

Policy History
Policy No.
RS6
Approving Jurisdiction:
President
Administrative Responsibility:
Provost and Vice President, Academic
Effective Date:
June 2, 2021

# Animal Use and Ethics in Teaching and Research Procedure

# A. DEFINITIONS

1. Animal Care Committee TACC): A

The committee which oversees the approval and implementation of all Animal Use Protocols and Standard Operating Procedures at KPU.

2. Animal Use Protocol (AUP):

The protocols described on forms developed by the ACC to track and describe animal use for teaching and/or research; these forms must be filled out by principal investigators (for research) or course instructors (for teaching) for approval by the ACC.

3. Animals:

As per the Canadian Council on Animal Care (CCAC) guidelines, 'animals' are defined to include all live vertebrate or cephalopod organisms that are covered under the mandate of the CCAC.

4. Animal User:

Any and all employees, visitors, contractors, volunteers, students or other individuals who will be directly handling or caring for live animals for teaching or research at KPU.

5. <u>Campuses and Sites</u>:

Includes any building, structure, parking lots, vehicle, space or land, (including vacant land or space) controlled, owned, leased, licensed, and/or occupied by KPU.

6. <u>Course Instructor:</u>

The institutional instructor (or designate) who is primarily responsible for submission of a particular Course Outline that involves animal use.

7. <u>Pedagogical Merit</u> <u>Review</u>: An independent expert peer-review of the pedagogical merit of a given proposed AUP to use animals for teaching. Pedagogical merit review is required for all AUPs for use of animals in teaching prior to their subsequent review and requested approval by the ACC.

8. <u>Principal Investigator</u> (PI):

The researcher who has primary responsibility for a given research project. Every project has one lead researcher designated as the Principal Investigator. For course-based research, the individual advising the student engaged in a research project shall function as the PI for the

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purposes of obtaining all approvals and complying with this Policy.

#### 9. Scientific Merit Review:

An independent expert peer-review of the scientific merit of a research project that proposes to use animals for research. Such review is required for all AUPs for use of animals in research prior to their subsequent review and requested approval by the ACC.

# 10. <u>Standard Operating</u> <u>Procedures (SOPs)</u>:

Specific established or prescribed methods of animal husbandry, maintenance, treatment, euthanization, or experimental manipulation to be followed routinely for the performance of these operations.

# 11. The Three Rs of Good Animal Practice:

- a) Replacement refers to methods which avoid or replace the use of animals in an area where animals would otherwise have been used.
- **b) Reduction** refers to any strategy that will result in fewer animals being used.
- **c) Refinement** refers to the modification of husbandry or experimental procedures to minimize pain and distress.

# **B. PROCEDURES**

Ethical animal use requires consideration of animal welfare needs. KPU will adhere to the guidelines and standards of the CCAC. These procedures should be interpreted harmoniously within the current CCAC frameworks (e.g. standards, policies, and guidelines, and other requirements) and the Tri-Agency Agreement on the Administration of Agency Grants and Awards by Research Institutions as may be updated from time to time.

#### 1. ROLE AND RESPONSIBILITIES:

#### a. Institutional Responsibility

In accordance with the CCAC policy statement for senior administrators responsible for animal care and use programs (Appendix 1), it is the responsibility of the Senior Administrator responsible for animal care at KPU (the Associate Vice President, Research, Innovation, and Graduate Studies, through the Office of Research Services or ORS) to:

- i. Arrange for scientific and/or pedagogical merit review of all proposed animal-based work at KPU (see section 3 below).
- ii. Ensure that a well-functioning ACC is appropriately composed and structured, according to the most recent version of the CCAC policy statement on: terms of reference for animal care committees (see section 2 below and Appendix 2).
- iii. Ensure that appropriate resources and facilities are allocated to animal care, as dictated by the CCAC guidelines for animal care facilities (Appendix 3) and the CCAC policy statement for senior administrators responsible for animal care and use programs (Appendix 1).

