Animal Use Protocol Application Help Sheet

NOTE: If you have never filled out an Animal Use Protocol (AUP) before, you are strongly advised to contact the Veterinary Director (acsvet@uvic.ca) for assistance. This will make the process easier, and will highlight any questions in advance that might be raised by the Animal Care Committee (ACC). Help is also available from the Animal Care Services Liaison (acsc@uvic.ca).

The use of animals for research or teaching is a privilege. Before a protocol to use animals in a project is approved, the work must be peer reviewed for scientific merit, the researcher must show that the use of animals is justified, and that the procedures to which the animals will be submitted will be carried out humanely and in accordance with the CCAC standards.

Before you begin.....

The UVic Animal Care Committee (UVic ACC) requires that:

- Forms are typed;
- Every section is completed;
- Additional procedures or revisions not present on your AUP be submitted as an amendment of the protocol before the revised work is undertaken;
- All protocols are valid for a total of four years, and are reviewed annually by the ACC;
- Animal-based research complies with Canadian Council on Animal Care (CCAC) and UVic guidelines;
- Research protocols be submitted on the form “Application to Use Animals for Research”
- Teaching protocols be submitted on the form “Application to Use Animals for Teaching”
- Teaching protocols are reviewed for pedagogical merit.

For a list of all ACC policies and procedures, please visit the Research & teaching with animals website.

Deadlines for submissions are to ensure deadlines are met for research and teaching:

- Submit protocols to the Animal Care Services Liaison, Office of Research Services, 10 days prior to the monthly ACC Meeting.
- The Committee meetings are generally held on the second Friday of each month. Check with the Office of Research Services for up to date meeting schedules.
- Incomplete applications or those received after the deadline date will be deferred to the next monthly meeting.
- Application submission due dates are listed on the web site of the Office of Research Services.

New Research Application

- The complete application, including the personnel form and all attachments, must be emailed to the Animal Care Services Liaison at acsc@uvic.ca.
- In addition, the first page with the signatures of the Department Chair and the Principal Investigator (PI) must be submitted to the Animal Care Services Liaison, Office of Research Services.
- The emailed application will NOT be processed until the original signature page is received.

**New Teaching Application**
- The PI’s department must review the complete application for pedagogical merit prior to submission for review by the ACC.
- Once approved for pedagogical merit, email the complete application with all attachments to the Animal Care Services Liaison at acsc@uvic.ca.
- In addition, the first page with the signature indicating pedagogical approval and the signatures of the Department Chair and the Principal Investigator must be submitted to the Animal Care Services Liaison, Office of Research Services.
- **The emailed application will NOT be processed until the original application is received.**

**Amendment or Continuation of an Approved Application**
- Using the current version of the original application (available on the [Animal research & teaching website](#)), make the necessary revisions.
- At minimum sections 1 and 5 must be revised.
- Any changes to personnel should be indicated on the personnel form.
- In addition, the first page with the signatures of the Department Chair and the Principal Investigator (PI) must be submitted to the Animal Care Services Liaison, Office of Research Services.
- Email the complete application, including all attachments, to the Animal Care Services Liaison at acsc@uvic.ca. If applicable, send the first page with signature of the PI, and the Department Chair (if necessary), to the Animal Care Services Liaison, Office of Research Services.
- **The emailed application will NOT be processed until the original application is received.**

**Personnel and Personnel Changes to an Approved Application**
- Before beginning their research using animals, researchers that are handling animals must complete all of the relevant animal research education and training components included on the [Facility Access application form](#).
- These components include a questionnaire, an online tutorial, a facility orientation, and hands-on training. Details on training can be found on the [Animal housing and care website](#).
- Once all relevant components are completed, the ACS Liaison will provide an Animal Care Services (ACS) certificate number.
- This number must be entered into the Animal Use Protocol Personnel form.
- Personnel changes can be submitted electronically to the ACS Liaison by the PI without a hard copy or signatures.

**The AUP, Section by Section……**

1. **Project**
   - The project title must include the major species being employed (e.g. rat, mouse, Atlantic Salmon, etc.), and should provide a succinct description of the type of study/studies that are being undertaken.
   
   Click the box to indicate whether the protocol is a new application, a renewal, an amendment or a pilot project.
• Pilot project: Usually a short or small study used to establish the feasibility of working with a piece of equipment, a strain, a species, in a new remote location, or using a new technique. If you are unsure whether your project should be studied as a ‘pilot’, please contact the ACS Liaison for further direction.

