

# Animal Care Committee (ACC)

## Terms of Reference

### INTRODUCTION

1. The Bamfield Marine Sciences Centre (BMSC) provides research and training infrastructure for the five-member Western Canadian universities as well as other Canadian and International institutes.
2. BMSC is committed to the humane and ethical care and use of animals and adheres to the principle that in order for animal use to be justifiable in scientific research and teaching, it is only acceptable if it has the potential to contribute to the understanding of fundamental biological principles, or to the development of knowledge that can reasonably be expected to benefit humans or other animals.
3. BMSC has established an Animal Care Committee (BACC) to facilitate research and training that complies with the Canadian Council on Animal Care (CCAC) Guidelines and Policies and with the Russell-Burch tenet of, "reduction, replacement and refinement".
4. BMSC will maintain an Animal Care Committee (BACC) for so long as any research, teaching, testing or reproduction involving animals is conducted in BMSC facilities
5. The BMSC Animal Care Committee (BACC) works to ensure that all animal users and caregivers are informed of and comply with CCAC guidelines and policies, and any guidelines and policies promulgated by the BMSC.
6. Any changes to the BACC Terms of Reference (TOR) will be reviewed by the ACC for consideration by the BMSC Director. As the BACC is responsible directly to the Director of BMSC, the Director will have final approval of changes to the TOR.
7. The ACC operates in accordance with the following terms of reference.

### MEMBERSHIP

1. The Director will determine the number of members on the BACC and will be responsible for appointing members to the BACC as directed by CCAC mandate.
2. The BACC should include the following members:
  - a. At least one research scientist experienced in animal care and use. This should ideally be an individual that uses and/or is familiar with the BMSC facilities;
  - b. An aquatic accredited Veterinarian experienced in experimental animal care and use;
  - c. The BMSC Coordinator of Animal Care
  - d. The Head of Research Services
  - e. The BMSC Animal Care Committee Coordinator
  - f. A student representation (graduate or undergraduate) currently enrolled at a member university
  - g. One department member or technical staff representative involved in the support of animal care or use of animals (e.g., Diving or Foreshore)
  - h. A BMSC representative whose normal activities do not depend on, or involve animal use for research, teaching or testing.
  - i. At least one person, preferably two, representing community interests and concerns, without

- affiliation with BMSC, and who is/are not involved in animal use for research, teaching or testing
- j. An animal user member from each departments involved in animal care or use of animals
- k. Any other person the Director may deem appropriate.

3. The Director will ensure continued support of the BACC in their duties at BMSC.
4. The Director will appoint all members of the BACC to a term of no less than two years (except for continuing BMSC positions). These positions are renewable at the discretion of the Director, or as delegated by the Director. BACC members should not serve more than eight consecutive years.
5. The Director will appoint the Chair (in consultation with the BACC) for a two-year term, which may be renewed. A member who is a BMSC veterinarian, is directly involved in the management of a BMSC animal care facility, or who has a conflict of interest with the BACC may not act as BACC Chair.
6. The BACC may also appoint a standing sub-committee (the "Policy Committee"), which will consider questions of policy related to the ACC and any matters for which the BACC is responsible, including the development of SOPs and recommend to the BACC. The BACC will consider and vote on any policies or guidelines recommended by the Policy Committee.

### **MEETINGS**

1. The BACC will be responsible for setting procedures for review and approval of BMSC AUPs. The BACC will meet no fewer than four times each calendar year with two of the meetings as face-to-face meetings. One meeting will be held prior to beginning of research season, and one in July/August at the peak of the research season. Meeting agendas will be distributed at least one week prior to the scheduled meeting. Minutes of each meeting will be recorded and distributed to all members of the BACC and the Director
2. The quorum for consensus in BACC meetings is a simple majority of the voting members. If necessary, teleconference or video conference may equate to in person attendance, but this should not become the norm and every effort should be made to meet in person. The quorum for all BACC meetings and decisions must include the Chair, BMSC veterinarian and Community Representative. The BACC Chair and the Coordinator of Animal Care will ensure that new animal use protocols (AUPs) and other outstanding BACC issues will be discussed at each meeting.

