



The use of vertebrates or cephalopods in laboratories by members of the CCS community requires approval from the Community Colleges of Spokane (CCS) Institutional Animal Care and Use Committee (IACUC). Exceptions can be found in CCS Administrative Procedure 2.30.05-U Animal, Care Treatment and Use.

In order for a project to be approved, the IACUC must determine that it is ethically acceptable, not unreasonably duplicative and there are no acceptable alternatives. More information regarding the IACUC can be found in CCS Administrative Procedure 2.30.05-U. Faculty are required to reapply to the IACUC each time their research design significantly changes.

The information you provide in this application should be easily understood by a mixed audience and should include any pertinent details. Please note that CCS does not have approved facilities for housing birds and mammals. Researchers that need to house birds or mammals should find alternative facilities at other regional institutions of higher education.

Please complete all applicable sections. Expand each answer as needed to contain all pertinent information and include all applicable appendices. Print and submit one hard copy to the CCS IACUC Chair.

1. Principal Investigator/Instructor: _____
2. Address or Mail Stop: _____
3. Telephone and email contacts: _____
4. Title of Project: _____
5. Anticipated duration of project (give dates): _____
6. Project type, please check one: Teaching Research Other
7. Overview of proposed project: Please provide a description of the specific aims of the project. Include information on the hypothesis and/or rationale for the project, the objectives of the project and its significance. Cite key references. Please limit your response to 500 words, not including references.
8. Animal Population
 - a. State type and quantity of animals to be used: _____
 1. Species: _____
 2. Strain: _____
 3. Age: _____
 4. Sex: _____

b. Number: _____

c. Specify the source of the animals: _____

d. Will animals be bred or stock animals kept? Yes No

If so, where? _____

e. Justify the numbers of animals listed. According to Federal regulations, the IACUC needs assurance that a statistically robust, but not excessive number of animals is used in any research activity. Describe how the number of animals was determined:

f. Is this a duplicative project (i.e. has this project been performed before)? Yes No

If so, justify why you are repeating a previous project:

9. Consideration of alternatives. For each species and invasive procedure in the proposal, applicants are required to conduct an up-to date literature search specifically related to the proposed project. The search is meant to exclude the possibility of reasonable alternatives such as less sentient species, procedures that would be less invasive/painful, or non-animal techniques.

a. Indicate which source and specify the key words that were used in your search.

b. Why was this species selected?

c. Explain why non-animal alternatives cannot be used for this protocol.

d. Justify any procedure that may cause pain and/or distress.

10. Disposition of animal subjects

a. Euthanasia. If applicable, specify the method of euthanasia (i.e., anesthetic agent, dose, route of administration) for each species employed:

b. Disposition of animals not euthanized

11. Housing of animals

a. State building and room(s) for housing of animals:

b. Briefly describe the housing conditions (i.e., density, description of enclosure) and husbandry plans (i.e., schedule for feeding, changing bedding, water, etc.) for your subjects:

c. Will animals be transferred from one location to another? Yes No

If yes, please specify transportation arrangements, locations, and duration of transport, and reasons for the location change.

12. Animal Health Monitoring: Document how (including frequency) your subjects will be monitored for health problems:

13. Identify All Personnel Working With Live Animals. Provide the name and position of each employee involved.

14. Will animals be used for antibody production? Yes No
If Yes, Complete Appendix A. If No, Remove and Discard Appendix.

15. Will animals be used for tissue harvesting? Yes No
If Yes, Complete Appendix B. If No, Remove and Discard Appendix.

16. Will non-recovery procedures be performed? Yes No
If Yes, Complete Appendix C. If No, Remove and Discard Appendix.

17. Will recovery surgery be performed? Yes No
If Yes, Complete Appendix D. If No, Remove and Discard Appendix.

18. Will infectious agents, radioisotopes, carcinogens, or toxic chemical be used in live animals? Yes No
If Yes, Complete Appendix E. If No, Remove and Discard Appendix.