• Amendment: An existing, approved protocol that needs to have some changes reviewed. Amendments and renewals often occur together. Use the existing, approved protocol number.

• Renewal: Every approved protocol must be renewed (“continued”) annually. Protocols are often amended at the time of renewal, so both boxes can be checked. Use the existing, approved protocol number.

• New: If you have never submitted this proposal before, it is considered ‘new’. Approved protocols expire after their 3rd renewal, and must be submitted as “new” at the end of every 4th year. A new protocol number will be assigned.

2. Principal Investigator

Provide the name, rank, and contact information of the UVic faculty member who is the principal investigator on this project. Emergency contact information (e.g. home phone, cell phone, etc.) for the PI must be provided. Provide the name and telephone number of at least one (preferably two) designated alternate contact persons.

3. Declaration

The signatures of the principal investigator and the investigator’s department Chair indicate that the protocol is accurate and complete and that both parties acknowledge that all work will be performed in accordance with relevant CCAC guidelines and UVic policies.

4. Approvals

The University Animal Care Committee Chairperson and the Veterinary Director (or designate) sign the approval once the Animal Care Committee has evaluated and approved the protocol.

5. Past History of Protocol

If this is a New protocol (see #1, above), click the N/A box.

5a) If you are changing any aspect of your protocol, click the “yes” box, and click the box to indicate which sections of your protocol are being amended. This helps to focus the Animal Care Committee on the CHANGES only.

If absolutely nothing in your protocol is being changed, click the ‘no’ box, and move on.

5b) Describe in general terms why you are changing your protocol. This description helps the committee understand why you need to make changes in the currently approved protocol. Examples might include:

- We wish to evaluate different doses of reagent xyz;
- We wish to add additional behavioural studies to the existing group of studies we currently use;
- We wish to broaden our scope to include an additional 6 islands in our survey, so our animal numbers need to increase.
5c) If you were able to perform your experiments using the animal numbers for which you were previously approved, click “yes” and move to 5d.

If you are amending your protocol because you have reached your previously approved maximum numbers, and you haven’t yet completed your experiments, click “no” and briefly explain why this is the case.

Examples might include:

- We experienced technical difficulties with our equipment and had to complete more experimental repetitions than expected.
- We underestimated the amount of tissue that we would need to collect to obtain sufficient RNA.
- The radio telemetry equipment failed in 50% of the animals that we collared, and therefore we need to recapture and re-collar a cohort.

5d) Did your experiments result in any UNEXPECTED complications, side effects, or disease in your research animals? If nothing unexpected occurred, click “No” and move to section 6.

If there were unexpected complications, side effects or diseases, click ‘yes’ and briefly explain. Examples might include:

- The experimental reagent became contaminated and resulted in minor skin infections in 10% of the animals. These resolved with antibiotics.
- The experimental reagent resulted in unexpected side effects, and the animals were lethargic for 3 days as opposed to one day. Average weight loss was 10% more than expected.
- We did not expect nest abandonment as a result of our presence, but approximately 10% of nests were abandoned within 3 days of our arrival. We changed our location as a result of this.
- The feed additive resulted in food refusal, and the frogs lost approximately 5% of their starting body weight. This was recovered within 14 days.

6. Funding Information

Agency:

Provide your primary funding source (e.g. NSERC, CIHR, Suzuki Foundation, BC Cancer Agency, Start-Up Funds, etc.). Typically research funds are either external (e.g. private foundations, NSERC, CIHR, etc.) or internal to the University (e.g. Start-Up Funds, Intradepartmental award). Other sources (e.g. commercial) may also be applicable.

Status:

If you have received notification that you are to receive funding, or the funding is already in hand, indicate that the status is “Awarded”. If you have applied for but not yet been awarded funds, indicate the status as “Pending”.

Peer Reviewed:

All research involving animals at the University of Victoria must be peer reviewed for its scientific merit. This assessment is done INDEPENDENT to the Animal Care Committee. All Tri-Council
agencies (SSHRC, NSERC, CIHR) and many other organizations (e.g. MSFHR, The Arthritis Society, Heart and Stroke Foundation of Canada) provide a peer review for scientific merit. Click “Yes” if your research has been funded by an agency that provides peer review for its funding applications.