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- iv. Lead the fulfillment of all other institutional responsibilities as required by CCAC, according to the CCAC policy statement for senior administrators responsible for animal care and use programs (Appendix 1).
- v. Ensure that KPU operational units such as Faculties, Institutes and Schools, Facilities Services, Information Technology Services, Security, and the University Space Administration are proactively consulted at the start of planning any new, or modification to any existing, animal care facility to:
- vi. Provide appropriate space allocation (for inclusion in the preparation of ACC applications), and cost estimates to create, operate, and maintain animal care facilities, including environmental controls and services (such as water supplies, emergency power, HVAC, etc.) for animal care facilities as needed to ensure animal health and welfare, as directed by the senior administrator described above.
- vii. Provide 24-hour facility access for routine animal care/monitoring and emergency responses.

#### b. Roles of Animal Users

#### **Principal Investigators or Course Instructors must:**

- i. Apply for and secure ACC approval of courses or research that make use of animals, prior to the commencement of teaching or research involving animals (see section 4 below). Each application will include the filling out of the Standard Animal Use Protocol (AUP) document, including any necessary supporting documents. The application shall also include documentation of approvals of the proposed research or course outline from Faculty and academic department levels, as well as evidence of appropriate animal housing and facilities (see b-ii below). Other supplemental information may be requested by the ACC. For research projects involving multiple Pls, only one Protocol is required, and should be submitted by the PI with the most direct involvement in handling/caring for the animals in question.
- ii. Consult in advance with KPU operational units such as Facilities Services, Information Technology Services, Security, the University Space Administration, Risk Management, or any other relevant stakeholders regarding new or modified animal care facilities prior to the submission of any Animal Use Protocol to the ACC, and provide documentation of approvals for such plans from appropriate Faculty, institute, academic department, or other relevant stakeholders.
- iii. Choose the most appropriate methods for their work, in consultation with veterinarians and other experts as needed; to detail all animal-based methods in writing to the ACC within the animal use protocol forms, and to answer questions from the committee on any aspect of animal-based work.
- iv. Ensure that all individuals who will be involved in the handling and/or care of animals

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under their protocols shall be appropriately trained as per item c below and be added to the existing protocol as users.

#### All animal users (including PIs and Course Instructors) must:

- v. Familiarize themselves with and strictly follow the approved protocols, procedures, and SOPs regarding the animals they will be using in teaching and/or research.
- vi. Complete the CCAC Animal Ethics Training modules, including the appropriate substreams (Fish, Vivaria, Farm Animals, or Wildlife) and submit records of completion to the ACC and ORS (ACC@kpu.ca and ORS@kpu.ca respectively).
- vii. Familiarize themselves with the reporting structure set up for the animals they will be using, and to appropriately report all animal usage and care to the PI and the ACC as directed by their SOPs.
- viii. Report any significant change or deviation in animal use protocols to the appropriate PIs, facility managers, or course instructors, and these changes must then be communicated to the ACC within 24 hours of use.
- ix. Report any major animal welfare incident within 24 hours, directly to the ACC using the appropriate incident report forms, and immediately deal with the incident as directed by the relevant SOP.

#### c. Role of the ACC

The ACC ensures that KPU adheres to the CCAC guidelines and policies, as well as any applicable institutional, national, and provincial requirements. The ACCs operate under CCAC-established Terms of Reference (Appendix 1) which detail the roles and responsibilities of the ACC and the institution. KPU's ACC fulfills this mandate as follows:

- i. Ethical review and approval of AUPs
  - 1) Ensure that no KPU teaching or research activity (including field studies) involving animals be commenced without prior ACC approval of a written animal use protocol, and that no animals be acquired or used before such approval (see section ii-1 below). A transition plan will enable activities to continue until initial review of animal use protocols can occur (see section 4 a-iv).
  - 2) Ensure that no animals be held on KPU campuses or sites for display or breeding purposes, or for eventual use in teaching or research, without prior ACC approval of a written animal use protocol, except where current CCAC guidelines provide for exemptions.
  - 3) Ensure that all ACC members and animal users have the opportunity to become familiar with the CCAC guidelines on animal use protocol review (Appendix 4), the CCAC statement on Ethics of Animal Investigation (Appendix 5), and all other CCAC guidelines and policy statements, federal, provincial or municipal statutes that may apply, as well as specific institutional requirements on animal care.

