

Animal Care and Use Committee TERMS OF REFERENCE

1. General

The Animal Care and Use Committee (ACUC), establishes policies and procedures to uphold Canadian Council on Animal Care (CCAC) guidelines throughout the institution. All animal care and use is reviewed at least annually by the ACUC. Representatives of the Canadian Council on Animal Care also make regularly scheduled, detailed inspections, which include a review of all research/teaching using animals and a review of the methods of protocols, and policy review at UNBC and affiliated institutions.

2. Authority of the ACUC

2.1 The Chair and/or Veterinarian, on behalf of the ACUC, has the authority to halt any procedure which causes unnecessary pain or distress to an animal, terminate the use of animals which deviates from the approved use, any non-approved procedure, or any procedure causing unforeseen pain or distress to animals, and to order an animal killed humanely if pain or distress caused to the animal is not part of the approved protocol and cannot be alleviated.

2.2 The ACUC shall report directly to the Vice President Research and Innovation (VPRI).

2.3 The Manager of the Northern Health Sciences Research Facility (NHSRF) shall report to the VPRI and the ACUC.

2.4 The Veterinarian shall report to the VPRI.

2.5 The ACUC will ensure that no research, testing project or teaching program involving animals commence without prior ACUC approval of a written animal use protocol and that no animals will be acquired or used before such approval.

2.6 The ACUC will review all animal use proposals.

2.7 The ACUC will review policies, Terms of Reference, and Standard Operating Procedures (SOPs) relating to animal care at least every three years.

3. Membership of the ACUC

3.1 The members of the ACUC will be appointed by the VPRI for a term of no less than two years, renewable for up to eight consecutive years. Given the small size of UNBC, including researchers that work with live animals, and the difficulties of recruiting community members from a relatively small regional population, a member of the ACUC may serve for more than eight consecutive years if a suitable replacement (e.g., expertise with specific set of methods such as specific animal models) is unavailable. This time limit does not apply to ACUC members who must be part of the ACUC because of their role within the institution (*ex officio* members: Administrative Assistant/Research Ethics Coordinator, veterinarian(s), laboratory animal care technician and the Manager of the NHSRF). The complement of the ACUC will vary, but shall include:

(a) a Chair appointed from the members of the ACUC on the recommendation of the ACUC. The Chair has delegated authority for signature, on behalf of the University, of approved protocols;

(b) at least two faculty members experienced in animal research, care and use, appointed on the recommendation of the ACUC;

(c) a faculty member who does not use animals in research and teaching, appointed on the recommendation of the ACUC;

(d) a community member or members, representing community interests and concerns, appointed on the recommendation of the ACUC; the community member(s) may be a scientist, but must not have been involved with animal use for research, teaching, or testing, and must have no affiliation with the University;

(e) a student representative experienced in animal research, care and use, appointed on the recommendation of the ACUC;

(f) a veterinarian who, until such time as a University Veterinarian is on staff, will be selected by the VPRI in consultation with the Committee (*ex officio* member);

(g) the Manager of the Northern Health Sciences Research Facility (*ex officio* member);

(h) a laboratory animal care technician from the Northern Health Sciences Research Facility (*ex officio* member);

(i) the Administrative Assistant/Research Ethics Coordinator (*ex officio* member);

(j) a representative from Coast Mountain College (CMC); and

(k) such additional members as the ACUC may require for their special expertise or because of workload, particularly for protocol review, including, where appropriate, an ethicist (someone with formal expertise in ethics and law from an accredited institution), appointed in consultation with the ACUC.

3.2 The ACUC may recommend the creation of sub-committees as required.

3.3 The ACUC Chair will hold an orientation with all new members of the committee. New members will complete the online animal ethics course and attend the first meeting as an observer only.