**If you are unsure whether or not your funding application was peer-reviewed, click “No”, and please contact the ACS Liaison for further guidance prior to submitting your application.**

**Funding Start Date:**
Enter the date that the funds will be released to you (or UVic).

**Funding End Date:**
Enter the date that the funding expires. Even if there is money ‘left over’ when the funding expires, the official funding end date should be the expiry date on your application.

**Funds Administered By:**
Indicate where the funds are held for your grant. If UVic’s Office of Research Services or your department manages the funding for your grant, click “UVic”. If someone else manages the funds for your grant (e.g. BC Cancer Agency, private company, etc.), click “Other”.

**Billing Account Number:**
Normally, grants administered by UVic are assigned a FAST account number. If UVic does not administer your grant, or if you do not know the account number for your grant, please contact the ACS Liaison. If you don’t expect to be incurring project-related costs that need to be paid through UVic, please contact the ACS Liaison for further guidance.

7. **Research Timelines**
Indicate the proposed start and end dates of the research described in this protocol. It is normally expected that research occurs during the period in which funding is active (i.e. starts at or following the funding start date, ends before or at the funding end date).

8. **Category of Invasiveness**
The following list of categories provides examples of experimental procedures that are considered to be representative of each category:

A. **Experiments on live isolates**
   Possible examples: the use of animals to generate primary tissue culture; tissues obtained at necropsy or from the slaughterhouse; the use of eggs.

B. **Experiments which cause little or no discomfort or stress**
   Possible examples: domestic flocks or herds being maintained in simulated or actual commercial production management systems; the short-term and skillful restraint of animals for purposes of observation or physical examination; blood sampling; injection of material in amounts that will not cause adverse reactions by the following routes: intravenous, subcutaneous, intramuscular, intraperitoneal, or oral, but not intrathoracic or intracardiac (Category C); acute non-survival studies in which the animals are completely anesthetized and do not regain consciousness; approved methods of euthanasia following rapid unconsciousness, such as anesthetic overdose, or decapitation preceded by sedation or light anesthesia; short periods of food and/or water deprivation equivalent to periods of abstinence in nature.
C. **Experiments which cause moderate to severe distress or discomfort**

Possible examples: cannulation or catheterization of blood vessels or body cavities under anesthesia; minor surgical procedures under anesthesia, such as biopsies, laparoscopy; short periods of restraint beyond that for simple observation or examination, but consistent with minimal distress; short periods of food and/or water deprivation which exceed periods of abstinence in nature; behavioral experiments on conscious animals that involve short-term, stressful restraint; exposure to non-lethal levels of drugs or chemicals. Such procedures should not cause significant changes in the animal's appearance, in physiological parameters such as respiratory or cardiac rate, or fecal or urinary output, or in social responses.

Note: During or after Category C studies, animals must not show self-mutilation, anorexia, dehydration, hyperactivity, increased recumbency or dormancy, increased vocalization, aggressive-defensive behavior or demonstrate social withdrawal and self-isolation.

D. **Experiments which cause moderate to severe distress or discomfort**

Possible examples: major surgical procedures conducted under general anesthesia, with subsequent recovery; prolonged (several hours or more) periods of physical restraint; induction of behavioral stresses such as maternal deprivation, aggression, predator-prey interactions; procedures which cause severe, persistent or irreversible disruption of sensorimotor organization; the use of Freund's Complete Adjuvant (see CCAC Guidelines on *Antibody Production*).

Other examples include induction of anatomical and physiological abnormalities that will result in pain or distress; the exposure of an animal to noxious stimuli from which escape is impossible; the production of radiation sickness; exposure to drugs or chemicals at levels that impair physiological systems.

Note: Procedures used in Category D studies should not cause prolonged or severe clinical distress as may be exhibited by a wide range of clinical signs, such as marked abnormalities in behavioral patterns or attitudes, the absence of grooming, dehydration, abnormal vocalization, prolonged anorexia, circulatory collapse, extreme lethargy or disinclination to move, and clinical signs of severe or advanced local or systemic infection, etc.

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

This Category of Invasiveness is not necessarily confined to surgical procedures, but may include exposure to noxious stimuli or agents whose effects are unknown; exposure to drugs or chemicals at levels that (may) markedly impair physiological systems and which cause death, severe pain, or extreme distress; completely new biomedical experiments which have a high degree of invasiveness; behavioral studies about which the degree of distress are not known; use of muscle relaxants or paralytic drugs without anesthetics; burn or trauma infliction on unanesthetized animals; a euthanasia method not approved by the CCAC; any procedures (e.g., the injection of noxious agents or the induction of severe stress or shock) that will result in pain which approaches the pain tolerance threshold and cannot be relieved by analgesia (e.g., when toxicity testing and experimentally-induced infectious disease studies have death as the endpoint).

