



Brandon University Animal Care Committee
(BUACC)

MANUAL FOR NEW COMMITTEE MEMBER

GENERAL INFORMATION:

[What is the Brandon University Animal Care Committee \(BUACC\)?](#)

The BUACC is a Senate sub-committee responsible for Brandon University's animal care and use program.

[What is the Canadian Council on Animal Care \(CCAC\)?](#)

The Canadian Council on Animal Care (CCAC) is the national peer review agency responsible for setting and maintaining standards for the care and use of animals in research. The CCAC requires that each institution conducting animal-based research, teaching, or testing establish an animal care committee, which must be functionally active and operate according to formal Terms of Reference based on the most current version of the *CCAC policy statement on: terms of reference for animal care committees*.

The CCAC conducts regular assessments of each participating institution which involves an assessment of the composition, functioning and effectiveness of the animal care committee and the appropriateness of its animal care facilities, practices and procedures. There are four CCAC statuses: Compliance, Conditional Compliance, Probation, and Non-Compliance. Institutions that have been assigned a status of Compliance or Conditional Compliance are awarded a CCAC Certificate of GAP – Good Animal Practice.

[General Responsibilities of the BUACC:](#)

The BUACC is responsible for ensuring ethical animal care and use, and compliance with CCAC and Brandon University guidelines, policies, and standard operating procedures. This is achieved through the following activities:

- review and approve animal use protocols, ensuring that no research, teaching, or testing programs (including field studies) involving animals commence without prior approval;
- develop, implement, and periodically review animal care policies to meet CCAC guidelines and policies, and to meet the changing needs within the University, the scientific community, the animal welfare community and society as a whole;
- visits/assessments of the Brandon University Animal Facility and McKenzie Farms;
- reporting to the CCAC, through annual animal use data reports and by filling out the Animal Care and Use Program Review Form every three years.

Membership of the BUACC:

All members of the BUACC are appointed by the Senate Research Committee to a maximum of eight consecutive years of service. The composition is as follows:

- a Chair who cannot be directly involved in the management of the institutional animal facilities, nor be the consulting veterinarian for the institution, nor be involved in the preparation of a significant number of protocols to be reviewed by the committee;
- two members chosen from scientists, teachers, and laboratory instructors experienced in animal care and use;
- a veterinarian, preferably experienced in experimental animal care and use;
- a Brandon University member whose work does not involve animals;
- a person and one alternate representing community interests and concerns, and who has no affiliation with the institution;
- the Animal Health Technologist – ex-officio;
- a student representative; and
- the BUACC Coordinator/Research Ethics Officer – non-voting, ex-officio.

Chair:

The Chair of BUACC serves as the public spokesperson for animal-related inquiries and represents BUACC at the Senate Research Committee and other meetings as required. The Chair ensures administrative and procedural policies concerning the protocol application process are followed and reports to the Vice-President (Academic & Provost) on BUACC policies and procedures.

The Chair is a BUACC member whose primary obligations are to fulfill the BUACC responsibilities in the context of BUACC and CCAC policies, guidelines, and procedures on animals used in research, teaching, and other applicable criteria which inform ethics review, deliberation and decision making. At times, the Chair may, during deliberations, bring the perspective, interests and concerns of his/her discipline; however, the Chair should not champion any particular perspective or interest of concern.

The Chair shall demonstrate exemplary conduct in all matters concerning the care and use of laboratory animals and will lead by example. The Chair shall advise researchers about the process of ethics review, the principles which inform ethics deliberation, and decisions and changes in practice and policy which may influence deliberations and decisions.

The Chair, with the assistance of the BUACC Coordinator/Research Ethics Officer, is responsible for the materials prepared by Brandon University for assessment visits conducted by the CCAC.

The Chair may assist the Vice-President (Academic & Provost) who is responsible for institutional responses to reports and request for information.

Two members chosen from scientists, teachers, and laboratory instructors experienced in animal care and use:

These positions shall include animal scientists and/or teachers that can assist BUACC's mandate with a distinct knowledge, prior experience, and expertise on conducting research and/or pedagogy.

At least one representative from this grouping shall attend Quality Assurance procedure observations for each approved protocol, and shall contribute, as applicable, to the written report of said observations.

