

Guidelines for Animal Experimentation Ethics Committee (AEEC) of the Chittagong Veterinary and Animal Sciences University

1. Background

The Chittagong Veterinary and Animal Sciences University (CVASU) is an academic institute with primary interests in education and applied research/experimental research on the field of Veterinary & Animal Science and allied disciplines. Conducting applied or intervention research requires the use of animals. For that the CVASU wants to set certain guidelines with the aim of ensuring animal welfare issues and ethically justifiable to use animals in different research purposes. This is particularly relevant as many CVASU members are involved directly in studying animal welfare and ethics, or are involved in relevant committee work or legislative procedure. Therefore, it is believed that CVASU should have a set of written guidelines to provide its members with a basis for structured self-evaluation of the ethical nature of their work and to serve as inspiration when planning research involving the use of animals. It is the intent of the CVASU-AEEC that these guidelines will serve to encourage appropriate research.

CVASU conduct a wide variety of studies using disparate species in very different contexts. These guidelines have been written with these great diversities in mind and as a consequence are broad rather than specific. The focus is therefore on the ethical principles and how to handle these, rather than a list of do's and don'ts applicable to all scenarios.

2. Introduction

The use of animals in research and education has attracted ethical concern for many years, most notably in toxicology and bio-medical studies. More recently, ethical concerns have been raised over less invasive studies. This raises a strong need for justification of the use of animals in research and some guarantee that the research is conducted in an ethically sound and acceptable manner. Veterinary & Animal Science research generally requires experiments on living animals; and animals are frequently used as surrogates for humans in research, education and testing. Animal experiments designed to lend to the saving of life or to improving the health of man or other animals are accepted as ethically justifiable, as also experiments that have a high probability that they will lead to a contribution of knowledge. But widespread use of animals has raised concerns of the ethics of using experimental animal and led to the need to address, animal welfare concerns.

The above considerations have prompted the establishment of an AEEC in CVASU conducting research responsible for ensuring compliance with accepted standard that protect the welfare of the research animals.

CVASU: Centre for excellence in livestock research and education, utilizes animals for many of its research activities and the need to form an AEEC has been felt for some time. The AEEC will do for animals what the Ethical Review Committee does for human subjects.

The document provides guidelines for the establishment and functioning of the Animal Experimentation Ethics Committee (AEEC) at CVASU.

3. Statement of Principles

The CVASU as an academic and research institute should, like any such body, institute and follow AEEC prescribed guidelines for research on Veterinary & Animal Science and related fields.

- a) Scientists must clearly justify the use of animals; and demonstrate that the experiment cannot be performed in vitro.
- b) Laboratory animals must be kept under care of professionally qualified persons and according to internationally accepted husbandry practices specific to each animal species. This relates to space, type, and frequency of intake of food and water, bedding, temperature and adequate ventilation. They should be regularly inspected and their well being be assessed, cages cleaned and bedding replaced according to the regulations.
- c) Animals should be handled in accordance with the accepted procedures specific for each species of animals by suitably qualified persons.
- d) Procedures to be performed on animals must be such that they are within the acceptable norms, and attempts should be made at all times to minimize the pain associated with each procedure.
- e) Whenever possible, procedures should be carried out using local or general anesthesia appropriate for the particular species of animal.
- f) As soon as illness is apparent, animals used for experiments should be sacrificed humanely.
- g) In procedures that require starvation, the duration of withdrawal of food should be kept to a minimum.
- h) Upon completion of each experiment animals should immediately be sacrificed humanely applying the method prescribed for the particular species.
- i) Scientists should provide justification as to the number of animals required for each experiment. While adequate numbers should be used to generate statistically significant findings, the number should nevertheless be kept to a minimum.

4. Relationship of the AEEC with CVASU

- a) The AEEC (or the Committee) is the sole independent body concerned with granting ethical clearance for the use of animals for scientific experiments.
- b) The Director (Research and Extension) CVASU, through the Head of department will ensure that decisions of the Committee are properly implemented.
- c) In case of disagreement between the Committee and the Principal Investigators, the matter shall be placed to the Vice Chancellor (VC), CVASU whose decision shall be considered final.
- d) The AEEC is accountable to the VC and the normal line of communication will be through the member secretary 'of the Committee.

5. Composition and Size

- a) The AEEC shall comprise members representing 2 notable Bangladeshi organizations, 2 faculty members- including at least one amongst the professors of having imminence in research and maintenance of laboratory animals, to be appointed by the VC.
- b) A member will serve the AEEC for a three-year term and will not ordinarily serve for more than six consecutive years. The mechanism for such extension will be developed by the AEEC keeping in mind the need for continuity in the Committee. The Ex-Officio (institutional) members of the Committee once appointed shall hold office for a period of three years even if they move out of their current positions to maintain continuity of its functions.
- c) The Committee shall elect from among itself a Chairperson and the Director (Research and Extension) CVASU will be the Member-Secretary.

6. Mode of Operation

- a) The Committee shall meet at least twice a year, to review protocols, inspect facilities, and inquire about the progress of research, which they had reviewed and accorded approval.
- b) Additional meetings may be convened as and when necessary.
- c) No modification relating to the use of animals for experiments for the AEEC-approved protocols should be made without prior approval of the AEEC. The investigators should submit the proposal, for proposed change(s) with proper Justifications, for consideration of the AEEC. The AEEC, if considers necessary,

will provide an opportunity to the scientists to present/discuss with the proposed changes.