9. **Animal Use Data for CCAC**

9a) If the application includes breeding, select 0; if the application also includes research, select one additional option from 1 – 5. “0” and ONE other box may be checked.
9b) Check all relevant boxes.

**Field studies**: Studies that are carried out in locations OTHER than University of Victoria animal care facilities. Licenses and/or permits are usually required to carry out this work. Please contact the Animal Care Services Liaison if you have questions regarding the license/permit component of your work.

**Surgery**: Surgery can be major (e.g. ovariectomy, renal artery ligation) or minor (e.g. castration, tumour biopsy). If surgery is performed and there is a subsequent recovery period (even a very short one), this is considered a ‘recovery surgery’. If the animal is euthanized without a surgical recovery period (e.g. during anaesthesia for the surgery), this is a terminal surgery.

10. **Summary**

10a) Describe for the public, in non-scientific terms at about a grade 7 reading level, why it is important that the work you are proposing gets performed. For example, diseases that are being considered, medicines that are being tested, the long-term impact on the environment, information about climate change, impacts of agricultural/aquiculture practices, and previously unknown information about the species under study is helpful information to include. This is the information that will be used in response to media or other inquiries, if this situation arises.

10b) Summarize in 100 words or fewer, in language accessible to the public, the primary scientific objectives of this study.

10c) Select keywords from the CCAC’s list of keywords (see page 14, Appendix C) that are relevant to your studies. These words are used by the CCAC to categorize the type of studies that are being undertaken at a national level. Additional keywords (like those you would use for a grant application) are not required.

11. **Alternatives**

Alternatives to using live animals include computers models, inanimate models, preserved specimens, videos and photographs. List the databases, electronic, and other resources you have evaluated to establish whether there are alternatives available and appropriate to use for the work that you wish to perform. If alternatives to live animals are available and you do not intend to use them, indicate why they are not going to be used in this study. If alternatives to live animals are not available, also indicate why. What is unique to the study that requires the use of live animals?

12. **Animal Data**

12a) Why did you choose this particular species for your study? Why is this strain (if applicable) appropriate for your research? Characteristics such as body size, relevant genetic modifications, naturalized species to the area, data from previous studies, or unique anatomic/physiological features are often considerations. NOTE: Cost of the animal is not considered an appropriate rationale by the CCAC for choosing a species.

12b) Animals are normally housed in facilities specifically built for animal housing. Normal housing conditions for mammals and aquatics species are briefly described on the Animal housing & care website. If your research dictates that you need to house animals outside of purpose-built facilities for periods greater than 24 hours, approval by the ACC is required. Please refer to policy and forms. Check the “Yes” box, and briefly describe the special housing requirements. Contact the Husbandry Coordinator (acshouse@uvic.ca), or the Aquatics Coordinator (acsaqua@uvic.ca) to review your animal housing needs prior to submitting your AUP.
12c) This form is designed to facilitate the account of the animals you will use for your research. In this section, please account for:

1. The total number of animals that you will acquire ("# Acquired") or breed ("# Produced by In-House Breeding"). Animals may be acquired from commercial sources (e.g. Charles River, Jackson Laboratories, Ward’s Natural Science), or from collaborators at other institutions. This number should include ALL of the animals you will acquire or produce, regardless of whether they will be used experimentally (includes animals euthanized for wrong genotype, wrong sex, health problems, etc.).

2. Where applicable, indicate the number of field animals you will capture and house at the University of Victoria ("# Field Animals Housed").

3. Where applicable, indicate the number of field animals that you expect to observe, experimentally manipulate, or euthanize in the field ("# Field Animals Not Housed").

4. The number of animals that will be needed for ALL purposes at any one time ("# Needed at One Time"). This should include animals intended for experiments, animals being used as breeders, animals being held for future use (e.g. “stock”), estimated number of field animals that will be observed/experimentally manipulated over one observation/field period, etc. This number allows the management of the facility to estimate occupancy of animal housing facilities throughout the year and the number of animal interactions likely to occur in the field.