Animal Health Technologist:

In relation to the responsibilities as a BUACC member, the Animal Facility Manager & Animal Health Technologist shall keep BUACC apprised of all animal activities in the Animal Facility. As well, the Animal Facility Manager & Animal Health Technologist is responsible for developing and updating Standard Operating Procedures for the Animal Facility in accordance with BUACC and CCAC policies, guidelines, procedures, and recommendations, and presenting these documents to BUACC for review and approval.

The Animal Facility Manager & Animal Health Technologist shall assist with the development of CCAC assessment materials relating to the Animal Facility in particular.

Student Representative:

The student representative is typically selected from those students in pre-veterinary studies; however, the student shall have demonstrated experience working with and/or knowledge of animals. The student representative shall assist BUACC's mandate by approaching review and approval of protocols, and discussion and development of policies and procedures from the student perspective.

Brandon University member whose work does not involve animals:

This representative shall be a faculty or staff member at Brandon University with whom normal activities do not depend on or involve animal use for research, teaching, or testing. The representative shall have an active interest in animal care, welfare and science; and feel confident with raising ethical concerns to be addressed in applications and policies/procedures.

Community representative:

The community representative shall be an individual external to the institution who shall represent community interests and concerns by providing unbiased opinions on the ethical nature of animal studies without personal consequence, for example affecting one's own work. The community representative shall have no affiliation with the institution that is not involved in animal use for research, teaching, or testing. As the general consensus of everyday society may differ from the academic community, it is important that the community representative attend all meetings and assessments to ensure the potential academic advantage does not overshadow any procedures that would not be tolerated, morally or ethically, in a non-research based setting.

Consulting Veterinarian:

The Consulting Veterinarian serves on the BUACC as an advisor and animal advocate on strategies to address the Three Rs – reduction, refinement, and replacement – and on matters of animal welfare, housing, care, and use. This will include anesthesia and analgesia, suitability of animal models, establishment of endpoints, zoonoses, biohazards, and occupational health and safety as it relates to the housing and use of animals.

The Consulting Veterinarian shall conduct site assessments of the Animal Facility, laboratories, and alternative housing sites, once as an independent assessment and once as part of the BUACC assessment, at minimum once per year. This number may be adjusted as warranted, according to the number of animals and/or specialized animal care and use programs would require.

The Consulting Veterinarian shall be involved with the development, implementation, and oversight of the animal health program for each species maintained in the Animal Facility. This includes identifying measures taken to receive, quarantine, condition, and introduce various species into the Facility.

The Consulting Veterinarian shall participate in the ongoing improvements in animal and veterinary care standards, guidelines, and techniques through interaction and communications with BUACC, senior administration, researchers, and animal care staff, to ensure best practices of the care and use of experimental animals. He/she shall participate in the development of programs and the delivery of education and training of animal users and animal care givers. He/she shall also participate in the development, implementation and review of Standard Operating Procedures for animal care, animal use, facility management, and of institutional animal care and use policies.

BUACC Coordinator/Research Ethics Officer:

The BUACC Coordinator supports BUACC by ensuring that animal use protocols are well managed, that Committee minutes and reports are promptly produced and distributed, that all exchanges between the BUACC and animal users are well documented and filed in a timely manner, and that animal users and BUACC members are provided with necessary information. The BUACC Coordinator may also provide administrative support by drafting policy and procedural documents for review and approval, maintaining accurate and complete files, and advising researchers on policy, training, application preparation, review processes, and providing general guidance. The BUACC Coordinator facilitates the merit review process for both the scientific merit reviews and pedagogical reviews. He/she also organizes and prepares materials, in coordination with the Chair, for CCAC site visits and communication requests.

Reporting Structure of BUACC:

Brandon University has a bi-cameral system, with the University Senate responsible for academic matters and the University Board of Governors responsible for financial matters. BUACC reports to the Senate Research Committee (SRC), which is a sub-Committee of Senate. Please see Appendix A for the BUACC reporting chart.

ANIMAL USE PROTOCOL REVIEW:

General Considerations:

BUACC is responsible for ensuring that no research, teaching, or testing involving animals (including field studies) commences without prior approval by the Committee of a written animal use protocol.

All members of the committee, but especially those typically without a scientific background (i.e. community representative), are encouraged to ask straightforward, honest questions, and should not worry about being less informed, scientifically speaking, than other members around the table.

