCAC guidelines: Identification of scientific endpoints, humane intervention points, and cumulative endpoints: section 2.1.1 for guidance on determining endpoints.
        - Include maximum age, number of matings and births, experimental duration, and total time housed in animal care facilities.
        - Include maximum number of classes and student interactions.
        - If animals are reused for multiple protocols or donated from another source, describe their previous experiences.
    b. Are your chosen endpoints consistent with CCAC guidelines?
        - If your endpoints are not consistent with CCAC guidelines, you must provide a scientific justification to the ACC.

6. Describe signs, symptoms, behaviours, measurements, etc. that will initiate humane intervention points and describe the interventions.
    - See CCAC guidelines: Identification of scientific endpoints, humane intervention points, and cumulative endpoints: section 2.1.2 for definitions and guidance on choosing humane intervention points.
    - Interventions may include medications, additional health supports, euthanasia, etc.
    - Include details for breeding animals, if applicable.
    - Attach supporting documentation such as morbidity scoring charts, templates, assessments, rubrics, etc. using the upload button below the text box.
    - For reference, a list of signs/symptoms and human interventions are provided in the application, click on *See examples…*.
    - Indicate what treatments will be authorized, by whom they will be authorized and undertaken, and how that decision will be made.

7. Animal welfare assessment
    a. Describe your plan for monitoring and assessing the welfare of animals in experiment
        - For further information on welfare assessment see CCAC guidelines: Animal welfare assessment and CCAC guidelines: Wildlife, section 11.
        - Welfare assessment can be combined with other monitoring or experimental activities.
        - Include details on who is responsible, frequency/duration of monitoring, what is assessed, and how, where and by whom assessment data will be recorded.
        - Checklists or templates including species-specific welfare parameters and monitoring points are encouraged, these may be uploaded via the upload button below the text box.
        - Welfare assessment plans for breeding or stock animals must be provided separately in

part c.
- The ACS veterinarian and technical staff can assist with the development of an animal welfare assessment plan.

b. Is your animal welfare assessment plan for experimental animals consistent with CCAC guidelines?
- If animal welfare assessment plan for experimental animals is not consistent with CCAC guidelines, you must provide a scientific justification to the ACC.

c. Describe your plan for monitoring and assessing the welfare of breeding and/or stock animals.
- See CCAC guidelines: Animal welfare assessment.
- Welfare assessment can be combined with other monitoring or teaching activities.
- Include details on who is responsible, frequency/duration of monitoring, what is assessed, and how, where and by whom assessment data will be recorded.
- Checklists or templates including species-specific welfare parameters and monitoring points are encouraged, these may be uploaded via the upload button below the text box.
- The ACS veterinarian and technical staff can assist with the development of an animal welfare assessment plan.

d. Is your animal welfare assessment plan for breeding and/or stock animals consistent with CCAC guidelines?
- If animal welfare assessment plan for breeding and/or stock animals is not consistent with CCAC guidelines, you must provide a scientific justification to the ACC.

8. List anticipated complications and the expected rates on incidence (%) within each animal group.
- The institutional veterinarian must be notified of interventions, including if euthanized for a humane intervention point.
- Provide a separate row in the table for each group of animals that may experience each complication at different rates.
- Be as specific as possible when describing anticipated complications.
- Provide separate estimates for different animal types: breeding, stock, experimental and by-catch animals by adding table rows for each type.
- Examples of complications related to experiments and unrelated to experiments are provided in the application. Click on *See examples…* to open the list.
- Include health conditions that are purposefully induced.
- This number can be estimated based on your experience, from data in the literature, experience of ACS staff members or the veterinarian, or other means.
- The Expected % column should only include complications that will be observed and reported within this protocol. Use the Comments column to provide rates expected after release, transfer, or adoption, if applicable.

