

## POLICY STATEMENT: ANIMAL CARE AND USE

### **8.4 PREAMBLE**

#### **8.4.1. Foundation Statement**

Research and teaching activities involving animals are critical to the mission of the Brock University and the moral commitment of the University to the appropriate care of, and respect for, the animals involved is central to this policy and its procedures.

External sponsors of research require an institutional review of research involving animals as a condition of the award of research funding. As an Ontario university, Brock is subject to the Animals for Research Act (Ontario) (R.S.O. 1990, CHAPTER A.22), as amended, and its regulations. Moreover, as a recipient of research funding from the federal granting councils, Brock "must adhere to the policies and guidelines of the Canadian Council on Animal Care" (CCAC). Formal responsibility for ensuring the humane care and use of animals in all University teaching and research programs is mandated both by the Animals for Research Act and by the guidelines of the Canadian Council on Animal Care and is delegated to the Animal Care and Use Committee (ACUC) which evaluates all activities involving animals within a framework of provincial legislation and national and international standards.

This policy covers all species of animals as defined by the CCAC guidelines, as amended from time to time, and the Animals for Research Act (Ontario), as amended from time to time. The definition of animal, for the purposes of this policy, shall normally mean a live, non-human vertebrate.

The Animal Care Policy and Procedures is intended for application within the context of academic freedom which is the right to examine, question, teach and learn without deference to prescribed doctrine or authority (Brock University-Brock University Faculty Association Collective Agreement, Article 11). Nothing in this policy or its procedures replaces or diminishes this fundamental principle. At the same time, academic, scientific and moral reputation of the University depends on the practice of academic freedom within defined ethical limits. This policy identifies such constraints in relation to the care and use of animals in University teaching and research programs.

Brock University adheres to the CCAC tenet that "The use of animals in research and teaching is acceptable only if it promises to contribute to understanding of fundamental principles, or to the development of knowledge that can reasonably be expected to benefit humans or animals. Animals should be used only if the researcher's or instructor's best efforts to find an alternative have failed. A continued sharing of knowledge, review of the literature, and adherence to the Russell-Burch "3R" tenets of "Replacement, Reduction and Refinement" are also requisites. Those using animals should employ the most humane methods on the minimum number of appropriate animals necessary to obtain valid information."

### **8.5 AUTHORITY AND RESPONSIBILITY OF THE ACUC**

The Animal Care and Use Committee (ACUC) has the responsibility to ensure that the use of animals in teaching and research at Brock University is conducted in accordance with best of class practices in Canada and internationally, at minimum the policies and guidelines of the Canadian Council on Animal Care as amended from time to time, and Brock University policies

and procedures. Moreover, the ACUC is responsible for ensuring compliance with federal and provincial legislation, including but not limited to the Animals for Research Act (Ontario).

Specifically, the ACUC shall have the authority, on behalf of the Vice-President Research, to:

