Brandon University Animal Care Committee (BUACC)

NEW RESEARCH/TEACHING ANIMAL CARE USE PROTOCOL APPLICATION FORM

INSTRUCTIONS

1. Download the most current application form from [www.brandonu.ca/buacc](http://www.brandonu.ca/buacc).
2. Save the Word document to your computer.

*NOTE:*

* *This is a locked form. All sections will expand as necessary.*
* *Spellcheck will not work. It is recommended that you prepare your responses to the application questions below in another Word document for spellcheck purposes, then cut and paste the text into the appropriate field below.*
* *Questions about using the form should be directed to Shannon Downey, Executive Officer to the Provost and Vice-President (Academic) and Research Ethics Officer, at (204) 727-9712 or* *downeys@brandonu.ca**.*
1. Forms shall be completed and submitted electronically. Hard-copy and hand-written forms will not be accepted. Accepted formats are Microsoft Word (preferred) and Adobe.
2. All questions in the application shall be answered. Incomplete applications will be returned to the Principal Investigator.
3. A submission must be either approved or withdrawn within six (6) months of the initial BUACC review date, after which time a new application is required.
4. Depending on the procedures proposed, additional Schedules may be required (see the “Procedures” section of this form). More detailed applications of the CCAC Category of Invasiveness are available on the BUACC website – [www.brandonu.ca/buacc](http://www.brandonu.ca/buacc).
5. All new research/teaching animal use protocols are subject to scientific merit/pedagogical merit review.
6. Applications shall be submitted to buacc@brandonu.ca.

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| Research Office File #:  |  | *(For Office Use Only)* |

PROJECT DETAILS

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| 1. Project Title:
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| 1. Protocol Designation:
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| Research Protocol: | [ ]  |
| Teaching Protocol: | [ ]  |
| Pilot Project:*As per the BUACC Terms of Reference, Pilot Studies are encouraged when new approaches, methods or products are being tried, before approving new, large-scale protocols. Pilot studies should be conducted with a very small number of animals (fewer than 10 animals) and within a short period of time.* | [ ]  |

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| 1. Proposed Start Date:
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| 1. Proposed End Date:

*NOTE: Projects that extend beyond one year require a protocol renewal for each subsequent year to a maximum of three renewals.* |  |

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| 1. Funding:
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| a) | Is this project currently funded? | [ ]  Yes | [ ]  No |
| i) | If yes, identify the funding agency: |  |
| ii) | If yes, what is the title on the grant application? |  |
| b) | Is funding being sought? | [ ]  Yes | [ ]  No |
| i) | If yes, identify the funding agency: |  |
| c) | Has this project been reviewed for scientific merit/pedagogical merit?*NOTE: If a research project has not been reviewed for scientific or pedagogical merit, peer review must be carried out before full approval of the protocol is granted.* | [ ]  Yes | [ ]  No |

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| 1. This project is:
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| Acute | [ ]  |
| Chronic | [ ]  |

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| 1. Maximum CCAC Category of Invasiveness:
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| B studies or experiments causing little or no discomfort or distress | [ ]  |
| C studies or experiments involving minor stress or pain of short duration | [ ]  |
| D studies or experiments involving moderate to severe distress or discomfort | [ ]  |
| E procedures that involve severe pain at or above the pain toleration threshold of unanaesthetized, conscious animals (category E procedures are normally not acceptable) | [ ]  |

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| 1. CCAC Purpose of Animal Use (PAU):
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| 0 breeding colony | [ ]  |
| 1 studies of a fundamental nature in sciences relating to essential structure and function (e.g. Biology, Psychology, Biochemistry, Pharmacology, Physiology, etc.) | [ ]  |
| 2 studies for medical purposes, including veterinary medicine, that relate to human or animal disease or disorders | [ ]  |
| 3 studies for regulatory testing of procedures for the protection of humans, animals, or the environment | [ ]  |
| 4 studies for the development of products or appliances for human or veterinary medicine | [ ]  |
| 5 education and training of individuals in post-secondary institutions or facilities | [ ]  |

personnel

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| 1. Principal Investigator:
 |
| Name: |  |
| Department:*Include full mailing address if external to Brandon University* |  |
| Phone Number: |  |
| Email Address: |  |

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| 1. Co-Investigator(s):
 |
| Name: |  |
| Department:*Include full mailing address if external to Brandon University* |  |
| Phone Number: |  |
| Email Address: |  |
| Name: |  |
| Department:*Include full mailing address if external to Brandon University* |  |
| Phone Number: |  |
| Email Address: |  |