9. What is the expected mortality (%) for each group of animals in this protocol?
- Mortality includes animals found dead or euthanized as a humane intervention point.
- Mortality does not include animals euthanized at scientific endpoints, for colony size management or for genotype generation.
- Every mortality must be reported to the institutional veterinarian, including if euthanized for a humane intervention point *(see CCAC guidelines on: Endpoints, section 2.2.3)*
- The Expected % column should only include mortality that will be observed and reported within this protocol. Use the Comments column to provide rates expected after release, transfer, or adoption, if applicable.
- Include separate mortality rates for experimental, breeding, stock animals and by-catch if

applicable.
- For field studies, each mortality should receive a post-mortem to determine cause of death

10. Will any animal experience more than one Category D or E welfare impact procedure in its lifetime?
    - Category D: Experiments which cause moderate to severe distress or discomfort.
    - Category E: Procedures which cause severe pain near, at or above the pain tolerance threshold of anesthetized conscious animals.
    - If you are unsure, review the linked CCAC document, for explanations and examples.
    - If any animal will experience more than one Category D or E welfare impact procedure in its lifetime, choose *yes* and provide a scientific justification.

I. Refinements

1. Are medical or supportive interventions permitted based on veterinary consultation?
    - If yes, in all situations, then no further explanation is required.
    - If there are situations in which medical or supportive interventions may not be allowed, or if no medical or supportive interventions may be allowed at all, then a scientific justification for withholding (not allowing) these interventions must be provided.

2. Are there limitations on the provision of species appropriate environmental enrichment?
    - Species-appropriate environmental enrichment refers to standard cage/tank enrichment.
    - See Animal Care Services Normal Housing Parameters and Environmental Enrichment Options for additional information.
    - If there are situations in which species appropriate environmental enrichment may be limited (Yes and No) or is fully limited (Yes), then a scientific justification must be provided.
    - If there are no limitations (No) on providing species appropriate environmental enrichment, then no further explanation is required.

3. Will normally group housed animals (mice, rats and many aquatic species) be housed alone for any reason?
    - If normally group housed animals will never be housed alone for any reason (No), no further explanation is required.
    - If normally group housed animals may be housed alone (Yes and No) or definitely will be housed alone (Yes), then a scientific justification is required.

4. Will you be housing animals outside of designated animal facilities (BWC, MSB, OAU and Petch) for more than 12 hours?
    - If animals will never be housed outside of designated animal facilities for more than 12 hours (No), no further explanation is required.
    - If there are situations where animals may be (Yes and No), or will definitely (Yes) be housed outside of designated animal facilities for more than 12 hours, then scientific justification and additional information must be provided.

5. Describe any additional refinements.
    - Refinement refers to any "modifications to husbandry or experimental procedures that minimize pain and distress for an animal" and also any "welfare-enhancing changes [i.e., environmental enrichment] made to the animal's living areas".
    - For more information on refinement, see the CCAC website: The Three Rs – Replacement, Reduction, Refinement.

- For field studies, include refinements to minimize impact on individual animals, populations, and the natural environment.

J. Drugs, chemicals, biologicals, anesthetic, and devices

1. Provide details on all substances administered to animals in the three categories (anesthetics and analgesics, clinical drugs, and all other substances).
    - Do not include agents used for euthanasia in Section J; list and provide details on agents used for euthanasia in Section K only.
    - If the relevant agent, solvent / diluent, or route is not included in the drop-down menu, type to enter a custom value.
    - Important: A Health Canada exemption is required to conduct studies with controlled substances; see Section L.1. for guidance and reporting on the use of controlled substances.
    - The Animal Care Services Formulary and Guidelines for Controlled substances acquisition and use are helpful resources for this question.

    a. Pre-anesthetic, anesthetic, and analgesic agents.
        - List all drugs that will be used to minimize pain, distress or discomfort.
        - Click *+Add new* to add rows to the table.
        - Provide all requested information for each agent: species, agent (see drop down options or type in custom), dosage, solvent / diluent (if applicable), volume, route (see drop down options), frequency (how often) and/or duration (how long), purpose (keep this very brief).

    b. Clinical drugs (including antibiotics).
        - List all pharmaceuticals that may be used to treat clinical signs (e.g., antibiotics, artificial tears, subcutaneous fluids, antiseptics, etc.).
        - Click *+Add new* to add rows to the table.
        - Provide all requested information for each agent: species, agent (see drop down options or type in custom), dosage, solvent / diluent (if applicable), volume, route (see drop down options), frequency (how often) and/or duration (how long), purpose (keep this very brief).

    c. All other substances administered to animals.
        - This category includes drugs, chemicals, and biologicals (including placebos, viruses, tumors, antigens etc.) that are administered to animals for experimental purposes.
        - Click *+Add new* to add rows to the table.
        - Provide all requested information for each agent: species, agent (see drop down options or type in custom), dosage, solvent / diluent (if applicable), volume, route (see drop down options), frequency (how often) and/or duration (how long), purpose (keep this very brief).

