Animal Care and Use Standard Operating Procedures: Definition, Creation, Approval and Management Procedure

Overview
The Canadian Council on Animal Care (CCAC) and the University of Alberta encourage the use of formal, written standard operating procedures (SOPs) for commonly used animal procedures wherever possible. In addition to promoting consistent and verifiable processes across the Animal Care and Use Program, SOPs offer Principal Investigators (PIs) an alternative to writing detailed procedures each time they prepare a protocol. Similarly, the use of SOPs reduces the review burden for the Animal Care and Use Committees (ACUCs) and simplifies the work of the animal services units.

Note: This Procedure addresses only SOPs involving live animals.

Purpose
- Define different types of animal care and use SOPs.
- Define the processes by which SOPs are created, approved and managed.

PROCEDURE

1. STANDARD OPERATING PROCEDURE REQUIREMENTS
   SOPs are sets of fixed instructions or steps to be followed in carrying out a given operation or in a given situation. SOPs may be developed by various members of the animal care and use program for a range of activities, including record keeping, equipment maintenance, use of equipment, emergency management and animal care and use.
   
   a. Any SOP involving live animals must be reviewed and approved by an ACUC before it can be used. Changes to SOPs must also be approved before they are implemented.
   
   b. SOPs should follow a standard template and provide sufficient detail so that trained personnel new to the animal care and use program should be able to carry out the procedure.
   
   c. Animal services units and ACUCs should, as much as possible, encourage PIs and their research personnel to follow common, consistent SOPs for animal care and use procedures.
2. INSTITUTIONAL SOPs

Institutional SOPs should be established for procedures involving animals that are common across research areas and/or animal services units and to promote best practices for the University’s animal care and use program.

a. Institutional SOPs should, wherever possible, make use of existing approved unit level or PI SOPs. Institutional SOPs may incorporate material from SOPs in use at other CCAC accredited institutions.

b. Institutional SOPs will be reviewed and approved by the University Animal Policy and Welfare Committee (UAPWC), which includes Directors of the animal services units and Chairs of ACUCs, or by a sub-committee of UAPWC, created for that purpose. Institutional SOPs will be accepted by all University ACUCs and animal services units.

c. SOPs relevant to the services provided by two or more of the animal services units must be endorsed by all units before they are presented to UAPWC for approval as institutional SOPs.

d. Whether or not institutional SOPs are regularly reviewed by ACUCs in connection with specific animal use protocols, they should be reviewed by UAPWC at least every three years.

e. Any member of the University animal care and use program may recommend development of an institutional SOP to UAPWC. However, UAPWC will give priority to development of SOPs for commonly used procedures.

f. The institutional animal user training program and ACUCs will reinforce the use of SOPs, in particular institutional SOPs or SOPs maintained by the animal services units.

g. Approved institutional SOPs will be maintained in the on-line research ethics system by REO and will be accessible on-line to animal module users.

3. ANIMAL SERVICES UNIT SOPs

Directors of the animal services units must establish and maintain SOPs for services or activities performed by their staff or in their facilities.

a. Unit level operational SOPs address various functions of an animal services unit in addition to those that involve animal care and use, for instance equipment maintenance, cleaning and record keeping. Operational SOPs that do not involve animals do not require ACUC approval.

b. Unit level animal care and use SOPs involving live animals may or may not be associated with a specific animal use protocol. Unit level SOPs connected to animal use protocols maintained by the Director, for instance, training or breeding protocols should be reviewed in conjunction with the animal use protocol or when these SOPs are amended. Stand-alone SOPs, for rarely used procedures, should be reviewed by ACUC at least every three years.

c. Animal services units should provide species and procedure or technique training consistent with approved institutional and unit level SOPs.

d. The Director must ensure current approved versions of his/her unit’s SOPs are available to staff and researchers as needed.

4. INVESTIGATOR SOPs

PIs may create standard operating procedures for specialized activities that they or their research personnel perform regularly.

a. PI level SOPs for protocol-specific procedures involving live animals will typically be approved by an ACUC, in connection with the PI’s animal use protocol, and reviewed in detail with full protocol renewal every four years or in the event of changes. The animal use protocol identifies the animal users and their training, as well as the context in which protocol-specific SOPs will be employed. The more invasive the SOP, the more important it is to verify that the personnel following the SOP have commensurate training.

b. The PI must ensure that current approved versions of his/her SOPs are available to all members of his/her research group on an as needed basis.

c. A PI may also include institutional or unit level SOPs in his/her animal use protocol and make minor modifications to the SOPs, provided those modifications are approved by ACUC.
DEFINITIONS

Any definitions listed in the following table apply to this document only with no implied or intended institution-wide use. [▲Top]

<table>
<thead>
<tr>
<th>Animal</th>
<th>Any living non-human vertebrate and any living invertebrate of the class of cephalopoda, including free-living and reproducing larval forms, used for research, teaching or testing by University staff or trainees.</th>
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<tr>
<td>Canadian Council on Animal Care (CCAC)</td>
<td>The national organization responsible for setting and maintaining standards for the ethical use and care of animals used in science (research, teaching and testing) in Canada.</td>
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<td>Principal Investigator (PI)</td>
<td>A member of the academic staff who is responsible for the design, conduct, supervision and oversight of the care and use of animals in research, teaching or testing as describe in an approved animal use protocol.</td>
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<td>Animal Services Units</td>
<td>Animal facilities established and operated by the University of Alberta as ongoing administrative units to provide veterinary and animal care staff, infrastructure, training, oversight and other resources to support use of animals in research, teaching and testing by University staff and trainees. They currently are: Agricultural, Food and Nutritional Sciences Animal Services (AFNSAS), Health Sciences Laboratory Animal Services (HSLAS) and Science Animal Support Services (SASS).</td>
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FORMS

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SOP Template

RELATED LINKS

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Agreement on the Administration of Agency Grants and Awards by Research Institutions (Government of Canada)

Animal Protection Act (Government of Alberta)

Animal Protection Regulation (Government of Alberta)

Canadian Council on Animal Care Guidelines (CCAC)

On-line Research Ethics System (University of Alberta)

Recruitment Policy (Appendix A) Definition and Categories of Academic Staff, Postdoctoral Fellows, Academic Colleagues and Excluded Academic Staff (UAPPOL)

Recruitment Policy (Appendix B) Definition and Categories of Support Staff (UAPPOL)

Research and Scholarship Integrity Policy (UAPPOL)

Research Ethics Office (University of Alberta)
University Animal Policy and Welfare Committee (University of Alberta)