### **ACC AUTHORITY**

1. The ACC has the authority to:
  - a. Stop any procedure if it considers that unnecessary distress or pain is being experienced by an animal;
  - b. Stop any animal use which deviates from an approved AUP that causes unforeseen pain or distress to an animal, and
  - c. Euthanize an animal humanely if considered necessary.
2. The ACC delegates authority to the BMSC veterinarian to treat, remove from a study or euthanize, if necessary, an animal according to the BMSC veterinarian's professional judgment. The BMSC 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 attempt to contact the Coordinator of Animal Care and BACC Chair. The BMSC veterinarian has the authority to proceed with any necessary and reasonable emergency measures, whether or not the animal user and ACC Chair are available. The BMSC veterinarian will send a written report to the animal user, the Director and to the BACC following any such event. The BMSC veterinarian and Coordinator of Animal Care may also choose to delegate responsibilities to other BACC members who are considered qualified to euthanize animals.
3. The BACC Chair, the Coordinator of Animal Care, and the BMSC veterinarian have access at all times to

areas where animals may be held or used.

## **RESPONSIBILITIES OF THE ANIMAL CARE COMMITTEE**

### **Protocols**

1. No use of animals in research, training, testing or breeding (reproduction) will be conducted at BMSC without an approved BMSC animal use protocol (AUP). The BACC is responsible for reviewing and approving all protocols. The BACC will ensure that all animal research, testing, reproduction and use of animals in teaching are undertaken only after a BMSC AUP has received BACC approval. No animals will be made available for research prior to such approval.
2. When reviewing AUPs, the BACC will follow the Canadian Council on Animal Care guidelines. All proposed work on animals at the BMSC will have proven scientific merit by peer review through the home institution animal care committee. The BACC will also adhere to:
  - a. Principles of [Ethics of Animal Investigation](#)
  - b. [Guidelines on the review of Animal Utilization](#)
  - c. All other CCAC guidelines and policy statements, and BMSC standard operating procedures.
3. The BACC will only consider applications submitted using a current BMSC animal use protocol form.
4. The Head of Research Services, on behalf of the BACC, will hold an AUP (holding protocol) to procure and hold animals intended for use prior to the arrival of visiting researchers or for educational purposes. These animals are held under the condition that work/teaching does not begin before the respective BMSC AUP has received final approval.
5. The BACC will prioritize applications from BMSC member institutions. The next priority will be other Canadian universities.
6. In the case where an BACC member has an AUP presented to the BACC, they will excuse themselves during discussions of that protocol and in the case where the BACC Chair presents a protocol, the Coordinator of Animal Care shall act as Chair in their absence.
7. Non-Canadian applicants submitting a BMSC AUP to work on vertebrates and cephalopods are subject to:
  - a. Proof of scientific merit by peer review,
  - b. Approval of the proposed work by a home institution animal care committee or parallel body of the home institution, and
  - c. Confirmation of recognized animal care accreditation.
8. Temporary interim protocol approvals will be used rarely and only under special circumstances where approval must be expedited. In these cases, the deliberations can be done by email and involve the BACC Core (chair, veterinarian and community rep). The AUP will be reviewed at the next BACC meeting for full committee approval.
9. If a protocol does not have scientific merit by peer review, the home institution of the researcher is responsible for providing peer review. In cases where this is not possible (smaller universities, colleges, or international researchers) BMSC will provide peer review using two peer review experts external to the BACC. Under advisement of the Director, the BMSC Administration will maintain a list of potential peer review experts.
10. All animal-based teaching and training conducted at the BMSC must undergo pedagogical merit review by the home institution before submission of a BMSC AUP. As animals used for educational purposes are not being used to discover, prove, or develop new ideas or techniques, but rather to demonstrate principles

and facts that are already well-known, animals must only be used for teaching and training when: (1) the activity is deemed to have pedagogical merit and (2) when the educational goals of the course that rely on the use of animals cannot be conveyed effectively in any alternative manner. As such, the Canadian Council on Animal Care (CCAC) policy on pedagogical merit of live animal-based teaching and training (May 2016) requires that CCAC certified institutions that conduct animals-based teaching or training must have a formal pedagogical merit review process.

For BMSC Courses, the Director will assign educational pedagogic merit review to a minimum of two independent reviewers.

11. The BMSC AUP applications for vertebrate and cephalopod research will contain all of the requirements listed in section 3c) i-xviii of the [CCAC Terms of Reference for Animal Care Committees \(2006\)](#).
12. The BACC will encourage reference to current BMSC and other relevant SOPs in submitted AUPs via email at the beginning of March for the year of proposed research. The SOPs are located with AUP submission materials on the BMSC website. These SOPs will be reviewed by the BACC every 3 years.
13. The approval of a BMSC AUP is valid for a maximum of one year. If the work described is included in a home institution AUP valid for a longer duration, the BACC will require the researcher to submit a BMSC renewal application. During annual renewals, only the BACC Core are required to review the renewal application. The BACC will not grant more than three consecutive renewal applications. After three consecutive renewals of an AUP, a researcher must reapply for approval in a new BMSC AUP.

