AC513: Pedagogical Merit of Live Animal-based Teaching and Training

**Policy Title:** Pedagogical Merit of Live Animal-based Teaching and Training  
**Policy Number:** AC513  
**Owner:** Sr. Vice-President Academic  
**Approved by:** College Executive Team  
**Effective Date:** September 2023  
**Reference:** Canadian Council on Animal Care policy statement on Pedagogical Merit of live animal-based teaching and training (May 2016)

**Links to Other Policy:**
St. Lawrence College is committed to making our resources fully accessible to all persons. This document will be made available in alternative format upon request.

**BACKGROUND**

Consistent with the Canadian Council on Animal Care’s (CCACs) Guidelines and Policies, it is the responsibility of the Animal Care Committee (ACC) to ensure that no live animals affiliated with the academic programs at St. Lawrence College are used or purchased without prior approval of an Animal Use Protocol (AUP).

The CCAC requires that the ACC ensure that all academic courses undergo a pedagogical merit review to evaluate if the use of live animals is essential for meeting the education objectives of the course(s).

**Definitions:**

**Three Rs:** The Three Rs tenet (Replacement, Reduction and Refinement) guides educators on the ethical use of animals in science as well as teaching. The concept originated from the scientific community and is now a widely accepted cornerstone of policies on animal-based science and teaching around the world.

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

(http://3rs.ccac.ca/en/about 2017)

**Animal Care Committee (ACC):** The keystone of the Canadian system of oversight of the care and use of animals in science is the local institutional animal care committee (ACC) set up by each participating institution according to the CCAC policy statement on: terms of reference for animal care committees. Institutional ACCs are responsible for overseeing all aspects of animal care and use and for working with animal users, animal care personnel and the institutional administration. (CCAC, 2017)
**Purpose:**
This policy is intended to act as a guide to decision-making about the appropriate, ethical and safe use of live animals in the delivery of academic programs.

**Scope:**
This policy applies to all live animal-based teaching or training activities conducted by St. Lawrence College faculty and staff including activities on campus and at designated off-campus sites when the activity is related to the delivery of our academic programs.

**POLICY STATEMENTS**

1. St. Lawrence College is committed to the safe and ethical use of animals in science and in delivery of our academic programs.
2. St. Lawrence College upholds a high standard of academic integrity through processes of continuous improvement and quality assurance.
3. St. Lawrence College adheres to the principles of the Three Rs to reduce the use of live animals and minimize the impact on live animals whenever possible while ensuring we provide appropriate experiences for students to meet the stated learning outcomes of our academic programs.
4. The goal of the pedagogical merit process is to determine if the live animal model proposed by the professor is the best learning model in support of the intended learning outcomes.
5. The ACC has the final decision with regard to animal involvement in teaching and training protocols. The ACC will review the final protocol, the conclusions of the merit review process and determine if animal involvement is ethical and acceptable practice.

**MONITORING**

The policy will be reviewed following any change to the Canadian Council on Animal Care policy statement on pedagogical merit of live animal-based teaching and training and/or a minimum of every four years and for every new teaching and training course using live animals.

**POLICY REVISION DATE**

September 2028

**SPECIFIC LINKS AND RESOURCES ON REPLACEMENT ALTERNATIVES**

https://wiki.cvma-acmv.org:8443/display/APS/Appendix+C+-+Pedagogical+Merit

- InterNICHE Studies Database
- References and abstracts for academic papers on humane education and training.
Comprehensive information on over 500 of the latest products within the fields of anatomy, clinical skills and surgery, critical care, physiology, and pharmacology. Listed by discipline and then medium, the application, specifications, and source for each product are detailed. [Must register to download]

- **NORINA database** – Norecopa
  This database contains more than 3,800 audio-visual aid alternatives to the use of animals in teaching and training from the elementary school level to university level. A description with comments and supplier information is provided for each alternative in the catalogue.

  This book examines animal use in education from a humane and ethical perspective.

- **Sheffield Bioscience Programs**
  Offers a range of high-quality, interactive computer-assisted learning programs aimed at enhancing the teaching of physiology and pharmacology to undergraduate medical and science students.

- **RECAL – University of Edinburgh, College of Medicine and Veterinary Medicine**
  RECAL provides software for the development of computer-assisted learning materials. The tools provided allow the learning objects programmed (educational content) to be separated from the particular authoring application. This saves redevelopment of the educational content as authoring applications change over time.

