The University of Ontario Institute of Technology (UOIT) has a responsibility to ensure that effective control is exercised in the care and use of experimental animals. All animals (live, non-human vertebrates) are protected by the Animals for Research Act of Ontario and its associated regulations. In addition to this provincial legislation, the National Science and Engineering Research Council (NSERC) and the Canadian Institutes for Health Research (CIHR) require adherence to the policies and guidelines of the Canadian Council on Animal Care (CCAC) as verified by Good Animal Practice (GAP) certification from the CCAC.

Both the Ontario legislation Animals for Research Act and the CCAC require institutions where research is conducted using animals to establish and maintain an Animal Care Committee (ACC) and that this committee oversees all research, teaching and testing with animals. The UOIT Animal Care Committee (ACC) has been established to meet these requirements and has the following terms of reference as outlined below.

The ACC is appointed by, and is responsible to, the Vice-President Research, Innovation & International. The ACC is responsible for the coordination, ethical review and approval for all proposed uses of animals in research (including field studies), teaching and testing and shall establish internal policies and procedures to ensure compliance with legislation and CCAC policies and guidelines.

1. Membership

The ACC shall report to the Vice-President Research, Innovation & International. ACC members will be appointed for terms of four years and normally renewable only up to a maximum of eight consecutive years of service. This maximum can be waived by the ACC if necessary in order to have appropriate animal user representation. This does not apply to ACC members who must be part of the ACC because of their role within the institution (ex officio members): the ACC Coordinator and consultant veterinarian.

The Vice-President Research, Innovation and International shall appoint a Chair and Co-Chair from the complement of the ACC committee. The Chair shall not be directly involved in the management of the animal care facilities, nor be the consulting veterinarian for UOIT nor be involved in the preparation of a significant number of the protocols to be reviewed by the ACC, in order to avoid potential conflicts of interest.
The complement of the committee will include:

a) a minimum of two scientists and/or teachers experienced in animal care and use, who may or may not be actively using animals during their term on the ACC;

b) a consultant veterinarian, experienced in care and use of animals used and housed at UOIT;

c) an institutional member whose normal activities, past or present, do not depend on or involve animal use for research, teaching or testing;

d) at least one person representing community interests and concerns who has had no affiliation with the institution, and who has not been involved in animal use for research, teaching or testing; community representation must be ensured for all ACC activities throughout the year and included on all protocol review subcommittees

e) technical staff representation preferably an animal research technician;

f) at least one student representative (graduate and/or undergraduate); and

g) the ACC coordinator (UOIT Ethics and Compliance Officer) who is responsible for the coordination of all animal care related activities and providing support to the ACC;

h) a representative of the senior administration reporting to the Vice-President Research, Innovation & International (Director, Office of Research Services);

i) a representative for occupational health & safety and biosafety.

1.1 A quorum at ACC meetings shall be a simple majority of the committee members and shall include at least one community representative as well as the consultant veterinarian. Decisions are made by consensus.

2) Authority

The UOIT ACC has authority, on behalf of the Vice-President Research, Innovation & International who is responsible for animal care and use at UOIT, to:

a. Stop any objectionable procedure if it considers that unnecessary distress or pain is being experienced by an animal;

b. stop immediately any use of animals which deviates from the approved use, any non approved procedure, or any procedure causing unforeseen pain or distress to animals; and

c. have an animal killed humanely if pain or distress caused to the animal is not part of the approved protocol and cannot be alleviated.

d. The Chair of the UOIT ACC and the consultant veterinarian(s) must have access at all times to all areas where animals are held or used.
Collegial working relationships must always be protected and promoted but it is necessary to have in place safeguards to ensure any difficulties experienced with any aspect of animal care or use can be effectively identified and addressed. Where there are persistent breaches of compliance or threats to the health and safety of personnel or welfare of animals, these must be reported back to the Chair of the ACC, and the Chair and ACC must promptly address these issues, through communications with the animal user(s), meetings and site visits and in accordance with the UOIT Policy on the Care and Use of Animals in Research and Teaching and associated Procedures. Breaches of compliance that cannot be corrected by the ACC working with the concerned animal user, a veterinary consultant and ACC Coordinator must be referred to the Vice-President Research, Innovation & International, who will inform all members of the animal care and use program about sanctions that will be taken by the administration in the event of serious breaches of compliance.

The ACC also delegates to the UOIT consultant veterinarian(s) the authority to treat, remove from a study or euthanize, if necessary, an animal according to the veterinarian's professional judgment. The UOIT consultant veterinarian must attempt to contact the animal user whose animal is in poor condition before beginning any treatment that has not previously been agreed upon, and must also attempt to contact the ACC Chair, but the UOIT consultant veterinarian has the authority to proceed independently with any necessary emergency measures, whether or not the animal user and ACC Chair are available. A written report will be sent by the UOIT consultant veterinarian to the animal user and to the ACC following any such event.