A renewal application must emphasize:

- a. The number of animals used in the preceding year
  - b. Justification for any change in number of animals needed
  - c. A brief statement describing any complications encountered relative to animal use (unpredicted outcomes, and animal pain, distress or mortality) and any progress made with respect to replacement, reduction and refinement of animal use
  - d. A statement on the adequacy of endpoints for the protocol, and on any complications encountered or refinements made relative to protecting animals from pain, distress or mortality,
  - e. Any amendments or other changes to the original protocol, including species.
14. The BACC will require any changes to an approved AUP to be submitted as an amendment. No proposed amended work under an approved AUP can occur until the amendment has been approved. In all cases a thorough scientific justification for the amendment needs to be provided. All administrative and minor amendments are reported to the full Animal Care Committee at the next meeting.

**a) Administrative Amendment:**

Administrative amendments are straightforward changes to the protocol which do not affect animal use or welfare. They are to be reviewed and approved by the Coordinator of Animal Care

Examples:

- Change in personnel, title, research dates, or contact information.
- Changes in collection locations
- Change in funding source or account information provided it does not impact scientific peer review.
- Increase of animal numbers to a maximum of 5% (level A-C protocols only).

**b) Minor Amendment -BACC Core:**

Minor amendments are changes to protocol which may affect animal use or welfare, but do not increase category of invasiveness. Minor modifications may be referred to the BACC Core for review.

Examples:

- Change in drug(s) used, where the effects on the animal are equivalent
- Change in the anesthetic agent used or in the use of analgesic agents
- Change in method of euthanasia
- Changes in the use of hazardous agents
- Increases in approved animal use numbers (rodent, fish and wildlife) up to 25%.
- Changes in animal species where care or holding requirements of the added species are the same as original species on protocol, and procedures are as identical originally described. If the species are evolutionarily (cladistically) disparate, the applicant must justify why the change in species will preserve species-specific animal welfare.

**c) Major Amendment - Full BACC:**

Major amendments are changes which affect animal use or welfare, including but not limited to those increasing the original category of invasiveness. Substantial modifications may result in a request to submit a completely new Animal Use Protocol.

Examples:

- Addition of animal species if scientific procedures, care or holding requirements for the added species is *different* than those of original species on the protocol.
- Change in procedure or new procedure(s)/manipulation(s) that are judged to result in increased potential for pain and distress (including changes to study endpoints).
- A change from non-survival to survival surgery.
- Increases in approved animal use numbers greater than 25%

15. A new AUP is required when there is:

- a. An alteration to scientific merit, a significant alteration of original protocol, change in the main objective of the study or change in the direction of the research (hypotheses and objectives) from those described in the grant request and/or in the existing animal use protocol, or
- b. Major changes to the original approved experimental protocol (i.e. the addition of novel or invasive surgeries or procedures that significantly extend the scope of animal use and/or increase the level of invasiveness.)
- c. A significant increase in the number of animals originally approved.

16. Any researcher has the right to appeal if the final decision of the BACC is to reject an AUP. The Director will oversee an appeal processes in an unbiased and independent manner. The request for appeal is to be made to the Director, who will strike an Appeals Subcommittee from members of the Animal Care Committees of member Institutions from which the researcher has no affiliation.

17. When a researcher is proposing new approaches to methods, the BACC Core strongly supports the use of pilot studies with a limited number of animals to confirm safety and efficacy of claim. Pilot studies may be a condition of approval.

18. The BACC will keep written confidential records of their discussions and decisions in the committee minutes and on attachments to the protocol forms. Written records of all discussions and decisions occurring between meetings will be kept and these can include comments/approvals received via email.

19. Annually, after work for an AUP has been completed, a report will be presented to the BACC by the Animal Care Coordinator to document the care of animals in the research project.

20. The intent of the BACC is to resolve concerns of the Committee with the researcher. The Committee will therefore invite the researcher, if necessary, to appear before the Committee with their concerns.