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- ii. Development and implementation of documents, policies, and procedures for institutional animal care and use. This Policy and Procedure contains an appendix with links to guidelines for creating CCAC-compliant forms (Appendix 6), as well as relevant Occupational Health and Safety programs (Appendix 7) and Crisis Management programs (Appendix 8). See also: KPU Safety and Health Policy SR7.
  - 1) Provide KPU Standard Animal Use Protocol documents that are consistent with CCAC Terms of Reference for animal care committees (Appendix 1), current standards of animal care, institutional needs, and community standards, and ensure that all PIs or course instructors complete these forms in language that all members of the ACC can clearly understand.
  - 2) Meet at least twice per year to review and assess all submitted animal use protocols, with particular emphasis on the CCAC Statement on Ethics of Animal Investigation (Appendix 4), the CCAC Guidelines on Animal Use Protocol Review (Appendix 5), and all other relevant CCAC guidelines and policy statements. All protocols must have been found to have scientific or pedagogical merit through independent peer review prior to approval (see section 3, below).
  - 3) Ensure that PIs or Course Instructors update their protocols with any modifications they intend to make and to approve any modifications to a protocol before they are implemented. Existing protocols must also be reviewed annually for renewal.
  - 4) Document all ACC discussions and decisions in the committee minutes and on attachments to the protocol forms.
  - 5) Ensure appropriate policies and procedures are established to provide for a system of animal care commensurate with current veterinary practices, to be provided for animals in all stages of their life and in all experimental situations. This must include veterinary care; formal arrangements must be made to obtain the services of a veterinarian, at least on a consultative basis, if they are not readily available within the institution. These formal arrangements must be based on the elements contained in the Standards of Veterinary Care of the Canadian Association for Laboratory Animal Medicine (CALAM), which define the roles and responsibilities of veterinarians involved in scientific animal care and use programs (Appendix 9).
- iii. Site Visits: ACCs conduct site visits at least once a year to ensure proper and well-equipped facilities are available for the animals and to monitor care post-approval. A CCAC Site Visit Checklist is included in RS6 Appendix links (Appendix 10).
- iv. Reporting to the CCAC: the ACC must submit complete and accurate animal use information in the CCAC Animal Use Data Form (AUDF) format for all protocols annually, and complete the Animal Care and Use Program Review Form every three

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years for CCAC Assessment Visits.

v. Maintain committee membership and regular activities/reports as detailed below.

#### 2. MEMBERSHIP AND ACTIVITIES OF THE ACC:

- a. The Animal Care Committee shall be composed as required by the CCAC Terms of Reference (Appendix 1). Calls for specific member requirements (a veterinarian familiar with animal research, members of the broader community, etc.) will be made as necessary by the ORS.
- b. The ACC shall report to the Associate Vice President, Research, Innovation, and Graduate Studies. The ACC shall provide an annual report on its activities in a form prescribed by the Office of Associate Vice President, Research, Innovation, and Graduate Studies.
- c. The ACC should regularly review (preferably every year, but at least every three years):
  - its Terms of Reference, expanding them as necessary to meet new CCAC guidelines or policies and changing needs within the institution, the scientific community, the animal welfare community and society as a whole;
  - ii. the security of housed animals and research facilities at KPU;
  - iii. all SOPs and institutional animal care and use policies that are not part of Standard Animal Use Protocols; and
  - iv. policies and procedures for monitoring animal care and experimental procedures within the institution, including the identification of the persons responsible for monitoring and reporting on animal health and welfare.
- d. The ACC must maintain liaison with the CCAC Secretariat and inform the Secretariat of any changes to their animal care program, to the senior administrator responsible for animal care and use, to the chairperson of the ACC, or the veterinary/senior animal care personnel.
- e. The ACC must develop a crisis management program for the animal facilities and for the animal care and use program, in conjunction with any general institutional crisis management plan(s).
- f. The ACC should try to achieve and maintain a high profile within the institution and in the community, including animal welfare organizations, in order to demonstrate the institution's efforts in promoting animal welfare and allay public concerns regarding animal experimentation.
- g. Education and Training the ACC shall, from time to time, sponsor seminars or workshops on the use of animals in science and the ethics of animal experimentation.