- Ensure that no research or teaching involving animals be commenced without ACUC review and approval and that no animals are procured or used prior to such approval.
- Ensure that no animals be held for display or breeding purposes or eventual use in research or teaching without the prior approval by the ACUC of a written animal use protocol, except where CCAC guidelines provide for such exemptions.
- Require all animal users to complete an animal use protocol form, ensure that such protocol adhere to the ACUC's SOPs and CCAC "Guidelines on Animal Use Protocol Review" and include at minimum:
  - Project title and descriptive key words or brief description of procedures to be conducted on the animals as defined in the CCAC Animal Use Data Form,
  - Principal investigator(s)/instructor(s) and all personnel who will handle the animals; along with their qualifications and training with respect to animal handling,
  - Departmental affiliation,
  - Proposed start date and end date,
  - Protocol renewal date,
  - Funding source(s) and status of funding approval,
  - Whether the project has received peer review for scientific merit,
  - Course number and indication whether the course has been reviewed with respect to the pedagogical merit of using live animals (AUPP04 "Review of Teaching Protocols"),
  - Project summary in layperson's terms,
  - An indication of the use of any biohazards, infectious, biological, chemical or radioactive agents in animal based projects and, if so, an indication of institutional approval of this use (e.g., approval number and date of approval),
  - Category of invasiveness (may be CCAC form),
  - Evidence of consideration of the Three Rs (Replacement, Reduction and Refinement) of animal use,
  - Description detailing procedures that are carried out on the animals,
  - Description of the endpoints of the experimentation, selected according to "CCAC Guidelines on Choosing An Appropriate Endpoint in Experiments Using Animals for Research, Teaching and Testing" and the person responsible for monitoring the animals and applying the endpoints (SOPs Health19 "Humane Endpoints" and Health20 "Humane Endpoints for Aging Rodents),
  - Description of capture, restraint, transportation and/or housing of animals used in field studies (Appendix 1 of AUPP form and the CCAC "The care and use of wildlife 2003"),
  - The method of euthanasia and justification if used (CCAC Guidelines on ....., AVMA Position statement on Euthanasia, SOPs Euthanasia01 ("Personnel Authorized to Perform Euthanasia", Euthanasia02 "Procedure for Euthanizing Small Rodents with CO<sub>2</sub> and Safe Operation of the CO<sub>2</sub> chamber", Euthanasia04 "Methods of Euthanasia for Various Animals", Euthanasia05 "Euthanasia of Mice and Rats by Decapitation Using a Guillotine", Euthanasia06 "Euthanasia of Rodent Fetuses and Neonates"),
  - Description of the fate of the animals if they are not euthanized, and
  - Other relevant information.

- Ensure that each research project has been found to have scientific merit through independent peer review and ACUC evaluation before approving the project (SOP AUPP02 “Assessment of Protocols in Absence of Peer Review from a Funding Agency”).
- Review and assess all protocols for the use of animals in teaching, research and testing by Brock University faculty members, limited term appointments, visiting researchers, students, and staff at Brock University facilities, at other organizations or in the field, where the individual is acting in her/his capacity as a Brock faculty member, student, staff member, employee, agent or affiliate, prior to the use of any animals in teaching, research or testing (SOPs AUPP01 “Mechanisms for Screening Research or Teaching Involving Animals”, AUPP03 “Assessment of Teaching Protocols”, AUPP04 “Review of Teaching Protocols”).
- Approve, not approve or require changes to protocols for the use of animals in teaching, research and testing at Brock University.
  - The ACUC may delegate the responsibility of interim approvals, to be used infrequently, to a subcommittee, which must include at least one scientific member, one clinical veterinarian and one community representative, one of whom should preferably be the Chair of the ACUC. However, all final protocol approvals must be given during a full meeting of the committee, to ensure that all committee members have the opportunity to discuss and further refine protocols as a group.
- Ensure animal users update their protocols with any modifications they intend to make and approve any modifications to a protocol before they are implemented.
  - For minor modifications, the Chair of the ACUC or a delegate may grant approval. For major modifications, a new protocol must be submitted.
  - Notations on what constitutes minor and major modifications are referenced in SOP AUPP05 “On Submitting an Amendment to an Approved AUPP”.
- Develop procedures for the review of and review all protocols annually (within 12 months of the commencement of the project).
- Develop and approve, subject to review by the Vice-President Research, procedures for the review, approval, post-approval monitoring of the use of animals in teaching, research and testing conducted under the auspices of Brock University (SOP AUPP06 “Post Approval Monitoring (PAM) Program”).
- Document all ACUC discussions and decisions in the ACUC Minutes, Notes and on attachments to the protocol forms.
- Develop and implement an education and training program for animal users which, at minimum, shall ensure animal users have the opportunity to become familiar with the CCAC policy statement on ethics of animal investigation and other CCAC guidelines and policy statements, federal, provincial and other statutes that may apply, and institutional requirement [CCAC Institutional animal users training program 1999, SOPs IAUP01 (“Canadian Council on Animal Care (CCAC) Training Modules”, IAUP02 “Mandatory Training at Brock University for Animal Surgeons”).
- Develop and approve Standard Operating Procedures (SOPs) for the care and use of animals in teaching, research and testing under the auspices of Brock University.