19. Will aversive conditioning be involved? (e.g., food, nutrient, or water restriction; sensory deprivation or prolonged restraint; foot shock or any aversive stimulus). Yes No
If Yes, Complete Appendix F. If No, Remove and Discard Appendix.

20. Are morbidity and/or mortality or unrelieved pain and/or distress expected during the course of the study aside from the planned euthanasia of the animals as specified in the protocol? Yes No
If Yes, Complete Appendix G. If No, Remove and Discard Appendix.

21. Will other procedures be carried out which are not included in the above sections? Yes No
If Yes, Complete Appendix H. If No, Remove and Discard Appendix.

22. List all training activities/programs that each individual who will be working with live animals has completed.

23. Declaration: I certify that the animals to be used in this proposal will be used in accordance with regulations and standards set forth by the United States Animal Welfare Act, National Science Foundation, The National Institutes of Health, the United States Department of Agriculture, and the Community Colleges of Spokane. I certify that any pain or discomfort to the animals will be limited to that which is unavoidable. To the best of my knowledge, the proposed project does not unnecessarily duplicate any other in the published literature. I certify that the use of non-animal procedures and less invasive, alternate techniques have been considered. I have concluded that the species, numbers of animals, and procedures proposed are the most appropriate for this project. I agree to visits from the IACUC.

Signature of Principal Investigator

Date:

**Appendix A
Antibody Production**

Complete a separate Appendix A for each species employed.

A1. State who will be performing the immunization procedures.

A2. State where the immunization procedures will be performed.

A3. State what species and how many animals will be used for antibody production.

A4. Immunization protocol.

a. State the antigen(s) that will be used.

b. State the numbers of sites, concentration per site, and volume per site.

c. State time, frequency, and duration of administration.

d. State route; intraperitoneal, intravenous, subcutaneous, or intradermal.

A5. Are adjuvants used?

Yes No

a. If yes, state type.

b. If complete Freund's adjuvant (cannot be injected intravenously or intradermally) or footpad injections (strongly discouraged), provide justification.

A6. Test Bleeds:

a. State frequency of sampling.

b. State amount collected at each sampling.

c. State method of sample collection.

**Appendix B
Tissue Harvesting**

B1. State who will be performing the procedures.

B2. State what species and how many animals will be used for tissue harvesting.

B3. State the location where harvesting of tissues will be performed.

B4. State what tissues are harvested.

B5. Describe procedure(s), including method of euthanasia. If an anesthetic is used provide dose, route of administration, and frequency.

Appendix C
Non-Recovery Procedures on Anesthetized Animals

C1. State who will be performing the procedures.

C2. State what species and how many animals will be used for non-recovery procedures.

C3. State the location where procedures will be performed.

C4. State the anesthetic(s) that will be used. Include drug, dose, route, and frequency.

C5. Describe supportive monitoring while animals are under anesthesia.

C6. How long will animals be maintained under anesthesia before euthanasia?

C7. Describe all procedures that will be carried out while the animal is alive.

Appendix D
Recovery Surgical Procedures

Complete a separate Appendix D for each species employed.

D1. State the species and number of animals that will be used for recovery surgical procedures.

D2. State the location where procedures will be performed.

D3. Pre-operative Procedures

a. State who is responsible for pre-operative care.

b. Are animals fasted? Yes No
If YES, state the length of time that food and water were each withheld.

c. Are pre-operative antibiotics given? Yes No
If YES, specify drug, dose, route, and frequency.

d. Are pre-operative anesthetics given? Yes No
If YES, specify drug, dose, route, and frequency.

e. Describe other pre-operative procedures (including hair/feather/fur/scale shaving/clipping; antiseptics used, CBC, physical exams, etc.).

D4. Anesthetic:

a. State who will be administering anesthetic.

b. Injectable. Provide drug, dose route, frequency, and duration.

c. Inhalant. Provide drug, concentration, duration, and method of delivery. Provide precautions used to protect personnel.

D5. How is the surgical plane of anesthesia determined and monitored?

D6. How, and with what, is the initial anesthetic dose supplemented, if necessary?