#### 3. SCIENTIFIC OR PEDAGOGICAL MERIT REVIEW

## a. Animal use in teaching

 PIs or Course Instructors proposing animal use in any teaching program at KPU shall indicate in the appropriate Course Outline forms provided by the Senate Standing Committee on Curriculum (SSCC) that pedagogical merit review is required before

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- the SSCC can approve the course. This will trigger notification of the ACC (at <a href="mailto:acc@kpu.ca">acc@kpu.ca</a>) and Office of Research Services (at <a href="mailto:ors@kpu.ca">ors@kpu.ca</a>) to arrange for review by an ad hoc pedagogical merit review committee, as described below.
- ii. PIs or Course Instructors will also submit appropriate animal use protocols and SOPs for review, including any additional information requested by the ad hoc pedagogical merit committee.
- iii. The Associate Vice President (AVP), Research, Innovation, and Graduate Studies or their designate will strike the ad hoc pedagogical merit review committee consisting of at least two independent referees with knowledge of pedagogy and alternatives to animal-based teaching, and who do not currently sit on the ACC. This committee will review the relevant course outlines, SOPs, and animal use protocols, and determine if animal-based teaching or training is essential to meeting learning objectives and outcomes of the courses involved, using the CCAC guidelines for Pedagogical Merit Review. Decisions must be documented and sent to the ACC (acc@kpu.ca) and to the AVP (avpr@kpu.ca) so that ethics review of AUPs by the ACC may proceed (see section 4 below).
- iv. The office of the AVP shall inform the SSCC and ACC chairs of the decision of the ad hoc pedagogical merit review committee so that course outline approval process and AUP review may proceed as may be appropriate. Implementation of animal use for the course may not commence until all approvals (course outlines and AUPs) are completed.
- v. Key considerations for Review of Pedagogical Merit for animal use in teaching are found in the CCAC Policy Statement on Pedagogical merit of live animal-based teaching and training (Appendix 11), including schedule for review.

#### b. Animal use in research

- i. For a research program or project that has been examined through an independent and expert peer-review process (e.g. federal and provincial granting agencies and others), the KPU's institutional research administration, ORS may choose to accept the results of this review as evidence of scientific merit.
- ii. For projects that are either internally funded or that are funded by a source not using a peer review mechanism with appropriate independence and expertise, the AVP, Research, Innovation, and Graduate Studies or their designate will strike an ad hoc scientific merit review committee consisting of at least two independent experts in the research area, external to the ACC and with no affiliation with the PI of the project. It is not appropriate for the ACC or PI to select reviewers. This committee will review the relevant animal use protocols and SOPs, and produce written reviews that include comments on the objectives, hypotheses, methodological approach, and potential contribution(s) of the study to scientific knowledge, using the CCAC guidelines for Scientific Merit Review. Decisions must be documented and sent to the

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- ACC (acc@kpu.ca) and to the AVP (avpr@kpu.ca) so that ethics review of AUPs by the ACC may proceed (see Section 4 below).
- iii. The PI should be provided with the reviews, and should address any questions or concerns, working with the ORS or the delegated ad hoc scientific review committee, before the ORS can confirm to the ACC that the work has been found to have scientific merit.
- iv. Key considerations for Review of Scientific Merit for animal use in research are found in the CCAC Policy Statement on scientific merit and ethical review of animal-based research (Appendix 12).

#### 4. ANIMAL CARE REVIEW PROCESS:

#### a. Application for ACC Ethics Review:

- i. The PI or Course Instructor is responsible for submitting research proposals or proposed course outlines to the ACC via <a href="mailto:acc@kpu.ca">acc@kpu.ca</a>. Each proposal will include a completed Standard AUP document provided by the ACC and any necessary supporting documents requested by the ACC (SOPs, descriptions of facilities, etc.). See the CCAC Addendum on Requirement for Submitting an Animal Protocol (Appendix 13).
- ii. The proposal shall also include documentation of preceding approvals of the proposed research or course outline from faculty and department levels, as well as evidence of appropriate animal housing and facilities. Other supplemental information may be requested by the ACC.
- iii. The submitted AUP shall include (at least) all information dictated by the CCAC Terms of Reference for Animal Care Committees (Appendix 1), as well as documentation of independent merit review (see section 3, above).
- iv. The ACC, in consultation with the Office of the AVP Research, Innovation, and Graduate Studies and the CCAC, shall develop a transition plan, to be enacted upon the date of adoption of this policy. This plan shall enable current courses and other activities involving animal use at KPU to continue while the CCAC certification of Good Animal Practices is being attained. The transition will involve pedagogical merit review of existing courses, scientific merit review of research, drafting of AUPs for all current animal use at KPU, and ethical reviews of AUPs by the ACC.