- Develop and approve procedures for determining and working to correct breaches of compliance with animal care and use policies and procedures (SOP AUPP06 “Post Approval Monitoring (PAM) Program”).
- Stop any objectionable procedure if it considers that unnecessary distress or pain is being experienced by the animal (SOP Euthanasia01 “Personnel Authorized to Perform Euthanasia”).
- Stop immediately any use of animals that deviates from the approved use, any non-approved procedure, or any procedures causing any unforeseen distress or pain by the animal (SOP AUPP06 “Post Approval Monitoring (PAM) Program”).
- Have an animal euthanized humanely if pain or distress caused to the animal is not part of the approved protocol and cannot be alleviated.
- Ensure appropriate care of animals in all stages of their life and in all experimental situations (SOP Husbandry series 01-12).
- Establish procedures, commensurate with current veterinary standards such as CALAM Standards of Veterinary Care to ensure that:
  - Unnecessary pain or distress is avoided,
  - Animal stress and injuries are avoided,
  - Anesthesia and analgesia are used effectively
    - SOP Health08 “Ketamine/Xylazine Anesthesia in Rodents”,
    - SOP Health10 “Use of Acetaminophen as an Analgesic in Rodents”,
    - SOP Health12 “Buprenorphine as an Analgesic in Laboratory Animals”,
    - SOP Health21 “Use of Metacam® (Meloxicam) as an Analgesic in Laboratory Mice, Rats, Guinea Pigs and Reptiles”,
    - SOP Health22 “Use of Anafen® (Ketoprofen) as an Analgesic in Laboratory Rats, Guinea Pigs and Reptiles”.
  - Appropriate post-operative care is provided
    - SOP Health05 “Post-Operative Care of Rodents”,
    - SOP Health06 “Recognition and Monitoring of Pain and/or Distress in Rodents and Rabbits”,
    - SOP Health13 “Aseptic Survival Surgery in Rodents”
    - SOP Health15 “Fluid Replacement in the Mouse, Rat and Hamster”
    - SOP Health17 “Limb or Tail Amputation in the Red-Spotted Newt”, and
  - Due consideration is given to animal welfare, including environmental enrichment (SOPs EE01 “Environmental Enrichment for Rats”, EE02 Environmental Enrichment for Mice”).
- Ensure that policies provide for a system of animal care that will meet the needs of Brock University.
- Encourage the use of pilot studies with few animals when new approaches or methods are being considered before approving the main body of the project.

The University shall not overturn a decision by the ACUC in which it does not approve the use of animals in a teaching or research activity.

The University has the right not to allow a project to proceed where the risks of proceeding are such that they place the principal investigator(s)/instructor(s), students or others at unacceptable risks and an adequate risk management protocol has not been implemented, where

the university is unable to provide adequate facilities to allow the project to proceed, or where the principal investigator(s)/instructor(s) has not obtain the necessary approvals for the use of specific facilities, the use of radioactive, biohazardous or other materials, or to meet environmental legislation or regulations.

### **8.6 CHAIR OF THE ACUC**

The Chair of the ACUC shall be appointed by the Vice-President Research in consultation with the members of the ACUC.

The Chair of the ACUC shall be a tenured or tenure-track faculty member.

The term of the Chair of the ACUC shall normally be two years. This term may be renewed by the Vice-President Research, in consultation with the incumbent and the members of the ACUC.

In order to mitigate potential conflicts of interest, the Chair of the ACUC should be at arms length, as much as possible, with the Brock University research environment, from the preparation of a significant number of protocols to be reviewed by the ACUC.