4. Meetings

4.1 The ACUC meets at least twice a year, at times that are convenient for all members, including the community representative and consulting veterinarian, to ensure that all or at least a majority of members of the ACUC can attend in person or by teleconference. One meeting should be considered an annual general meeting, at which the Committee reviews its terms of reference and, within its jurisdiction, the security of the animals and research facilities, standard operating procedures, and policies and procedures for monitoring animal care and use.

4.2 Quorum for ACUC meetings shall be one half, or the smallest whole number exceeding one half, of the voting members, and shall include community and veterinary representation. ACUC members may be present for the purposes of quorum by attending in person or via teleconference.

4.3 The Committee meets at the call of the Chair.

4.4 Minutes detailing discussions and decisions of the ACUC concerning individual protocols, as well as any required modifications to protocols, will be produced for each meeting. The minutes shall be forwarded to the VPRI.

5. Procedures Concerning ACUC Review of Protocols

5.1 Research proposals associated with competitive funding applications to agencies with independent peer review processes generally do not require review for scientific merit by the ACUC. The requirement for scientific merit is normally met if the application is funded. Where ACUC approval is required by a funding agency before it will review the funding application, ACUC approval shall be provisional, pending assurance from the funding agency that the application has high scientific merit. If scientific merit has not been peer reviewed externally, the ACUC will request that the Office of Research solicit two reviews of the objectives, hypotheses, methods and contributions of the project by knowledgeable scientists who do not collaborate with the investigator. Both referees must be external to the committee. The reviews must be documented and must contain sufficient information to support the reviewers' conclusions.

5.2 Review of teaching protocols. The ACUC will ensure that use of animals for teaching is based on sound ethical justification; it is the responsibility of the applicant's Program or Department to ensure that the use of animals for teaching has pedagogical merit and is based on proven educational objectives. Justification should be provided for the use of animals over the use of alternatives such as models, videos, computer simulations and emulations. The level and type of training of the students are important considerations in ascertaining the need to use animals. Teaching protocols are subject to the same review considerations as for research protocols. Additionally, evaluation of teaching protocols will take into consideration student inexperience and numbers of students involved in the protocol. Descriptions of projects should include the number of students per animal, and the student to teacher ratio. The disposition of the animals at the end of the teaching session must be clearly described.

5.3 Protocol review and approval by the ACUC will be conducted as a group and approval will be given by consensus of the committee. If there are no contentious issues, the Chair of the ACUC will approve the proposed research.

- (a) Protocol applications, renewals or amendments are written and submitted to the ACUC by the Principal Investigator (PI); an electronic copy is signed and emailed to acuc@unbc.ca.
- (b) The protocol is distributed to all ACUC members at least one week prior to the ACUC meeting by the ACUC coordinator. A protocol may be distributed less than one week prior to the ACUC meeting at the discretion of the chair, and only due to extenuating circumstances.
- (c) The protocol is reviewed by ACUC members prior to the ACUC meeting.
- (d) If an ACUC member is directly involved in the protocol, they will leave the room and return once discussion of the protocol is completed. If the member is also the ACUC Chair, another faculty member will temporarily chair the meeting and issue a *Certificate of Approval of Animal Care and Use*.
- (e) The ACUC will, by consensus:
 - a. Approve the protocol if there are no revisions required or no further information or peer/pedagogical review required.
 - b. Approve the protocol in principle if the protocol is acceptable but requires minor revisions. Once the revisions have been fulfilled the protocol is approved.
 - c. Not approve the protocol if the protocol does not meet ACUC or CCAC welfare standards. The ACUC will ask for revisions if there is absent or incomplete information or lacking supporting requirements, such as permits or pedagogical/peer review.

(f) Once the protocol has been approved, a *Certificate of Approval of Animal Care and Use* will be sent to the PI via email by the ACUC Chair and research may begin. In the absence of the Chair, a designate may sign and send out the Certificate.

5.5 Where proposals to a potential project sponsor require evidence of approval, the signed Certificate must be included with the application.