5. Total animals ("Total # Per Year") is automatically calculated based on your data entries for items 1 – 4 (above).

12d) Please indicate how you arrive at your total number of animals. Include information on experimental and control groups, number per group/cohort, and expected failure or repeat rates. Specify how many adults are used for breeding purposes, expected number of offspring produced, how many offspring are used in experimental procedures, and how many are euthanized without being used for experiments. The arithmetic explaining how the total number of animals per year for each column in the table is calculated should be made clear. (Please attach another page if more space is needed.)

In keeping with the principles of the three R's (Reduction, Refinement, Replacement) the Animal Care Committee is required by its terms of reference to assess the number of animals to be used, based upon your experimental design, to determine if it is appropriate. This is not optional. Power calculations are encouraged, especially in instances where large numbers of animals are being requested.

The committee is enjoined to minimize animal use, but you should consider that the most prevalent statistical problem in the literature is insufficient statistical power to avoid a false negative report (type 2 errors).

Many experiments involve multiple sequential procedures and each procedure may have its own wastage. 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.

Example:

1. Identify the number (M) of experimental groups to be studied.
2. Identify the number (N) of animals in each study group that you will need to complete your protocols and state how this number was arrived at (e.g. your experience, power calculation, etc.).
3. Estimate the fractional wastage (or success rate) of each serial procedure. Please tell the committee how you arrived at these estimates (e.g. your experience, colleagues’ experience published reports, etc.).

4. Determine how many animals you need to enter the protocol in order to provide sufficient "N" at the end of the protocol.

\[ N(\text{finish}) = \text{success}(1) \times \text{success}(2) \times \ldots \times \text{success}(n) \times N(\text{start}) \]

Or

\[ N(\text{start}) = \frac{N(\text{finish})}{\{\text{success}(1) \times \text{success}(2) \times \ldots \times \text{success}(n)\}} \]

\[ N(\text{start}) = \frac{10}{0.9 \times 0.8 \times 0.7} = \frac{10}{0.504} = 20 \]

Number used in experiment = \( N(\text{start}) \times M(\text{groups}) \)

The number of animals you will breed may be greater than the number you use in experiments. If, for instance, you are studying the effect of an autosomal trait in adult female rates and the homozygous condition is lethal then you can predict that you will use only one quarter of the animals you breed.

13. Standard Operating Procedures (SOPs)

Using the check sheet, please indicate which UVic SOPs will be applied to your research or teaching project. The SOPs can be found at the Animal housing and care website. If your laboratory has developed its own SOPs for your procedures, please list them here and provide them to the committee for review with your AUP. Although there is the initial time commitment, creating SOPs is an excellent way of standardizing laboratory procedures, facilitating training, and will expedite AUP submissions.

If ACS Staff will be assisting you to carry out listed procedures, please check the “Yes” box. Otherwise, check the “No” box.

14. Description of Procedures

14a) If a procedure is described by an SOP, write “As Per SOP ‘title’”; no further detail is required. For each experimental group, describe all procedures and techniques, which are not part of the SOPs, in the order in which they will be performed – surgical procedures, immunizations, behavioural tests, immobilization and restraint, food/water deprivation/restriction, requirements for post-operative care, sample collection, substance administration, special monitoring, euthanasia, etc. Where possible, please include references for procedures that are new to the lab. If not all animals will be receiving all procedures, please include the experimental plan for each group. In other words, how will the procedures be linked together (in what order) and what is the maximum combination of procedures an animal will undergo? Diagrams/timelines can be extremely helpful to the Committee.

The withholding of analgesia and medical support following procedures expected to cause pain must be clearly scientifically justified to the Committee in this section.

14b) The experimental endpoint is the point at which the animals are recovered from the experiments. This could be a terminal procedure, a set time after initiating the experiment, achievement of particular values of a biological variable, etc.
14c) In most chronic protocols, some degree of morbidity can be anticipated. Please describe the conditions, complications, and criteria (e.g. >20% weight loss, maximum tumour size, vocalizing, lack of grooming) that would lead to the removal of an animal before the expected completion of the experiment (specify per species and project if multiple projects involved). Use objective measures wherever possible (e.g. body weight loss, observable behaviours or signs, body temperature, etc.), and be as specific as possible. Researchers are encouraged to use tables, diagrams, and decision trees to describe clinical endpoints.

If treatment of clinical signs will be considered (instead of removal from the experiment), indicate what treatments will be authorized, by whom they will be authorized and undertaken, and how that decision will be made. The ACS veterinarian and technical staff can assist with the development of clinical endpoint/intervention point plans.