2. How will you ensure that the injectable agents listed in J.1.a. – c. are sterile before use?
    - In the text box, describe your processes for ensuring injectable agents listed are sterile before use.

3. Telemetry Devices
    a. Will you use telemetry devices attached to animals studied in the field?
        - Examples: VHF and satellite transmitters, data loggers, video cameras, depth gauges

    b. If yes, provide details:
        - Include specifics on attachment materials and placement (collar, backpack, etc.), size and weight, and the total percent of body weight this represents.
        - Justify the use of all telemetry devices and their mass, attachment location, and attachment methods in terms of meeting the research needs while minimizing negative

impacts on the animal.
- If investigators are implanting devices, scientific justification must be provided for why less invasive alternatives cannot be used.

K. Euthanasia

1. Describe the methods of euthanasia used for each animal species included in this protocol.
   - Refer to the CCAC Euthanasia Guidelines and Frequently Asked Questions for information on acceptable versus conditionally acceptable euthanasia methods, or contact the UVic Veterinary Director (acsvet@uvic.ca) for guidance.
   - See also CCAC Guidelines: Wildlife, section 13 for additional guidance specific to field research.
   - A Health Canada exemption is required to conduct studies with controlled substances; see Section L.1.

   a. Euthanasia methods designated **acceptable** by the CCAC (guidelines p.12-16).
      - Methods which are simple to perform and consistently produce death with minimal pain and distress.
      - For each acceptable method listed in the table, provide:
        - Species
        - SOP# of euthanasia SOP to be used
        - Primary method of euthanasia
        - Follow up method used to confirm or ensure death
        - Agent administered (dosage, solvent/diluent, volume)
        - Additional method description
        - Team members designated and trained to perform the procedure

   b. Euthanasia methods designated conditionally acceptable or granted special approval (guidelines p. 17-21).
      - Methods requiring scientific justification and trained personnel available to carry out the procedure.
      - For each acceptable method listed in the table, provide:
        - Species
        - SOP# of euthanasia SOP to be used
        - Primary method of euthanasia
        - Follow up method used to confirm or ensure death
        - Agent administered (dosage, solvent/diluent, volume)
        - Additional method description
        - Team members designated and trained to perform the procedure
        - Scientific justification for use of the conditionally acceptable method.

2. Indicate method(s) of final disposition of animals that will not be euthanized.
   - Choose all that apply from the checklist provided.
   - If not listed, choose other and provide detail.

L. Controlled substances and safety hazards

1. Will controlled substances be used in this study?
   - A Health Canada exemption is required to conduct studies with controlled substances (e.g., buprenorphine, pentobarbital, ketamine butorphanol, etc.).
   - For a complete list of controlled substances, refer to the Controlled Drugs and Substances

Act.

- If a controlled substance will be used, upload your license.
- Guidance documents: Guidelines Document: Controlled Substances Acquisition and Use and Health Canada information on exemptions.

2. Will hazardous agents be used in this study?
   - Hazardous agents include infectious or biological agents, cytotoxic drugs, carcinogens, radioisotopes, cells, other hazardous chemicals, etc.

   a. Indicate from the checklist which hazardous agents will be used in animals.
      - Choose all that apply.

   b. Indicate where animals will be housed after administration of hazardous agents.
      - If animals will be housed in an investigator/teaching lab or other location, provide the building and room number in the space provided.
      - Reminder: researchers must ensure that animal cages are clearly labeled with housing details at all times.

   c. Describe potential health risks posed by hazardous agents and the control measures that will be used to reduce these risks.
      - In the table provided, include all hazardous agents listed in Section J and Section K.
      - If an agent is not included in the drop-down menu, type to enter a new agent.
      - For each agent, describe health risks to humans working with animals (both team members and ACS staff) and risks to other animals in the facility.
      - For each agent used, detail all control measures, including:
        - descriptions of disposal methods
        - personal protection equipment (PPE) required
        - measures to minimize impacts on the environment and natural populations
        - other relevant control measures.
      - Safety Data Sheets must be uploaded to the protocol (see upload button) and must be current (i.e., no more than 3 years old).