5.6 The Certificate must identify the PI, the project or purpose for which it was issued, the date of issue, and its period of validity.

5.7 The signature of the faculty member on the protocol constitutes an undertaking to adhere strictly to applicable requirements; the signature of the Chair of the ACUC indicates that the proposal is in accordance with the applicable requirements.

5.8 An approval may be revoked if the protocol is changed in any way contrary to the applicable requirement of the actual use of animals or it fails to conform to the applicable guidelines.

5.9 ACUC approval is given for one year. Ongoing projects must be renewed annually by researchers via the renewal process, for a maximum of three consecutive renewals. A protocol can be renewed by the ACUC for a maximum of four years, after which a complete, new protocol shall be submitted.

5.10 Pilot studies are used to help develop new methods, approaches and products and will be encouraged, as they may reduce the number of animals used in research. These protocols will be reviewed and approved as normal protocols with the exception that approval will be for a one-year period and will not be renewable. The PI must provide a written report to the ACUC at the termination of the pilot study that documents total number of animals used; any unanticipated complications observed, including pain, distress, and mortality; and a decision to continue with the research or activities following the submission and approval of a full protocol.

5.11 The ACUC must be given written notice of any changes in a protocol and any amendments to protocols, including changes to environmental enrichment, which must be reviewed and approved by the ACUC. Requests for a renewal or amendments to protocols should be submitted using the relevant forms. Individuals wishing to make major amendments to approved protocols are required to submit a new protocol for approval to the ACUC. Renewal applications should permit the ACUC to review proposed modifications to the original protocol, if any, and the justification for the changes. All modifications must be approved and documented by the ACUC before being initiated by the investigator.

5.12 Minor amendments to approved protocols, such as slight refinements to the procedures used on animals, the addition of one or two personnel on a project, may be submitted on an amendment form any time throughout the year. The ACUC Chair or delegate may approve minor amendments in between regularly scheduled ACUC meetings.

5.13 Major amendments are subject to a full review by the ACUC and require the submission of a new protocol. Examples of major amendments include changes in the nature of invasive procedures(s), discontinuing or the withdrawal of anesthetics/analgesia in a protocol that may cause pain or distress, an increase in the "Category of Invasiveness", a change in animal species, or an increase in the number of animals that exceeds 20% of the approved number of animals.

5.14 The interim approval of protocols that are received in between scheduled ACUC meetings shall be determined by the Chair. All such protocols must be reviewed at minimum by one scientist, the veterinarian, and a community representative. All protocols receiving interim approval will be reviewed at the next scheduled ACUC meeting.

5.15 In cases where investigators or instructors undertake collaborative projects with individuals from other institutions, and the protocol has been approved by a collaborating institutions animal care committee, the ACUC will accept the protocol as submitted if the collaborating institution is in good standing with the CCAC. An approval letter from the collaborating institutions animal care committee must also be submitted along with the protocol. The ACUC will review the project to ensure that it meets the committee's normal standards and does not contravene any institutional policies on animal care and use.

5.16 By an Indirect Certification agreement, the ACUC shall be responsible for all animal-based work conducted at Coast Mountain College (CMC). That includes a review of protocols describing animal-based research and teaching to ensure that those procedures are consistent with the UNBC ACUC Terms of Reference. The ACUC is responsible for inspecting animal-use facilities and post-approval monitoring of protocols submitted by CMC. For complete details refer to UNBC File Ref. RC14-2961 or CMC 5415.1415.

6. Procedures for Post-Approval Monitoring (PAM)

6.1 The ACUC is responsible for post-approval monitoring of laboratory protocols to ensure compliance with CCAC guidelines and the UNBC ACUC Terms of Reference. Any deviations from the approved protocol shall be brought to the attention of the researcher to ensure compliance and reported to the ACUC. The Manager and researcher, along with the Chair of the ACUC, shall work together to ensure that animal users carry out their work not only ethically, but successfully. Researchers are required to record dates and times in the animal facility when they will be working on any protocols. During this time the Manager and full-time Technician can monitor researchers to ensure they are following approved procedures. The veterinarian also assists in PAM during their regularly scheduled facility visits. All other committee members are encouraged and invited to visit the animal facility on campus at any time.