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| 1. Designated Emergency Contact(s):
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| Name: |  |
| Daytime Contact Phone Number: |  |
| After Hours Contact Phone Number: |  |
| Email Address: |  |

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| 1. Technical Staff:
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| Name: |  |
| Department: |  |
| Phone Number: |  |
| Email Address: |  |

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| 1. Students, Teaching, or Research Assistants:
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| Name(s): |  |
| Phone Number(s): |  |
| Email Address(es): |  |

education, training qualifications, experience

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| 1. Education, Training Qualifications, and Experience:
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| Name: | Qualifications/Experience*Briefly describe training and/or experience in relevant procedures.* | Course/Workshop in Animal Use*Include the date of certification/completion.* |
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endpoints

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| 1. Scientific Endpoint: defined as “…the point at which an experimental animal’s pain and/or distress is terminated, minimized or reduced, by taking actions such as killing the animal humanely, terminating a painful procedure, or giving treatment to relieve pain and/or distress” (CCAC Guidelines on: Choosing an Appropriate Endpoint in Experiments using Animals for Research, Teaching and Testing).
 |
| a) | Identify the scientific endpoint for this project. Examples include, but are not limited to, collection of data or biological materials over a pre-determined time; achieving learning outcomes; etc. |
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| b) | Briefly justify your chosen scientific endpoint. Examples of appropriate justification include relevant scientific literature, pilot studies, correspondence with colleagues or previous laboratory work. |
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| 1. Humane Intervention Points: defined as “…pre-established criteria (e.g., observable health impacts, physiological changes, behavioural signs) that indicate when an intervention (e.g., supportive care, analgesia, euthanasia) should occur in order to reduce welfare impacts to a level that has been approved by the animal care committee.” (CCAC Guidelines on: Identification of Scientific Endpoints, Humane Intervention Points, and Cumulative Endpoints).
 |
| a) | Identify the humane intervention points for this project. For example, observable health impacts, physiologic changes, behavioural signs. |
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| b) | Identify/describe the intervention that will be performed for each of the above. For example, removal from study, supportive care, euthanasia, etc. |
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| c) | What is the expected time course for the animals, from initial treatment to first signs of pain/distress, to the death of the animal, based on previous information with the specific model under study? |
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| d) | When are the effects to the animal expected to be most severe? |
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animal involvement, welfare assessment, and reporting

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| 1. Complete the table below for each species of animal proposed for this project:

Animals that to used for research, teaching, and testing are to be housed in the Brandon University Animal Facility. If there is a need for alternative housing that exceeds 12 hours, complete Schedule 4 – “Alternative Animal Housing Request Form”. This is inclusive of animals to be housed on-campus, but outside the Animal Facility. |
| **Species/Strain** | **Quantity** | **Sex** | **Age/Stage** | **Weight/Size** | **Experimental Area (room number and building) or Field Study Location**  |
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| 1. Animal Monitoring/Welfare Assessment: The CCAC now expects that all animals kept and used at Brandon University undergo regular welfare assessments that are documented and appropriate for the species and scientific activity undertaken. (CCAC Guidelines on: Animal Welfare Assessment and BUACC Animal Welfare Assessment Standard Operating Procedure)
 |
| a) | Who will monitor the animals and keep records? Identify all responsible. |
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| b) | Where will animal welfare assessment records be kept? |
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| c) | What will be the frequency of animal observations:As per the CCAC Implementation Guide: Welfare assessments will be conducted on a weekly basis during the period of active research. Welfare assessments will be conducted every other week when no research is actively ongoing. |
| i) | During the course of the study? |
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| ii) | During critical times for the animals? |
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| d) | What provisions have been made to deal with animals that show unexpected severe signs and symptoms? |
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| e) | Identify the person(s) responsible for identifying mitigations. |
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| f) | Who will check to ensure that any actions taken to correct welfare issues were completed and were effective? |
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| g) | For toxicological studies, have existing toxicological data been evaluated? | [ ]  Yes | [ ]  No | [ ]  N/A |
| h) | As Appendix A, submit the Welfare Assessment Form that you will use to monitor the welfare of the animals and track their progress towards scientific and humane endpoints, along with any interventions performed.The above noted CCAC Guidelines and SOP can be used as guidelines for creating an appropriate form, as well as consultation with the Animal Health Technologist and Consulting Veterinarians. | [ ] Appendix A included |

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| 1. Select one of following and complete that section.