### b. Review and Approval:

i. The ACC will review all new protocols at their regular meetings. This may require further supportive information from the investigator/instructor or meetings with the investigator/instructor to ensure that all members of the committee understand the procedures to be used on the animals. All communications to and from the ACC shall occur exclusively through <a href="mailto:acc@kpu.ca">acc@kpu.ca</a> to ensure continuity of records.

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- ii. Protocol authors and members of their research/teaching teams must always clearly remove themselves from ACC decision-making on their own protocols.
- iii. The ACC may delegate the responsibility of interim approvals to an interim approval subcommittee of the ACC, which must include at least one scientific member, one veterinarian and one community representative, one of whom should preferably be the chair of the ACC. The interim review process, including exchanges between the ACC and protocol authors, must be documented and then be subject to discussion and final approval at a full meeting of the committee.
- iv. The ACC shall define its own protocol review process in its Terms of Reference, following the CCAC Guidelines on Animal Use Protocol Review (Appendix 4). This process should include or refer to clear instructions to protocol authors, to ensure that all animal users in the institution understand how the ACC works, when it meets, how to fill out and submit a protocol form and what to expect after submission.
- v. The ACC shall notify PIs or course instructors when their animal use protocols are currently being reviewed and make requests for interviews or for any further information as deemed necessary. The ACC will either approve of the protocols as written, or request revisions as necessary to satisfy all pertinent considerations required by the CCAC Guide, ACC terms of references, institutional needs, and community standards.

#### c. Protocol Renewal:

- i. Minor modifications (e.g., one or two animal users added or removed, a small number of animals added, etc.), as defined by the ACC, can be approved by the Chair of the ACC or a delegate. Any major changes to a protocol must be reviewed and approved by the entire ACC.
- ii. The ACC will define, in writing, the criteria as to what constitutes a major change to a protocol (e.g., a 10-15% increase of the number of animals required vs. the number in the original protocol, a change of species, use of more invasive or more frequent procedures, use of entirely new procedures, or other criteria).
- iii. The ACC will review all approved protocols annually, i.e., within a year of commencement of the project; annual renewals should be approved by at least an interim subcommittee as described in section b-iii above, and should be subsequently brought to the attention of the full ACC for its information.
- iv. The ACC may choose to use a shorter protocol renewal form, as described in the CCAC Guidelines on Animal Use Protocol Review (Appendix 4).
- v. The ACC shall require the submission of a new protocol after a maximum of three consecutive renewals.

#### d. Reconsideration and Appeals:

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- i. Applicants have the right to appeal negative decisions of the ACC. An appeal can only be launched for procedural or substantive reasons, but ACC decisions made purely on ethical grounds should always stand.
- ii. Where the appeal concerns ongoing research, the ACC may direct that the research be suspended during the Consultative Dialogue and Formal Appeal period(s).
- iii. Consultative Dialogue (initial appeal) Ongoing consultation and dialogue between the PI or Course Instructor and the ACC occurs throughout the protocol review process. The ACC will generally provide opportunities for response and alterations of a protocol before denial of approval. As such, an outright denial of approval will be very rare; instead, PIs or Course Instructors will be invited to re-submit with edits or alterations to the protocols.