6.2 The ACUC is responsible for post-approval monitoring of field protocols to ensure compliance with CCAC guidelines and the UNBC ACUC Terms of Reference. Post-approval monitoring of field work shall be accomplished using the following methods:

- (a) site visits conducted by ACUC members. To facilitate this option, ACUC members are encouraged and supported by the VPRI to accompany researchers in the field; and / or
- (b) researchers can provide frequent progress reports for work being conducted in the field; and / or
- (c) researchers can provide pictures or videos of work being conducted in the field; and / or
- (d) any other method appropriate to the field work and acceptable to the ACUC.

7. Responsibilities of the Veterinarian

7.1 The ACUC delegates to the veterinarian(s) the authority to treat, remove from a study or euthanize, if necessary, an animal according to the veterinarian's professional judgment.

7.2 The veterinarian is to be regularly informed of all interventions related to animal health and welfare; these interventions shall be recorded and kept on file in the Northern Health Sciences Research Facility.

7.3 Reports of the veterinarian's site visits shall be forwarded to the VPRI and the Chair of the ACUC.

7.4 The veterinarian is responsible for reviewing the storage and use of all drugs under their authority.

8. Multi-site Protocols

8.1 The authority of the ACUC extends to all teaching and research activities involving vertebrate and higher invertebrate animals conducted on or off-campus by university faculty, students, and staff, and any such activities conducted by non-UNBC collaborating researchers or instructors on campus, including the Quesnel River Research Centre, or permanent infrastructure, such as a laboratory or if an animal holding facility is constructed in the field or at a UNBC owned or managed research station.

9. ACUC Visits to Animal Care Facilities

9.1 The ACUC shall regularly, and at least once per year, visit all UNBC animal care facilities and areas in which animals are used to better understand the work being conducted and to satisfy itself that all animal use within its jurisdiction is in compliance with all applicable regulations and CCAC guidelines. Such visits are documented through the ACUC minutes or written reports. Any responses to ACUC recommendations should be in writing. Jointly, the ACUC and VPRI shall ensure that all recommendations from a site visit are addressed.

10. Appeal Mechanism

In the event that the ACUC rejects a submitted protocol for ethical reasons or because scientific or pedagogical merit has not been adequately demonstrated, and the Investigator does not accept the decision, the following process will apply:

10.1 The Investigator may request that the ACUC reconsider its decision. This could include the submission of a revised protocol following feedback from the ACUC via the Chair. Reconsideration may involve the Investigator meeting with the ACUC so that they may thoroughly understand the details of the protocol. The ACUC may seek scientific opinions from individuals who are not members of the ACUC.

10.2 If further consideration by the ACUC does not provide a satisfactory solution to the Investigator, then the Investigator may appeal to the VPRI. The VPRI will convene an Appeals Committee. A current ACUC member may not be a member of the Appeals Committee to keep the process separate, fair, and impartial. The Appeals Committee will be composed of three persons as follows:

- (a) one person (internal or external to the University) who has appropriate expertise, named by the Investigator of the protocol being considered;
- (b) one person (internal or external to the University) who has appropriate expertise, named by the VPRI; and
- (c) one person (internal or external to the University) who has appropriate expertise, who shall be Chair, agreed upon by the Investigator and VPRI or, failing such agreement, one person appointed by the President of the university.

10.3 By majority vote, the Appeals Committee may confirm or modify the decision of the ACUC and may impose its own conditions for approval of the project, or for its continuation, by way of a Certificate to the PI, written by the Appeals Committee. The Appeals Committee may halt an ongoing project. The decision of the Appeals Committee shall be final.