The Committee should ensure that the project that is to be carried out is sufficiently justified. This requires questioning the value of the project in terms of its goals, the extent of discomfort or distress that may be experienced by the animals, as well as the competence of the investigators and technical staff to conduct the procedures. Appendix B offers examples of questions that can be asked to ensure that the research adheres to the principles of the Three Rs – Replacement, Reduction, and Refinement.

The *CCAC guidelines on: animal use protocol review* provides specific guidance on protocol review, including the following topics:

- the potential benefit of the research;
- replacement alternatives to animal use;
- animal species or model selection;
- reduction on animal use and/or animal numbers;
- refinement of experimental technique;
- setting endpoints;
- physical restraint;
- invasive/stressful procedures;
- euthanasia;
- hazardous materials;
- teaching protocols;
- wildlife studies.

Reviewing Protocols:

BUACC requires that all animal users complete an animal use protocol form, and demands that no animals are acquired, held for display or breeding purposes or used for research, testing or teaching before an animal use protocol is approved.

All members of BUACC must be able to clearly understand each protocol. The Principal Investigator, who is the identified lead researcher for the protocol, is responsible for ensuring that the application submitted to BUACC is clear and avoids using scientific jargon. A summary of the primary aims and proposed use of animals must always be provided in lay terms. This should include a description of procedures designed to ensure that animal suffering will be prevented or at least minimized.

All protocols must be reviewed by BUACC to ensure that the proposed animal use complies with CCAC and Brandon University policies and guidelines. BUACC is responsible for attempting to reconcile public demands for medical, scientific and economic progress with demands for reduction in animal use, pain, and suffering. The cost, in terms of animal welfare and integrity must be measured against the expectation of a proportional contribution to the understanding of fundamental biological or ecological principles, or to improvement of human or animal health and welfare. Protocol review by the BUACC provides a mechanism for achieving this "cost/benefit assessment" which involves consideration of relevant ethical, scientific, and social issues. Discussions and decisions about protocols are made during full committee meetings.

The objective review of protocols is based on the following principles:

- that the use of animals in research, teaching, and testing is acceptable only if it promises to contribute to the understanding of environmental principles or issues, to

fundamental biological principles, or to development of knowledge that can reasonably be expected to benefit humans, animals or the environment;

- that optimal standards for animal health and care result in enhanced credibility and reproducibility of experimental results;
- that acceptance of animal use in science critically depends on maintaining public confidence in the mechanisms and processes used to ensure necessary, humane and justified animal use; and
- that animals should be used only if the researcher's best efforts to find an alternative have failed. A continuing sharing of knowledge, review of the literature, and adherence to the Russell-Burch "Three Rs" tenet of "replacement, reduction, and refinement" are also requisites. Those using animals should employ the most humane methods on the smallest number of appropriate animals required to obtain valid information.

Appendix C demonstrates the steps taken for protocol review. For more information, please see the *CCAC guidelines on: animal use protocol review*.

POLICIES, GUIDELINES, AND STANDARD OPERATING PROCEDURES:

The CCAC and BUACC have policies, guidelines, and standard operating procedures that facilitate and give clear direction for the animal care and use program at Brandon University. These policies can be found at www.brandonu.ca/buacc and www.ccac.ca/.

Brandon University Animal Care Policies:

- BUACC Terms of Reference
- Adoption of Animals
- Allergies Regarding Laboratory Animals
- Collaboration Policy (BU Animal Care Policy for Animal-Based Projects Involving Two or More Institutions)
- Non-Compliance Policy and Procedures
- Scientific Merit & Pedagogical Review Policy (Policy on Independent Scientific Merit and Pedagogical Peer Review of Animal Based Research, Teaching, and Testing)
- Policy on Alternative Housing of Experimental Animals
- Quality Assurance Policy
- Training of Personnel Working with Animals

Brandon University Standard Operating Procedures:

- Administration of Medications
- Animal Handling
- Animal Health Technologist
- Animal Procurement
- Animal Room Capacity Rodents
- Biosafety Guidelines
- Climate Control
- Common Rat and Mouse Diseases
- Crisis Management & Communication Plan
- Daily Rounds
- Endpoints
- Lights and Timers
- Monitoring of Animal Bedding
- Occupational Health & Safety
- Ordering and Receiving Supplies
- Procedures for Dead and Moribund Animals
- Receiving Animals
- Rodent Cage Cleaning
- Rodent Euthanasia and Anesthesia
- Tank Cleaning & Disinfection
- Treatment of Common Mouse Behaviours
- Waste & Carcass Disposal
- Zebrafish Husbandry