The UOIT ACC is responsible for the Post-Approval Monitoring (PAM) program and has established procedures for Post-Approval Monitoring of animal use protocols. The veterinarian and ACC may choose to delegate PAM and other certain responsibilities to the ACC Coordinator to ensure compliance with the CCAC.

3) Responsibility

It is the responsibility of the UOIT ACC to:

a) ensure that no research, teaching program or testing involving animals be commenced without prior ACC written approval of a written animal use protocol and that no animals be acquired or used before such approval. This includes internally funded projects;

b) ensure that no animals be held for display or breeding purposes, or for eventual use in research, teaching or testing projects, without prior ACC approval of a written animal use protocol. The ACC should also be aware of other animal-based activities, such as commercial or recreational activities, within the institution, and should work with the persons responsible for these activities to ensure that animal care and use is undertaken according to appropriate procedures;

c) have good lines of communication between them (UOIT’s ACC) and another university’s ACC (if involved in collaborative animal-based work) to ensure that both institutions review and approve before any work involving animals can begin. Any contentious issues identified in the protocol should be resolved to the satisfaction of both committees.
d) require all animal users to complete an animal use protocol form and ensure that the information therein includes the following points, clearly presented in a form that all members of the ACC can readily understand (essential supplemental information can be found in the CCAC guidelines on: animal use protocol review, 1997). To facilitate the work of both protocol authors and ACC members, appropriate SOPs will be referred to as much as possible. A copy of approved protocols and SOPs will be readily available in the areas where animal-based use is taking place;

e) ensure that each research project has been found to have scientific merit through independent peer review before approving the project. If the review is not carried out by an external, peer review agency, according to the CCAC Policy on the Importance of Independent Peer Review of the Scientific Merit of Animal-Based Research Projects, 2000, an independent peer review will be conducted. An independent peer review committee will conduct reviews of research projects that have not been reviewed by an external peer review agency. It shall consist of two researchers (from a list that should include an individual or individuals suggested by the principal investigator), external to UOIT, who do not have a conflict of interest, and who do not collaborate with the investigator, to review the proposal. The Office of the Vice-President Research, Innovation and International will facilitate the independent peer review process and communication between the ACC and the independent peer review committee. Close links must be maintained between the ACC and Office of the Vice-President Research, Innovation & International so that:

   i. the ACC receives confirmation that each animal-based research protocol has been found to have scientific merit before it is given final approval;

   ii. the office of the Vice-President Research, Innovation & International receives confirmation of protocol approval from the ACC before releasing funds for animal-based work for the corresponding project.

The Office of the Vice-President Research, Innovation & International, will implement a mechanism through which non-peer-reviewed projects are reviewed for their scientific merit by calling upon the expertise of individual independent peers.

f) review and assess all animal use protocols, with particular emphasis on the CCAC policy statement on: ethics of animal investigation and CCAC guidelines on: animal use protocol review as well as on all other relevant CCAC guidelines and policy statements. If procedures are at variance with CCAC policies and guidelines, the ACC requires justification on scientific grounds. The ACC will both discuss protocols and make decisions on them during full committee meetings, rather than through individual reviews, and will attempt to reach decisions by consensus. In urgent situations only, the ACC may delegate the responsibility of interim approvals to an interim approval subcommittee, which must include at least one veterinarian, one community representative, one scientist, and the chair or co-chair of the ACC. However, such interim approvals will only be used infrequently, and the interim review process, including exchanges between the ACC and protocol authors, will be documented and must then be
subject to discussion and final approval at a full meeting of the ACC where the final protocol approval will be documented in the ACC meeting minutes;

g) ensure that animal users update their protocols with any amendments or modifications they intend to make, and approve any modifications to a protocol before they are implemented. Minor modifications (e.g., 1 or 2 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 will require a new protocol submission, as decided upon by the ACC;

h) ensure that animal users annually file the Annual Review Form to report to the ACC using the Protocol Annual Review form within a year of commencement of the project; annual renewals will be approved by at least a scientist, a veterinarian and a community representative and will be brought to the attention of the full ACC for its information. All protocol renewals must emphasize:
   i. the number of animals used in the preceding year;
   ii. the number of animals projected to be needed for the year to come, with a justification;
   iii. a brief progress report, describing any complications encountered relative to animal use (unpredicted outcomes, and any animal pain, distress or mortality), any amendments to the original protocol, and any progress made with respect to the Three Rs of replacement, reduction and refinement of animal use;
   iv. a brief report on the adequacy of the endpoints for the protocol, and on any complications encountered or refinements made relative to protecting animals from pain, distress or mortality; and
   v. any other changes from the original protocol.