For more information, refer to the CCAC Reportable Animal Welfare Incidents Frequently Asked Questions and the BUACC Reporting Animal Welfare Incidents Standard Operating Procedure. |
| [ ]  | This project includes multiple research objectives or components that are fully independent of each other. The significance of the incident would be based on the total number of animals by species, per specific project component or objective, on-site at that time of the incident. |
|  | Specific Project Component/Objective | Species | Number of Each Species on-site during the Specific Project Component/Objective | Mortality Baseline |
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| [ ]  | The project includes multiple research objectives or components that are interrelated and conditional on each other. |
|  | Specific Project Component/Objective | Species | Number of Each Species on-site during the Specific Project Component/Objective | Mortality Baseline |
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| [ ]  | The project includes only one component or objective. |
|  | Specific Project Component/Objective | Species | Number of Each Species on-site during the Specific Project Component/Objective | Mortality Baseline |
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| 1. Animals used for this project will be procured from:
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| Laboratory stocks | [ ]  |
| Farm/Stockyard | [ ]  |
| Wild Populations | [ ]  |
| Other, please specify | [ ]   |

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| 1. Are wild vertebrates to be used in this project?
 | [ ]  Yes | [ ]  No |
| a) | If yes, are they rare or endangered? | [ ]  Yes | [ ]  No |
| b) | If yes, indicate method: |
|  | Capture by: |  |
|  | Restrained by: |  |
|  | Transportation by: |  |
|  | Housing at: |  |

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| 1. Are permits required?
 | [ ]  Yes | [ ]  No |
| a) | If yes, have they been applied for? | [ ]  Yes | [ ]  No |
| b) | If yes, have they been obtained? | [ ]  Yes | [ ]  No |

project description

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| 1. Lay description:

NOTE: This section must be completed using language appropriate for a multidisciplinary committee that may not be familiar with the experimental procedure(s). Use clear and simple language, avoiding technical terminology, for example, “National Geographic” style of writing or media quality. |
| a) | What is the rationale for doing this study? (Expected response – 2 sentences.) |
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| b) | What are the Primary Objectives for this study? (Expected response – 2-3 sentences.) |
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| c) | What is the expected contribution to the knowledge or to the well-being of animals or humans? (Expected response – 2-3 sentences.) |
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| d) | What key words can be used to describe this project. (Expected response – 5 key words. See Appendix II – Key Words from the CCAC Interpretation Bulletin no. 1.1). |
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| 1. Provide a concise summary of your project, including a description of the procedures to be used and how the procedures relate to the objectives of this study.
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Justification

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| 1. Explain why it is necessary to use animals in this study, and why alternatives would be inappropriate to meet your project or course objectives.
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| 1. What is the rationale for using this particular species or animal model?
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| 1. Will any mathematical models, computer simulations or in vitro preparations be used in lieu of animals in this project?
 | [ ]  Yes | [ ]  No |
| a) | If “No”, please explain why they would be inappropriate and/or cannot be developed. |
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| 1. Justify the numbers of animals needed per year for each species listed in this application. Include the number of treatment and control groups to be used, the number of animals per group, and the number of replicates to be conducted.
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| 1. What provisions will be made to provide environmental enrichment for animals used in this study? If none will be made, justify not using them.
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| 1. The CCAC advocates “Three R Principles” of REDUCTION of number of animals required; REFINEMENT of procedures so as to minimize the stress placed on animals; and REPLACEMENT of animals with alternatives whenever possible. Explain how you have incorporated all three principles in designing this project.
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| Reduction: |  |
| Refinement: |  |
| Replacement: |  |

disposition of animals

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| 1. Identify the disposition of the animals following this project:
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| [ ]  | Retained (specify location): |  |
| [ ]  | Sold/Donated to: |  |
| [ ]  | Returned to Stock or Herd |
| [ ]  | Returned to Wild |
| [ ]  | AdoptedIf animals are to be adopted, an Animal Adoption Release and Waiver Form is required. |
| [ ]  | Humanely Euthanized: |
| Indicate the method of euthanasia and the person carrying out the procedure: |  |
| Justify the method of euthanasia: |  |
| 1. Indicate any clinical conditions or behavioural changes expected or that could arise as a result of the proposed study or teaching exercise. (e.g. increased grooming or vocalizations, postural changes, anorexia, diarrhea, etc.)
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| 1. Is normal veterinary care appropriate for this project?