CCAC Fundamental Principles and Policy Statements:

- *Ethics of Animal Investigation (1989)*
- *Social and Behavioral Requirements of Experimental Animals (1990)*
- *Categories of Invasiveness in Animal Experiments (1991)*

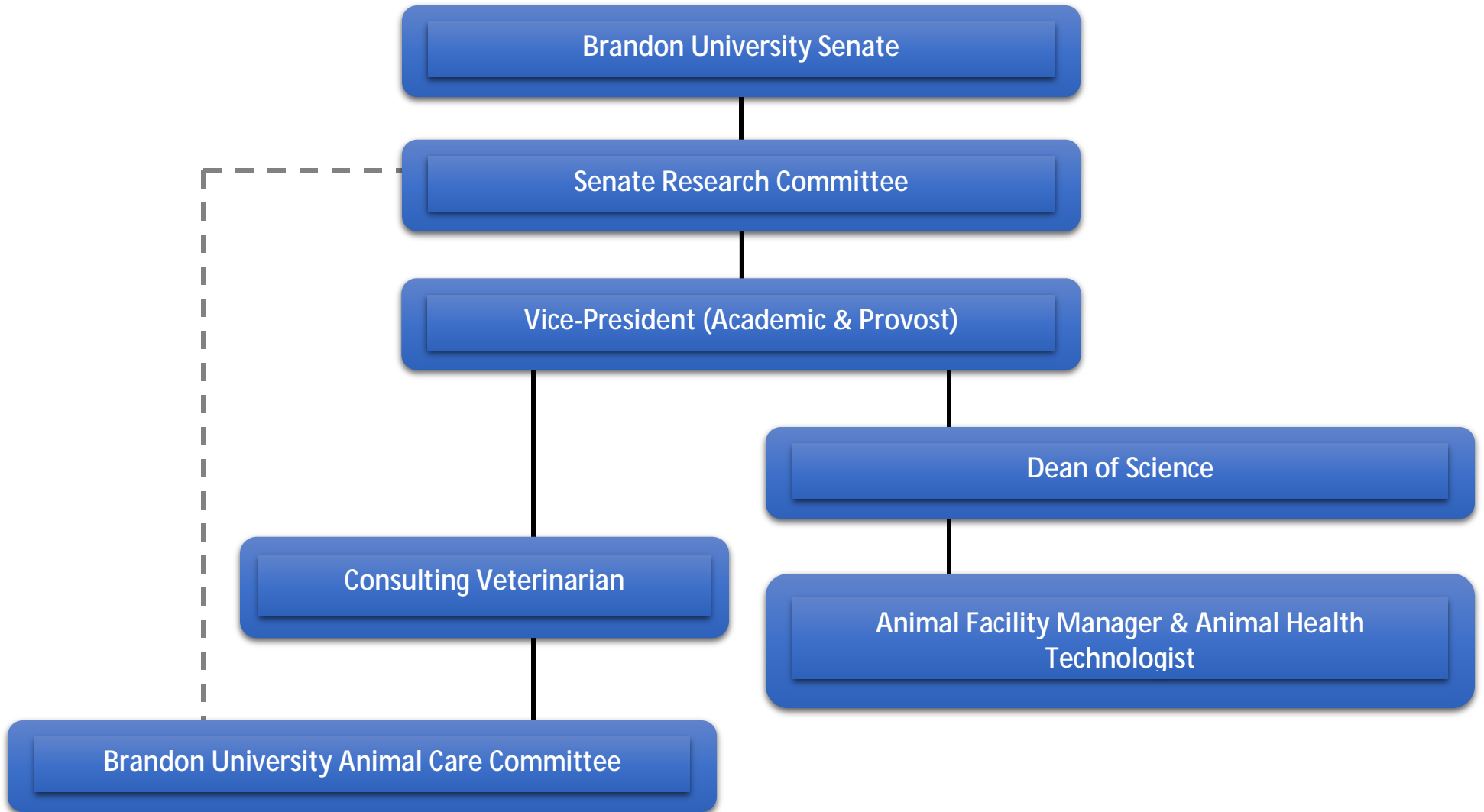
- *CCAC Policy: Certification of Animal Ethics and Care Programs (2020)*
- *CCAC Policy: Confidentiality of Assessment Information (2019)*
- *CCAC Policy: Recommendations Made in CCAC Assessment Reports (2018)*
- *CCAC Policy: Animal-Based Projects Involving Two or More Institutions (2003)*
- *CCAC Policy: Pedagogical merit of live animal-based teaching and training (2016)*
- *CCAC Policy: Scientific merit and ethical review of animal-based research (2013)*
- *CCAC policy statement on: senior administrators responsible for animal care and use programs (2008)*
- *CCAC policy statement on: terms of reference for animal care committees (2006)*