D7. Which vital signs (and how often) are checked during the surgical procedure?

D8. Describe supportive care (including fluids that are given and control of body temperature) during surgery.

D9. State who will be performing the surgery.

D10. Describe surgical procedures to be performed in sufficient detail to allow the IACUC to evaluate it. Include site(s) of incision, operative manipulations, method(s) and layer(s) of closure, suture materials, and suture patterns to be used.

D11. What is the anticipated duration of surgery?

D12. Are multiple surgery procedures performed?

Yes No

If YES, provided justification and length of time between surgeries.

D13. State what precautions are used to reduce risk of post-operative infection.

D14. Immediate post-operative procedures:

a. State who will be responsible for the immediate post-operative monitoring.

b. State where the animals will be monitored.

c. What specifically will be monitored?

d. How long after surgery will animals be monitored and with what frequency?

D15. Will operated animals receive monitoring after hours, holidays, or weekends?

a. State who will be responsible for daily monitoring.

b. In case of emergency, state contact person and telephone number where that person can be reached 24 hours a day.

D16. At what time post-operation will skin sutures or wound clips be removed?

D17. State who will be responsible for suture/wound clip removal.

D18. What is the length of survival after surgery?

D19. Describe possible adverse effects that may be anticipated as a result of the surgical procedures and the steps that will be taken to minimize the adverse effects.

Appendix E
Use of infectious/hazardous agents/substances

E1. State the species and number of animals that will be exposed to hazardous s agent(s).

E2. State what agent(s) will be used.

E3. State what dose is given per animal.

E4. State the type/class of agents used (e.g. teratogen, carcinogen, etc.).

E5. Is the agent shed into the environment?

Yes No

a. If YES, what is excreted and by what route?

b. If YES, how will material be disposed of?

c. If YES, what personnel safety procedures will be instituted?

E6. What personnel will be handling the hazardous agents?

E7. Who will be handling the animals once they have been exposed?

E8. Where will hazardous agents be used?

E9. Where will hazardous animals be housed?

E10. Will hazardous animals be transferred from one location to another?

Yes No

If YES, provide details of transport.

E11. How long will exposed animals be housed?

E12. Specify precautions to be used to reduce risk to personnel.

**Appendix F
Adverse Conditions**

F1. State the species and number of animals that will be used.

F2. State who will be performing the procedures.

F3. State where the procedures will be performed.

F4. Describe the adverse condition to be performed. Include duration.

F5. Provide special justification for the use of aversive conditioning, food/nutrient/water restriction, or sensory deprivation.

F6. What adverse effects/reactions, if any, are expected?

F7. How will animals be monitored for adverse effects/reactions?

F8. Describe the schedule for monitoring of adverse effects/reactions.

F9. State who will be carrying out the monitoring of subjects.

F10. Describe the management of adverse effects.

Appendix G
Morbidity and Mortality

G1. Provide justification for use of morbidity and/or mortality as an endpoint.

G2. Provide justification for unrelieved pain and/or distress.

G3. What are the possible adverse physiological, pathological or behavioral events that may occur as a result of this proposal?

G4. What will be done to alleviate pain or discomfort?

G5. If death is not an endpoint, but moribund, tumor burdened or morbid animals are endpoints, describe how these end points will be observed and handled.

G6. Documentation must be maintained that animals will be monitored three times daily. State who will be responsible for the monitoring.

G7. Indicate the staff member(s) (and their contact information) who will be available 24 hours a day in case of emergencies.

**Appendix H
All Other Procedures**

H1. State the species and number of animals that will be used.

H2. State who will be performing the procedures.

H3. State where the procedures will be performed.

H4. Describe handling and/or restraint of animals.

H5. State anesthetics that will be used, including drug, dose, route of administration, and frequency.

H6. State other medications/drugs that will be used, including drug, dose, route of administration, frequency and duration.

H7. Describe any additional procedures.

H8. What is the length of survival?

H9. State who will be carrying out the monitoring of subjects.