#### iv. Formal Appeals:

- 1) KPU, through the AVP, shall enter into an agreement with another institution, whose Animal Care Committee shall function as an Appeal Board for the purposes outlined in this Policy. In return for providing the Appeal Board, the KPU ACC may be made available to hear appeals of applications rejected by the ACC of the other institution.
- A PI or Course Instructor wishing to formally appeal a decision of the KPU ACC to deny approvals or to halt ongoing animal use, they (the Appellant) must contact the office of the AVP, Research, Innovation, and Graduate Studies within 30 days of the ACC's decision and provide the following documentation: the final application package including the AUP, related SOPs, and supplemental information as requested by the ACC during the protocol review process; a statement of the basis of the appeal (procedural, substantive, or both); and the rationale for the appeal. The Office of the AVP, Research, Innovation, and Graduate Studies shall submit all the materials to the Appeal Board within ten working days of receipt of the materials described above. Decisions of the Appeal Board shall be final and binding upon KPU and the Appellant.

## e. Animal-Based Projects Involving Two or More Institutions:

- i. The ACC is responsible for overseeing the work carried out by all KPU employees, faculty and students who use animals for teaching or research. For multijurisdictional projects, the KPU employee, faculty or student must first submit a written animal use protocol describing the project to KPU's ACC. who 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. The ACC would approve the protocol in principle, conditional to the approval of the protocol by the other host institution's ACC.
- ii. This process may require submission of a single common protocol form to be agreed upon by the ACCs and the principal investigator. The chairs of each ACC will

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communicate directly with each other to discuss any questions that either committee may have. Guidelines for this process can be found in the CCAC guidelines on Animal-based projects involving two or more institutions (Appendix 14).

#### 5. REPORTING AND VIOLATIONS

#### a. Reporting Structure

All animal use statistics, protocol submissions, protocol and SOP changes, project completion reports, incidence reports, and facility upkeep reports must be made to the ACC and the ORS through proper channels, and distributed annually to the appropriate Senate standing committees:

- i. The ACC reports directly to the Associate Vice President Research, Innovation, and Graduate Studies
- ii. Individual Animal Care Facilities Managers, PIs, and course instructors report both to the ACC and to their respective Dean's office and/or Institute directors.
- iii. Animal users such as technical staff, laboratory managers, laboratory instructors, or students report to the appropriate Animal Facilities Managers, and/or PIs or course instructors under whose animal use protocols they are working.
- iv. Institutional animal use data is reported to the CCAC Secretariat annually by the ACC.

#### b. Incident Reporting

- i. Animal welfare incidents include any unforeseen situation impacting the health or welfare of animals in KPU facilities. This includes any emergency situation requiring veterinary intervention, any damage to animal care facilities, missed feedings, or incidents causing undue animal stress.
- ii. All animal care incidents must be reported directly to the ACC, within 24 hours, using the appropriate Incidence Report form.

### c. Project Completion report

i. All completed research projects or discontinued courses involving animal use must be reported to the ACC so that endpoints can be documented.

# d. Violations

- i. Failure to comply with these procedures may result in loss of CCAC certification of Good Animal Practice, as well as legal ramifications under such federal and provincial legislation as may apply (see RS6 *Animal Use and Ethics in Teaching and Research and Policy*).
- ii. KPU will also employ Breach of Policy processes as outlined in the <u>Responsible</u> <u>Conduct of Research Framework</u> and KPU policy RS2 <u>Integrity in Research and</u> <u>Scholarship</u> in addition to any other policies, employment agreements, and contracts as may apply.

# C. RELATED POLICY AND OTHER REFERENCES

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# **D. APPENDICES**

- 1. Policy Statement for: senior administrators responsible for animal care and use programs
- 2. Terms of Reference for Animal Care Committees and Roles of Animal Care Committee Members
- 3. CCAC General guidelines
- 4. CCAC guidelines on animal use protocol review
- 5. Ethics of Animal Investigation
- 6. Presentation on Animal Use Protocol Forms
- 7. CCAC Occupational Health and Safety training module
- 8. CCAC guidelines on crisis management programs
- 9. CALAM standards of veterinary care
- 10. ACC Annual Site Visit Checklist
- 11. CCAC Policy: Pedagogical merit of live animal-based teaching and training
- 12. CCAC Policy Statement on: scientific merit and ethical review of animal-based research
- 13. Requirement for Submitting an Animal Protocol Addendum to the CCAC policy statement on terms of reference for animal care committees
- 14. Animal-based projects involving two or more institutions

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