CCAC Guidelines:

- *CCAC guidelines on: antibody production (2002)*
- *CCAC guidelines on: choosing an appropriate endpoint in experiments using animals for research, teaching and testing (1998)*
- *CCAC guidelines on: euthanasia of animals used in science (2010)*
- *CCAC guidelines on: Husbandry of animals in science (2017)*
- *CCAC guidelines on: laboratory animal facilities – characteristics, design and development (2004)*
- *CCAC guidelines on: procurement of animals used in science (2007)*
- *CCAC guidelines on: animal use protocol review (1997)*
- *CCAC guidelines on: training of personnel working with animals in science (2015)*
- *CCAC guidelines on: transgenic animals (1997)*
- *CCAC Guideline to the Care and Use of Experimental Animals, Vol. 1, 2nd Ed., 1993 – currently under revision*
- *CCAC guidelines on: the care and use of wildlife (2003) – currently under revision*
- *CCAC guidelines on: the care and use of fish (2005) – currently under revision*

This document was drafted based on the Canadian Council on Animal Care and Canadian Federation of Human Societies' "Manual for Community Representatives".

Brandon University Animal Care Committee Reporting Structure



Appendix B

Suggestions of questions to be asked during animal use protocol review:

- Why do animals need to be used for this project?
- What will be accomplished in practice by using animals?
- Is this study a repetition of work using the same species? If yes, why is it being repeated?
- How were the proposed numbers of animals determined?
- Are you confident that enough animals will be used for the project to be valid scientifically/pedagogically, and that the number of animals proposed does not exceed what is needed for the project to be valid?
- Where will the animals be obtained from, or in what geographical area will they be studied?
- Will they be transported in a standard way or will this project require an unusual form of transport requiring special precautions?

Wild Animals:

- Will wild animals be chased, trapped, handled, manipulated, released?
- Are all of the persons who will be handling the animals well trained and protected for this type of animal and this type of project?
- How will these procedures take place in practice, and what level of discomfort are the animals likely to feel? For how long?
- Can the procedures themselves, the number of procedures, the way in which the animals are caught/held or the length of time that the animals are held be further refined to better protect the animals' health and welfare? Has there been veterinary input to this end?
- Are appropriate anesthesia/analgesia/other therapies, chosen with veterinary input, being used for invasive procedures? Will animals be manipulated and monitored by competent personnel?
- How likely is it that animals will be injured or killed by accident? What will happen in case of injury?

- What are the animal welfare endpoints for this project? Who will apply them, and is this person able to apply them promptly and appropriately?
- What is (are) the method(s) of euthanasia and is (are) it (they) the most appropriate?
- When will the Animal Care Committee receive a report about what happened in practice in the field?

Laboratory Animals:

- Where and how will the animals be housed?
- Are all of the personnel who will be handling the animals well trained and protected for this type of animal and this type of project?
- Can these new animals be appropriately received and housed in the institution's existing facilities, with no concerns for animal groups currently being housed?
- Will the animals have the best possible housing conditions and environmental enrichment?
- What will happen to the animals in practice, day to day, once they arrive in the facility?
- What procedures will be undertaken on the animals? At what frequency? What level of discomfort are the animals likely to feel? For how long?
- Can the procedures themselves, the number of procedures, the way in which the animals are housed or the length of time that the animals are held be further refined to better protect the animals' health and welfare? Has there been veterinary input to this end?
- Are appropriate anesthesia/analgesia/other therapies, chosen with veterinary input, been used for invasive procedures? Will animals be manipulated and monitored by competent personnel?
- Will animal facility/veterinary and not only research personnel be monitoring the animals regularly?
- How likely is it that the animals' health/welfare will be compromised by the procedures?
- What are the animal welfare endpoints for this project? Who will apply them, and is this person able to apply them promptly and appropriately?
- What is (are) the method(s) of euthanasia and is (are) it (they) the most appropriate?

Appendix C