- **Online Veterinary Anatomy Museum (OVAM) – Wikivet**

- **Education Resources – Alternatives to Animal Testing Web Site (Altweb), John Hopkins Bloomberg School of Public Health**

- **Alternatives in Education: An Introduction – Altweb, John Hopkins Bloomberg School of Public Health**

- **Search for Alternatives: Databases – Altweb, John Hopkins Bloomberg School of Public Health**

**APPENDIX A PEDAGOGICAL MERIT REVIEW PROCESS**

Appendix A – Pedagogical Merit Review Process

St. Lawrence College’s Veterinary Technology program is accredited by the Canadian Veterinary Medical Association (CVMA)’s Animal Health Technologist/Veterinary Technician Program Accreditation Committee (AHTVTPAC). Maintaining accreditation means that Veterinary Technology’s program learning outcomes cover all of CVMA’s essential task list, which have undergone CVMA’s Pedagogical Review process. Animal-based taught skills that go beyond the CVMA essential task list do not fall under the CVMA Pedagogical Review process above and requires institutional pedagogical merit review, which may include animal-based skills found in Veterinary Assistant, a program not accredited by CVMA.

St. Lawrence College follows the Pedagogical Merit review Process Flowchart outlined by the CCAC illustrated in Figure 1. Explicit steps are as follows.

P1 Professors will identify course learning outcomes, assessment methods and learning activities in the course outline and learning plan. Course Outlines and learning plans will be submitted to the Associate Dean of Applied Science and Computing.
P2 Professors will complete the SLC live animal use pedagogical merit review form (SLCPMR), outlining the requirement for use of live animals, and the assessment requirements. The form can be obtained from the Coordinator of the ACC or the Associate Dean, Applied Science and Computing.

P3 The Associate Dean of Applied Science and Computing will pass on all outlines, learning plans and protocols for courses with live animal use to the Pedagogical Merit Live Animal Use Review Committee (PMRC). The PMRC consists of Two independent referees: a faculty member from the Vet Tech or VA program with knowledge of alternatives to live animal based teaching and another member of the academic division familiar with pedagogy, ethics, and/or animal care. The form the referees use is obtained from CCAC, and found online at https://www.ccac.ca/Documents/Standards/Policies/CCAC_Pedagogical_Merit_Review_Form_for_Reviewers.docx

The course outline and learning plan will be reviewed in conjunction with the Pedagogical Merit Review form as developed by the CCAC and the SLCPMR

P4 The reviewers will consider the following key aspects:

- Are the learning outcomes clear and specify the involvement of live animals?
- Do the learning outcomes specify the proportion of the outcome that must be achieved and/or how well the behavior must be performed (accuracy, speed, quality)?
- Are the composition, learning level and needs of the student group(s) compatible with the goals and objectives of the animal-based teaching/training?
- Is the timing of the inclusion of animals in the teaching/training suitable for the projected timing of the expected outcomes(s)?
- Is this the best learning method for the students?
- Are the criteria proposed for assessing the completed animal-based teaching/training suitable and will it contribute to optimization of this use of animals for the benefit of future student?

P5 The reviewers will complete their documentation and if they agree that the proposed use of live animals is justified and reasonable the Associate Dean will approve the detailed course outline and learning plan and indicate the approval to the course developer / professor.

P6 If the reviewers recommend changes, the Associate Dean will follow-up with the course developer / professor and provide feedback on what needs to be changed. The outline and learning plan must then be resubmitted for consideration before approval.

P7 All Decisions of the reviewers are documented in summary form and sent to the ACC Coordinator to be shared with the ACC on an annual basis.

P8 If the professor disagrees with the recommended changes, the professor may appeal to the Associate Dean, who will adjudicate the appeal and issue a final decision. The Associate Dean may engage external members of the veterinary and animal care community to advise while reviewing the appeal.
PEDAGOGICAL MERIT REVIEW PROCESS FLOWCHART

INSTRUCTOR

Planned live animal model (PLAM) + learning outcomes + assessment methods

Constructive curricular alignment?

NONE or WEAK

INSTRUCTOR Re-evaluate and re-submit

Are the learning outcomes essential to the students?

STRONG

YES

Are there equivalent (relative or absolute) replacement alternatives to the PLAM?*

NO

PLAM IS NOT the best model

INSTRUCTOR Use replacement*

ACCEPTABLE PEDAGOGICAL MERIT

Decision sent to animal care committee for protocol review

ANIMAL CARE COMMITTEE

* REPLACEMENT ALTERNATIVES

ABSOLUTE (no animal):
No protocol or pedagogical merit required

RELATIVE (tissues, eggs, invertebrate):
Category A protocol

RELATIVE (live vertebrate or cephalopod):
Submit revised PLAM

NO PEDAGOGICAL MERIT

Decision sent to animal care committee for information