Require the submission of a new protocol after a maximum of three consecutive renewals;

i) document all ACC discussions and decisions in the committee minutes and on attachments to the protocol forms;

j) the Appeal process overseen at the level of the Office of the Vice-President Research, Innovation & International, can be used by the author of a protocol in the event that animal use is not approved by the ACC (002 SOP: Process for Appeal of Decisions of the ACC);

k) ensure that all ACC members and animal users have the opportunity to become familiar with the CCAC Guide and CCAC policy statement on: ethics of animal investigation and all other CCAC guidelines and policy statements, federal, provincial or municipal statutes that may apply, as well as institutional requirements;

l) ensure appropriate veterinary care of animals in all stages of their life and in all experimental situations. Veterinary care is available on a consultative basis based on the elements contained in the CALAM/ACMAL Standards of Veterinary Care of the Canadian Association for Laboratory Animal Medicine (2007);
m) establish procedures, commensurate with current veterinary standards, to ensure that:
   i. unnecessary pain or distress is avoided, and animal stress and injuries are avoided;
   ii. anaesthesia and analgesia are properly and effectively used;
   iii. appropriate post-operative care is provided;
   iv. all due consideration is given to animal welfare, including environmental enrichment.

n) ensure that institutional policies to provide for a system of animal care that will meet the needs of UOIT are established, implemented and maintained, and include:
   i. the requirement that all animal care and animal experimentation are conducted according to CCAC guidelines and policies, and to any federal, provincial and institutional regulations that also may be in effect;
   ii. ensuring adequate animal care and management of the animal facilities, in particular by verifying that there is a designate to be in charge of animal care and management of the animal facilities, who should be a member of the ACC (see Section 1), and who should keep the other ACC members updated on the activities within the animal facilities;
   iii. the training and qualifications of all persons who care for and use animals for research, teaching or testing purposes, and the veterinarian must receive training under the auspices of the UOIT Animal Care Committee in the protocols appropriate to the animal species being used. They must demonstrate competence ensuring maximum benefit to the animals. This would include, continuing education in their field; (scientists/study directors, post-doctoral fellows, graduate students and research technicians) and they must receive appropriate training according to the CCAC guidelines on: institutional animal user training, 1999, either within the institution or through the programs of other institutions;
   iv. an occupational health and safety program for those involved in animal care and use, in collaboration with the institutional authorities on occupational health and safety, that will appropriately protect all those who may be affected by animal-based work, according to CCAC guidelines (see Chapter VIII of Volume 1 (2nd Edn, 1993) of the CCAC Guide or the most recent CCAC guidance on occupational health and safety);
   v. standards of husbandry, facilities and equipment;
   vi. standard operating procedures (SOPs) for all activities and procedures that involve animals, including animal care and facility management SOPs; the ACC should review all SOPs and ensure that all necessary SOPs are produced and regularly updated and reviewed (see also Section 5a)iii));
   vii. procedures for euthanasia.

o) encourage the use of pilot studies with only a few animals when new approaches, methods or products are being tried, before approving new, large scale protocols. The purpose includes evaluation of invasiveness; determining number of animals required; and helping to establish meaningful humane endpoints. Ensure that animal users report on the results of any pilot studies, no matter whether they wish to pursue the study
immediately or not, in order to preserve important data on various approaches to animal-based studies; and

p) in the case of projects involving proprietary or patentable research or testing, ensure that as much information as possible is provided to the ACC in terms of what effects to expect on animal health and welfare, and insist on close monitoring of animals.

4) Meetings

The UOIT ACC will meet at least twice per year or more frequently as is necessary to fulfil their Terms of Reference and be satisfied that all animal use within their jurisdiction is in compliance with institutional, municipal, federal and provincial regulations, and CCAC policies and guidelines. The agenda for meetings will include Animal Use Protocol Forms submitted three weeks prior to the meeting date. Minutes detailing all ACC discussions, decisions and modifications to protocols will be produced for each meeting, and forwarded to the Vice-President Research, Innovation & International who is responsible for animal care and use.