When the Chair submits a research protocol to the ACUC, in order to avoid conflicts of interest, the Chair shall excuse her/himself during the consideration of the protocol by the ACUC, at which point the Vice-Chair will conduct the meeting. If there is a question about the Vice-Chair's arms-length distance from the protocol under review, then the Vice-Chair shall excuse her/himself during the consideration of the protocol and the ACUC shall appoint an ad hoc Chair from among its members to conduct the meeting while the protocol is being considered.

### **8.7 VICE-CHAIR OF THE ACUC**

The Vice-Chair of the ACUC shall be appointed by the Vice-President Research in consultation with the Chair and members of the ACUC.

The Vice-Chair of the ACUC shall normally be a tenured or tenure-track faculty member.

The term of the Vice-Chair of the ACUC shall normally be one year. This term may be renewed by the Vice-President Research, in consultation with the incumbent and the members of the ACUC.

The Vice-Chair shall be responsible for the roles and responsibilities of the Chair in the Chair's absence.

### **8.8 COMPOSITION OF ANIMAL CARE AND USE COMMITTEE**

The ACUC shall be comprised of the following voting members:

- One researcher representative from each department or research centre or institute in which animals are used for teaching and research purposes,
- One faculty member knowledgeable in ethics,

- One faculty member who is a non-animal user,
- ACUC veterinarian, appointed from the available Clinical Veterinarians (SOPs Job03 “Animal Care and Use Committee (ACUC) Veterinarian”, Job04 “Clinical Veterinarian”),
- Two community members appointed by the Vice-President Research following consultation with the Chair of the ACUC (SOP ACUC01 “Community Representative”),
- One (or more) graduate student, appointed by the Vice-President Research following consultation with the Chair of the ACUC,
- One (or more) undergraduate student appointed by the Vice-President Research following consultation with the Chair of the ACUC, and
- An Animal Care Facility representative (Facility Manager and/or Animal Care Technician)

The Vice-President Research (or designate) may attend ACUC meetings as a non-voting, ex officio observer and/or at the invitation of the ACUC.

From time to time, other individuals may be invited to participate in or make a presentation to the meetings of the ACUC, including but not limited to principal investigators, Human Resources; Manager of Environment, Health and Safety, and/or Biosafety Officer and/or Science Safety Officer.

Quorum for ACUC meetings is a simple majority of membership (50% of its membership plus 1), and must include one veterinarian, one community member and one faculty member

### **8.9 ACUC CHAIR, FACILITY MANAGER and ACUC VETERINARIAN ACCESS TO FACILITIES**

The ACUC Chair, ACT and her/his staff, and the ACUC Veterinarian shall have unimpeded access to all facilities in which animal are housed or used for teaching, research and testing.

### **8.10 AUTHORITY AND RESPONSIBILITY OF THE CHAIR, ACUC**

The Chair of the ACUC may act on behalf of the ACUC between meetings.

The Chair shall report to the ACUC on all actions taken by the Chair on behalf of the ACUC between meetings.

### **8.11 AUTHORITY AND RESPONSIBILITY OF ANIMAL CARE TECHNICIANS**

The ACUC delegates to the Animal Care Technicians (ACTs) responsibility for the day-to-day care for and oversight of the use of animals in teaching and research at Brock University.

An ACT shall have the authority to intervene where the welfare of animals is in question and to call in the ACUC Veterinarian to treat, remove from a study, or euthanize, if necessary, an animal which welfare is in question. In this event, the ACT will also attempt to contact the animal user whose animal is in poor condition and the Chair of the ACUC (SOP Euthanasia01 “Personnel Authorized to Perform Euthanasia”).

If the ACT is unable to contact the ACUC Veterinarian, the Chair of the ACUC or the animal user, the ACUC delegates to the ACT the authority to treat, remove from a study, or euthanize, if necessary.

#### **8.12 APPOINTMENT OF THE ACUC VETERINARIAN**

The ACUC Veterinarian is appointed by the Provost and Vice-President Academic on advice of the Vice-President Research and the Chair of the Animal Care and Use Committee.