7. Committee Meetings

- a) Notices for meetings of AEEC indicating date, time, venue along with agenda and documents, shall be circulated to Chairperson, Co-Chairperson and members of the Committee at least 10 (ten) days prior to the date of mandatory meetings, and 5 (five) days before the additional meetings.
- b) In absence of the Chairman a member, to be elected by the members present, shall preside over the meeting(s).
- c) Presence of fifty percent of the full members will form-a quorum in a meeting. However, for the adjourned meetings a quorum will not be required.
- d) AEEC Application Form (Appendix B) along with copies of the protocol shall be submitted to the Animal Ethics Committee Secretariat. The Member-Secretary shall scrutinize the application, on receipt, to ensure that the investigators have fulfilled the requirements for submission.
- e) The Principal Investigator (PI) along with co-investigators will be invited to the meeting of the AEEC to present the protocol, and all participating in the protocol are expected to be present.
- f) Investigator(s) will be informed of the decision of the Committee, in writing, in respect of their protocol after the meeting.
- g) In case of urgency, the Member-Secretary, however, upon proper review may accord ad-hoc approval of any protocol, which requires immediate implementation but the meeting of the AEEC cannot be convened at a short notice. The investigators will be allowed to start the research protocol and subsequently, the proposal will be placed before the AEEC for its review and final approval.
- h) The Committee should, if it wishes, meet with the investigators of some specific studies. In such cases, arrangements can be made through the Member-Secretary.

2. Experimental Category (tick appropriate category)

- 2.1 Minimal Procedures: a) Animals to be used to raise antibodies (local and systemic)/to drug trials
b) Animals used to obtain tissues
c) Animals to be used for drawing blood
d) Animals to be used for animal behavior & welfare
e) Others (Specify) _____
- 2.2 Anaesthetized animal: Non-recovery experiment
Yes No
If yes, Please specify _____

3. General Questions

- 3.1. Is the acquisition, retention or use of the experiment animals (e.g. Protected species, primates) subjected to a permit, law of regulations of Bangladesh?

Yes No

If Yes, have the conditions of the law/regulations currently in force in Bangladesh been adhered to? (a copy of relevant document attached).

Yes No

- 3.2. Source of animals:

Please specify _____

- 3.3. Species of animals proposed to use

- 3.3. Number of each species to be used

<u>Name of Species</u>	Age*	Number to be used

Adult of infant

3.5. List person(s) who will assist with the experimentation

Sl #	Name	Academic Qualification	Position

3.6. Estimated duration of the protocol: Actual start date _____
 End date _____

3.7. Could the protocol aims be achieved by using other means e.g., *in vitro* rather than *in Viva* methods, tissue culture, computer simulation, etc?

Yes No

In vitro methods should always be used wherever possible. Therefore, if YES justification for using animal experimentation be provided.

4. Protocol Details

4.1. Outline the Procedures to be Carried Out on Animals

(Details of design of animal experimentation should be limited within 1 - 1½ page).

(Brief but complete details of procedures should be included, e.g. methods of handling and restraint, aseptic procedures, surgical interventions, sites and volumes of injections. For example, if raising antibodies, full information on the immunization regime should be provided, including routes and volumes of injections, procedures for collecting blood, volume of blood taken and frequency of blood collection.

ADJUVANTS: If adjuvants are to be used, please indicate/the type and why they are necessary. The use of adjuvants is often questioned, particularly the uses of complete

Freund's adjuvant (CFA). CFA should only be injected intramuscularly. Strong justification must be given for the use of CFA in booster injections, or intraperitoneally to cause the initial splenic stimulations when attempting to raise monoclonal antibodies. The investigator should provide an assessment of the amount of pain or distress associated with the procedure to be used.)

4.2. Anaesthesia : Yes No

If yes, please indicate the name of the agent and the route of administration.

4.3. Will neuromuscular blocking agent be used?

Yes No

If yes, mention agent, dose, and route of administration

Agent _____

Dose _____

Route of administration _____

4.4. Extent and method of supervision of animals during the experimentation including methods to be used for assessing and preventing pain and distress:

4.5. Arrangements made by the investigators for immediate and continuing post-operative and/or post-procedural care, including details of restraint, housing and analgesics to be used:

4.6. Disposal

(Animals should be sacrificed humanely using the method appropriate for the investigation. If injectable agent(s) is/are to be used, provide details of the particular agent, dose and route of injection. The use of cervical dislocation or a blow to the head of animals other than mice and poultry is discouraged and approval will require a scientific explanation for such a need.

Will the animals be sacrificed immediately following the experiment?

Yes No

If YES, indicate the method is to be used _____

If NO. indicate what will be done with the animals _____

4.7 Any other relevant information

5. **Declaration by the Applicant and Head of Department**

I have considered the feasibility of achieving the purpose of the project by means other than those using animals and, in my opinion, no such alternatives would achieve the objectives of this project. I agree to follow the Approved Standard Protocols and any delineated modifications as approved by the Animal Ethics committee, I will also supervise and assure compliance and training by my co-workers and-students as listed above

Signature Applicant

Date:

Signature Supervisor

Date:

Signature Head of Department

Date:

Signature of supervisor required if application submitted by research student

For Animal Ethics Committee Use

Date of Submission of Application to the AEEC _____

AEEC's Approval: AEEC meeting (date_____)

AEEC Chairman/Member Secretary (date_____)

Signature _____

Position _____ Date : _____