14d) Monitoring -- (how/who/when/what). Please indicate how animals (e.g. post-surgical, disease model) will be monitored. You must indicate: a) the person(s) who will be responsible for monitoring the animals, b) the frequency and duration of monitoring, c) what variables are to be assessed (e.g. feeding, grooming body weight, daily behavioral rhythms, incision), and indicate how and where the data will be recorded (e.g. using a monitoring template). The ACS veterinarian and technical staff can assist with the development of a monitoring plan.

14e) Morbidity: Definition: “a diseased state or symptom, the incidence of disease.” Please describe and provide an estimate (%) of the expected morbidities related to the experiments you propose. Expected morbidities may include: capture/restraint-related stress, pain, lethargy, inappetence/anorexia, weight loss, decreased social interaction, decreased growth, limping/lameness, changes in gait, incisional infection/failure, etc. This estimate may be a high percentage, based on the type of work that you do.

In addition, please describe and provide an estimate (%) of morbidity that may be seen, but is unrelated to your experiments. Examples might include pregnancy complications (for breeding animals), dermatitis (strain related), fight wounds (socially housed animals), sporadically occurring infectious or non-infectious diseases (e.g. “fungus” in fish, overgrown teeth in rodents, “red leg” in frogs). 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.

15. Drugs / Chemicals / Biologicals / Anesthetic

For the three classes of substances (anaesthetics and analgesics, clinical drugs, and all other substances please provide all information requested concerning dosage (mg/kg, mg/ml, etc.), volume and route of administration (IP, IV, SC, topical, immersion, inhalant, etc.), as well as frequency (how often it will be given) and duration (how long you will be giving it for) for the substance. UVic’s formulary is a helpful resource.

15a) List all drugs that will be used to anaesthetize and/or minimize pain, distress or discomfort.
15b) List all pharmaceuticals that may be used to treat clinical signs (e.g. antibiotics, artificial tears, cancer treatments/chemotherapeutics, subcutaneous fluids, antiseptics, etc).
15c) This category includes drugs, chemicals, and biologicals (including viruses, tumors, antigens) that are administered to animals for experimental purposes. Diluents used to reconstitute reagents/pharmaceuticals (e.g. saline, sterile water, PBS) can be included here.
16. Euthanasia

16a) Please indicate the method of euthanasia for all animals used in this protocol. Note that methods other than those listed here MAY be acceptable (see current CCAC Guidelines on Euthanasia) but must be justified on a scientific basis in Section 14a.

16b) If animals are not to be euthanized, then explain their final disposition. Examples might include the release of field animals, transferred to another protocol, etc.

17. Hazardous Agents

17a) It is the investigator’s responsibility to ensure that all relevant MSDS sheets are available at the appropriate facility (e.g. MSB ACU, Aquatic Unit). Please provide your safety certificate numbers (if applicable). MSDS must be no more than 3 years old.

17b) Check the box to indicate in which facility animals will be kept following the administration of infectious/biological agents, toxic chemicals, carcinogens, etc.

17c) Please describe any potential health hazard to humans working with these animals or to other animals in the facility. Examples might include working with infectious agents, chemotherapeutics, carcinogens, toxic, corrosive or irritating chemicals. If you are working in the field, describe the field conditions that may be considered hazardous (e.g. remote locations, on the water, wildlife hazards, etc.)

17d) Describe how the risks identified in 17c will be reduced or mitigated. For example, describe disposal methods of hazardous agents, list the type of personal protection equipment that will be used, and/or detail methods that will be used to minimize the impact on the environment and natural populations, describe the ‘working in remote locations’ plan that you have in place.

17e) The Animal Care Committee is concerned not only with human health but also with animal health. Thus it must assure that cell lines introduced into animals contain no pathogenic viruses that affect either humans or species housed in the facility. Note for instance that ATCC cell lines are tested for human pathogens, but not 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).

Personnel Form: AUP Personnel and Qualifications

This form is to be used to inform Animal Care Services of personnel changes.

List all laboratory personnel (as opposed to Facility personnel) and the Animal Use Protocol (AUP) number(s) they will be working under. Indicate their employment status, their Animal Care Services training certificate number, and whether they have received training in the specific procedures they are to perform. Individuals cannot be added to a protocol until they receive an Animal Care Services training certificate number. Please indicate any personnel removed from a protocol and the date they were removed.