The ACUC Veterinarian reports to the Vice-President Research.

The term of the ACUC Veterinarian is normally one year. This term may be renewed by mutual agreement of the University and the ACUC Veterinarian.

#### **8.13 AUTHORITY AND RESPONSIBILITY OF THE ACUC VETERINARIAN**

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

The veterinarian will attempt to contact the animal user whose animal is in poor condition before beginning any treatment that has not been previously agreed upon and will attempt to contact the Chair of the ACUC.

The veterinarian has the authority to proceed with any necessary emergency measures, whether or not the animal user and the Chair of the ACUC are available.

The veterinarian shall send a written report to the animal user and the Chair of the ACUC following any such event.

#### **8.14 TERM OF ANIMAL CARE AND USE COMMITTEE**

With the exception of the student representatives and individuals appointed as ex officio members, members of the ACUC shall be appointed for a term of no less than two years and no more than four years, renewable to a maximum of eight consecutive years. Student representatives are appointed for a term of one year, renewable.

#### **8.15 MEETINGS**

The ACUC shall meet at minimum three times per annum: once in the autumn term, once in the winter term and once in the spring/summer term.

#### **8.16 ANNUAL REPORTS**

The ACUC shall report annually to the Vice-President Research who shall report to the Senate Research and Scholarship Policy Committee and Senate on the operations of the ACUC in the previous academic year.

## **8.17 ACUC APPEALS COMMITTEE**

### **8.17.1 Appeals**

Researchers who have received a negative decision on the approval or renewal of a protocol or have been requested to make significant modifications to a protocol may appeal the decision to the Vice-President Research. The Vice-President Research shall direct the appeal to an ad hoc ACUC Appeals Committee for review and decision.

### **8.17.2 Appointment of the ACUC Appeals Committee**

The ACUC Appeals Committee is appointed by the Vice-President Research with the responsibility for adjudicating an appeal from the author of a research or teaching protocol where the use of animals is not approved by the ACUC.

### **8.17.3 Membership of the ACUC Appeals Committee**

The ACUC Appeals Committee shall consist of four individuals, three of whom are knowledgeable of the CCAC guidelines and policy statements, federal and provincial legislation and regulations, and national and international best practices in the use of animals in research and teaching. The fourth individual shall be a community member who will normally have had experience on an animal care and use committee.

The ACUC Appeals Committee is composed of individuals who are not currently members of the ACUC and a Clinical Veterinarian.

### **8.17.4 Term of the ACUC Appeals Committee**

The ACUC Appeals Committee shall be appointed on an ad hoc basis, and dissolved when there is no further action required.

### **8.17.5 ACUC Appeals Committee Policies and Procedures**

The ACUC Appeals Committee shall develop policies and procedures for the expeditious review of appeals from the author of a research or teaching protocol where the use of animals is not approved by the ACUC and where normal efforts to come to an agreement between the author and the ACUC have failed.

The ACUC Appeals Committee may render one of the following decisions:

- upholding of the ACUC decision,
- overturning of the ACUC decision, or
- requiring the ACUC to reconsider the protocol and/or the author to revise the protocol in accordance with ACUC recommendations.

The decision of the ACUC Appeals Committee is final and there are no further appeals.

The University shall not overturn the decision of the ACUC Appeals Committee.

### **8.18 CONFIDENTIALITY OF ANIMAL USE**

In keeping with the Animals for Research Act (Ontario) and the CCAC guidelines, information collected by the University's Animal Care and Use Committee shall remain confidential, with the exception of regulatory reporting requirements including but not limited to the annual animal use data provided by Brock University to the Ontario Ministry of Agriculture, Food and Rural Affairs and which is compiled on a provincial or national basis without the names of the users.

The Agenda and Minutes of the ACUC are public, with the exception of *in camera* discussions and actions which include the review of and actions on individual research protocols.