21. Post Approval Monitoring (PAM) at BMSC is designed to ensure the health and welfare of animals being held at BMSC and to develop best practices in this regard. To ensure best practices in animal holding, handling and care:
- a. An on-site member or members of the BACC will meet face-to-face with AUP applicants shortly after their arrival at the BMSC and prior to work beginning. This orientation is to ensure that BMSC understands the needs of the applicants and that they in turn understand BMSC SOPs and procedures.
  - b. The BMSC veterinarian may view and comment on surgical procedures in person or by recorded video or real-time streaming from electronic devices. They will visit the facility during times most frequented by researchers. The veterinarian will work with researchers to develop best practices for surgical procedures.
  - c. BMSC staff will ensure that all animals are checked daily and records are kept.
  - d. The Coordinator of Animal Care will oversee the care and maintenance of animals being held on BMSC AUPs. They will visit each animal holding facility daily during working hours to monitor the welfare of the animals not yet on protocol and will ensure researchers provide adequate care to animals once on protocol.
  - e. In the case of any incidents related to animal care, the BACC will provide incident reports to the home universities of researchers and the signatory of the AUP. Reports will be provided by the Animal Care Committee Coordinator within two weeks after notification of the event.
  - f. While the BACC also serves as the eyes of the home institutions of researchers working at BMSC, questions concerning apparent deviations from approved scientific procedures will be referred to the BACC of the home institution where the scientific expertise involved in the initial approval of the protocol lies.

#### **FACILITIES AND ANIMAL CARE**

1. The Director will be responsible for ensuring that reasonable security procedures are in place in all BMSC animal facilities.
2. The Animal Care Coordinator will oversee housing, care and production of animals and ensure that animal care users and animal care personnel are qualified and properly trained according to CCAC guidelines.
3. The Director, along with the aid of the BACC, will ensure that the appropriate care, including adequate veterinary care, is given to animals at all stages of life and in all experimental situations in compliance with CCAC guidelines, applicable legislation and BMSC rules.
4. Each member of the BACC will participate in a site visit of all the BMSC animal care facilities at least once a year that will be documented in the BACC meetings. These will be scheduled to coincide with face-to-face meetings of the whole committee, at a time when researchers are on campus to facilitate communication between the BACC and the researchers.
5. The contracted BMSC veterinarian will visit the animal facilities at least twice a year. These visits should take place during the times of the year most heavily used by researchers. The BMSC veterinarian will produce a site report from these visits, which will be sent directly to the BMSC Director with a copy to the ACC Coordinator and the BACC Chair.
6. The BACC will ensure that up to date BMSC SOPs are available to animal users by referring them to the BMSC animal care webpage.
7. The ACC Coordinator or designate will be available to render assistance to animal users and care givers in the event of any unanticipated problems and to advise and educate participants with respect to CCAC guidelines and ethics, legislation, BMSC rules, procedures and recommendations with respect to animal

use and animal care

8. The BACC will establish standard operating procedures, commensurate with current veterinary standards, to ensure that:
  - a. Unnecessary pain or distress is avoided
  - b. Anaesthesia and analgesia are properly and effectively used in all cases where necessary
  - c. Appropriate post-operative care is provided
  - d. Appropriate means of euthanasia are used
  - e. All procedures are carried out in the most humane and scientifically efficient manner, and
  - f. All due consideration is given to animal welfare, including environmental and habitat enrichment.
9. The BACC will work with the BMSC Occupational Health and Safety Committee to protect appropriately those affected by animal-based work at BMSC.

#### **GENERAL**

1. The BACC will review these Terms of Reference every three years to ensure that they reflect changes in CCAC policies and guidelines as well as animal welfare, scientific or community concerns.
2. The BACC will develop institutional animal care and use policies and standard operating procedures for animal care and will review them annually. SOPs will be accessible to all ACC members and AUP applicants. The full ACC shall review all SOPs.
3. The Coordinator of Animal Care and the BACC Chair will liaise with the CCAC Secretariat on behalf of BMSC and provide such information to the CCAC that it may require from time to time, including the annual Animal Use Data Form (AUDF).
4. The BACC will develop a crisis management program for the facilities and for the animal care and use program, in conjunction with any general institutional crisis management plan(s).
5. The BACC will periodically sponsor seminars and/or workshops on the use of animals in science and the ethics of animal experimentation, and encourage as many animal users as possible to attend. The BACC will also be prepared to accept criticism that may periodically occur, and will be receptive to developing and maintaining communication with animal welfare organizations.
6. The BACC will act as a general resource to BMSC animal users and caregivers and will demonstrate its commitment to the welfare of animals in and around BMSC by maintaining a visible profile to researchers, students and the community of Bamfield.

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1<sup>st</sup> revision February 2008

2<sup>nd</sup> revision October 2009

3<sup>rd</sup> revision March 2011

4<sup>th</sup> revision November 2014

5<sup>th</sup> revision April 2018

6<sup>th</sup> revision July 2019

7<sup>th</sup> revision June 2020

8<sup>th</sup> revision February 2021

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