In addition, the ACC will regularly visit all animal care facilities and areas in which animals are used, in order to better understand the work being conducted within the institution, to meet with those working in the animal facilities and animal use areas and discuss their needs, to ensure a PAM program (004 SOP: UOIT Post Approval Monitoring Program) that monitors animal-based work according to approved protocols and SOPs, to assess any weaknesses in the facilities (ageing facilities, overcrowding, insufficient staffing and any other concerns) and to forward any recommendations or commendations to the Vice-President Research, Innovation & International. Measures used for post-approval are included in the following:

i. PAM Form - this form outlines the process to be followed, records relevant information gathered and provides a standardized format for communication of Post Approval Monitoring committee’s findings back to both the researcher and the ACC.

ii. PAM Program Checklist – this checklist captures the pre-PAM visit (captures advance scheduling needs of the investigator); PAM visits (protocol review and monitoring documentation, husbandry, anaesthesia and analgesia, post-surgical care and euthanasia) and the Post PAM visit (issues identified, changes to the procedures, and standard operating procedures required); and a Procedural or Ethics non-Compliance Checklist.

Information gathered for the purpose of post-approval monitoring will be documented and kept with the relevant protocol file.

Visits of the animal facilities by members of the ACC will be conducted at least once a year, and will be documented through the ACC minutes or written reports. Those responsible for the animal facilities will respond to any ACC recommendations in writing, and site visit reports will always be followed up on jointly by the Vice-President Research, Innovation & International and the ACC. The full ACC may tour the facilities as a group or may be subdivided into smaller groups.
ACC members will be asked to join the Post Approval Monitoring Committee during each of their scheduled audits, which will be held on average every 6 months on a date mutually agreeable to by all parties concerned including the consultant veterinarian and researchers. Findings will be documented in the Post Approval Monitoring report and will be presented at the following ACC meeting for review. These visits will be scheduled to assess all aspects of animal care and use including quality assurance with respect to filing of Incident Reports and appropriate use of the Amendment Form. More frequent ACC site visits will be scheduled as necessary.

5) General

The UOIT animal care committee:

a) will regularly review (at least every three years):
   i. the Terms of Reference to meet new CCAC guidelines or policies and changing needs within UOIT, the scientific community, the animal welfare community and society as a whole, and expand its Terms of Reference to meet the requirements of the institution;
   ii. the security of the animals and research facilities;
   iii. the standard operating procedures (SOPs). They may be delegated to ACC members with the appropriate expertise, but SOPs should be accessible to all ACC members, and the full ACC should review all SOPs that involve procedures that may result in deleterious effects to animal health or welfare; and
   iv. policies and procedures for monitoring animal care and experimental procedures within the UOIT, including the identification of the persons responsible for monitoring animal health and welfare, and the procedures carried out by the ACC to conduct monitoring.

b) will maintain liaison with the CCAC Secretariat, and inform the Secretariat of any changes to their program: to the Vice-President Research, Innovation & International who is responsible for animal care and use, the chairperson of the ACC, or the consultant veterinarian at UOIT;

c) will submit complete and accurate animal use information in the 1) CCAC Animal Use Data Form (AUDF) and 2) OMAFRA Animal Use Data Form for all protocols annually (animal use information for each calendar year must be submitted by March 31st of the following year) and also in pre-assessment documentation;

d) will review the crisis management program specific for the animal facilities and for the animal care and use program, in conjunction with the UOIT institutional crisis management plan. This program must detail plans in the event of power outages (short and prolonged), work stoppages, fires, natural disasters, large chemical spills and other similar crises, and must include a communications plan for addressing public and media inquiries on concerns related to animal use;
e) will, from time to time, sponsor seminars or workshops on the use of animals in science and the ethics of animal experimentation, and encourage as many animal users, animal caregivers, students, ACC members and other interested parties to attend as possible;

f) will support UOIT’s efforts in promoting animal welfare and will respond to public concerns surrounding animal experimentation. (See Communication Plan).

These Terms of Reference should be supplemented as may be required with careful reference to the appropriate CCAC Policies & Guidelines listed below if further details or clarification is required:

**Policies with Specific Reference to ACC Terms of Reference:**

CCAC Policy Statement for: Senior Administrators Responsible for Animal Care & Use Programs, 2008
CCAC policy statement on: terms of reference for animal care committees, 2006
CCAC Assessment Report: University of Ontario Institute of Technology, April 4, 2012

**Other Policies, Procedures & Guidelines:**

CCAC policy statement on: the importance of independent peer review of the scientific merit of animal based research projects, 2000
CCAC guidelines on: institutional animal user training, 1999
CCAC guidelines on: choosing an appropriate endpoint in experiments using animals for research, teaching and testing, 1998
CCAC guidelines on: animal use protocol review, 1997
CCAC policy statement on: ethics of animal investigation, 1989
UOIT Animal Care and Use of Animals in Research and Teaching, 2012
UOIT 004 SOP: UOIT Post Approval Monitoring Program
UOIT 002 SOP: Process for Appeal of Decisions of the ACC