If “No”, attach specific instructions on any veterinary indications/contradictions to be left on file with the Animal Health Technician should an emergency arise.NOTE TO PRINCIPAL INVESTIGATOR: IN THE EVENT OF AN ANIMAL HEALTH EMERGENCY, IF CONTACT CANNOT BE MADE WITH THE LISTED INDIVIDUALS, THE DECISION OF THE INSTITUTIONAL CONSULTING VETERINARIAN ON WHETHER TO TREAT OR EUTHANIZE AN ANIMAL WILL BE FINAL. ENSURE THAT ARRANGEMENTS ARE IN PLACE TO PERMIT CONSULTATION ON A 24-HOUR BASIS. | [ ]  Yes | [ ]  No |

procedures

|  |  | Yes | No |
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|  | Will these animals be used for teaching? | **[ ]** Complete and attachSchedule 1: Teaching/Display | [ ]  |
|  | Does this project involve minor procedures such as injection, blood collection, non-surgical catheterization, biopsies, etc.? | [ ] Complete and attachSchedule 2: Minor Procedures | [ ]  |
|  | Is this a wildlife field study, or does it involve the capture or release of animals into the wild? | [ ] Complete and attachSchedule 3: Field Study | [ ]  |
|  | Does this study involve activities off-campus? | [ ] Attach the risk assessment as per the *Brandon University Policy for Off-Campus Activities* as Appendix C. For more information, refer to the BUACC Off-Campus Activity Standard Operating Procedure. | [ ]  |
|  | Does this project involve the use of animals on non-university property? | [ ] Complete and attachSchedule 4: Alternative Animal Housing Request Form | [ ]  |
|  | Does this project involve environmental manipulation outside the normal range of adaption of the species being studied? | [ ] Complete and attachSchedule 5: Environmental Manipulation | [ ]  |
|  | Does this project involve the use of potential hazards to animals or humans? (e.g. chemicals, pathogens, radioisotopes, carcinogens) | [ ] Complete and attachSchedule 6: Potential Hazards | [ ]  |
|  | Does this project involve behavioural manipulation? | [ ] Complete and attachSchedule 7: Behavioural Experiments | [ ]  |
|  | Will conscious animals be restrained other than for examination, injection or other minor procedure? | [ ] Complete and attachSchedule 8: Restraint | [ ]  |
|  | Will there be distress, illness or pain as a result of any procedure you will be using other than short-term or surgical pain? | [ ] Complete and attachSchedule 9: Distress, Disease and Pain | [ ]  |
|  | Will surgical procedures be used? | [ ] Complete and attachSchedule 10: Surgery | [ ]  |
|  | Does this project involve feed/water/nutrient deprivation other than pre-surgical fasting? | [ ] Complete and attachSchedule 11: Feed/Water/Nutrient Deprivation | [ ]  |
|  | Does this project involve the use of transgenic, “knockout” or mutant animals? | [ ] Complete and attachSchedule 12: Genetically Modified Animals | [ ]  |

appendix i

This section must be completed for protocols that have not been peer reviewed for scientific or pedagogical merit.

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| 1. Provide a detailed background for the research to be conducted (including relevant references from literature).
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| 1. Provide justification for the research to be conducted (including relevant references from literature).
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| 1. Provide a complete reference list.
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appendix ii

*14*

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| CCAC interpretation bulletin no. 1-1 | KEYWORDS |
| General | Procedures |
| * Research, teaching, testing;
* regulatory (if the experiments are performed directly in relation to testing regulations in force in Canada and/or the US (FDA, EPA, etc.) and/or elsewhere), type of testing (e.g., cosmetic testing);
* field work, behavioral observation, environmental protection study, wildlife conservation;
* development of techniques, study of the effectiveness of a product (drugs, others) or a method (spectroscopy, others);
* breeding, breeding colony, sentinel program;
* antibody production (monoclonal, polyclonal);
* pilot study;
* palatability test;
* digestibility test;
* reinforcement/motivation;
* staged behavioral encounters;
* primary cell culture, tissue/organ collection, graft, transplant;
* species, transgenic animal; and
* validation of non animal model (*in vitro* test, computational methods...).
 | trapping/netting, marking/tagging, injection (intravenous, subcutaneous, intramuscular, intraperitoneal), blood sampling/testing (small volume), blood removal (large volume), gavaging, physical restraint, infection induction, whole body radiation, physical euthanasia, food deprivation, water deprivation, special diet, altered environ- mental exposure, physical restraint (duration). |
| Agents |
| Radioisotope administration, chemical exposure, infectious agents, immunogenic or inflammatory agents, Freund's complete adjuvant. |
| Surgery |
| Major surgery, minor surgery, stereotaxic surgery, survival surgery, multiple surgeries, cannulation |