   d. Will cells be injected or implanted into animals?
      - Examples of cells that may be injected or implanted into animals may include immune cells, tumors, pancreatic cells, organ transplants etc.
      - The ACC must assure that cell lines introduced into animals contain no pathogens that affect either humans or species housed in the facility. Note for instance that ATCC cell lines are sometimes tested for human pathogens, but not normally for rat or mouse pathogens.
      - The committee is looking for strong evidence that the cell lines being used provide no hazard to the health of humans or other animals. Such evidence could include serology reports from animals in which the cells were used previously, repeated use of the cell lines without untoward effects, appropriate veterinary certificates from institutions where such lines have been used extensively. The ACS veterinarian can provide information on specific testing available for cell lines (both human and animal).

3. Describe potential hazardous situations and the control measures that will be used to reduce risk.
   - Include all hazardous situations that pose potential health risks to humans, animals, or the environment.
   - Examples of hazardous situations include: animal handling hazards (scratching, biting or attacks), boating hazards (drowning), field hazards (tripping or falling), radiation exposure etc.

- For each hazardous situation, detail all control measures (i.e., how you will mitigate the risk).
- If you are 'working in remote locations' describe the plan that you have in place.

4. Indicate which research safety (OHSE) requirements are applicable to your research and confirm status.
    - See Occupational Health, Safety & Environment – Research safety for information and guidance regarding boating, scientific diving and fieldwork safety requirements.
    - Add new rows as necessary to indicate additional research safety programs relevant to the project.

M. List of uploaded documents

1. This section lists all the additional document uploads in the application and provides:
    - A hyperlink to the section of upload (if applicable)
    - File name and date of upload
    - Options to remove the upload.
2. Add additional uploads here that are not linked elsewhere in the application (e.g., appendices, supporting research papers, diagrams, **annual review forms**, expedited amendment forms, etc.)
3. **Do not** upload SOP attachments for SOPs referenced in Section G, H, or K. Approved SOPs should be referenced to the SOP number on the Approved SOP Library and new or amended SOPs must be submitted via email to animalethics@uvic.ca for ACC review.
    - If a new SOP or amendments to an approved SOP are proposed outside of the normal review schedule for an aligned AUP, the AUP must also be provided to the ACC as part of the application review package; SOPs will not be reviewed without an accompanying AUP.

N. Signatory/departmental sign-off

1. Signatory sign-off
    - Indicate the Chair/Director/Dean or their designate to provide sign-off on the application for submission.
    - To select a Chair/Director/Dean start typing their name and select the individuals' name from the drop-down list.
    - By signing off the application, the signatory is affirming appointment status of the Principal Investigator (PI).

PI Declaration and Submission Process

1. Once all sections of the application are complete and the signatory has been selected in section M., the PI may submit the application.
    - The PI will be asked to affirm the following prior to submission by clicking *I agree*:
        - *I have read this application and it is complete and accurate.*
        - *The research will be conducted in accordance with the University of Victoria and Canadian Council on Animal Care guidelines, regulations, policies and procedures governing the ethical conduct of research involving animals.*
        - *The conduct of the research will not commence until research ethics approval has been granted by the Animal Care Committee (ACC.*
        - *I will seek an amendment if this application requires modifications.*
        - *I understand that ACC approval is for one year only and I will seek renewal of this*

application annually.
    - *Adequate supervision will be provided for students and or staff involved in this project.*
  - To submit the application, the PI must click *Submit the application* which will notify the signatory that their sign-off is required.

2. Signatories will be prompted to sign in to RAIS to review and sign-off on the application.

3. After sign-off by the signatory, the application is submitted directly to the Animal Ethics Office via RAIS.

4. The AEL will confirm that the application is complete and will then forward the application for ACC review at the next meeting date.

5. Once reviewed, the ACC will provide a Notice of Review to the PI detailing whether the application was approved, approved with revisions, or not approved.