ACEC ADVICE TO APPLICANTS

An application to the Animal Care and Ethics Committee (ACEC) to hold or use animals at UNSW is required by the NSW Animal Research Act 1985. Projects must not commence until final approval has been received. The Committee is most willing to assist researchers to meet their obligations under the Act. The Committee offers itself as a resource for resolving any issue relating to the care and welfare of animals used in research and teaching.

The ACEC’s primary purpose is to protect the welfare of the animals and ensure that they are used in a way that is scientifically worthwhile. There are two ACECs at UNSW and these ACECs are composed of approximately 16 people. Four members are lay people, three members represent animal welfare organisations, and four members are veterinarians. The remaining members are animal researchers and are drawn from the biological, medical, and behavioural sciences.

The purposes and composition of the ACEC are important for researchers to remember when applying for approval. In particular, the applications must be written in "plain English" suitable for an interested, educated person from the general community, not a specialist. Applications that are written in the language of the specialist - as if they were grant applications - are not helpful to the Committee. Approval of a project requires unanimous approval of the Committee. Accordingly, it is essential that all members of the Committee have a reasonable, but not in-depth grasp of the aims, significance, and procedures of the project as they pertain to animal welfare. Clarifying what is happening to the animals frequently causes delays in gaining approval.

In considering an application, the ACEC is concerned primarily with what is happening to the animals, particularly when they are conscious. Over the years, the majority of the Committees’ deliberations have revolved around four questions:

1. Scientific Merit? Does the research justify the use of animals?

The aims and significance of most projects can be explained in approximately a half-page of "plain English". When addressing this issue, think about the style of English you would use if you were explaining your project on an ABC science show.

This question applies to all projects, even when they entail little risk of pain or distress to the animals. The underlying principle here is that poorly-conducted research is unethical even if it involves no harm to the animals. The key issues here concern:

- the general scientific merit of the project
- the experience of the investigators with the animals and procedures
- the experience of the investigators with the proposed procedures
- whether the number of animals yields adequate statistical power and/or replication.

Many applicants have trouble expressing the aims and purposes of their project. Some researchers give a brief abstract that would be suitable for a journal but is mystifying to the ACEC, including scientific members from other areas. Other researchers go to the other extreme and give an extensive background found in a grant application, which also mystifies the ACEC.
2. Impact on the Animals? What are the risks to the animals' welfare from their perspective?

Most of the Committee's concerns relate to this question. For all projects, the housing and husbandry of the animals must be adequate. For projects involving surgery, the potential for pain during and after the surgery must be assessed by the applicant. For any other interventions in the animal's activities, the potential for pain or distress must be assessed by the applicant.

3. Adequacy of Monitoring? Are procedures in place for ensuring the animals' welfare? Will the procedures be detecting and recording any threats to the animals' welfare?

This question covers:

- routine husbandry (e.g., are the animals' receiving adequate water?)
- early detection of identified threats to animals' welfare (e.g., possible morbidity from a tumor?)
- unexpected threats to animals' welfare (e.g., infection in the animal colony?)

While the Committee needs an outline of the biological measurements and analyses to assess the scientific worth of the project, the procedures to ensure the animals' welfare are more important to the Committee's decision. Unfortunately, some applications skim over the issues of monitoring in a few words and then spend a page on the fine details of assay on tissue taken from the animal.

4. Adequacy of Safeguards? Are precautions taken to minimise threats to the animals' welfare?

This is the area where practices are changing most rapidly, and researchers may find what was acceptable even three years ago is no longer acceptable. These changes are related to improvements in veterinary practice as well as ethical judgments.

Among other things, this question covers:

- Use of appropriate anaesthetic in surgery? (e.g., ether is largely unacceptable now; there are less irritating anaesthetics.)
- Use of appropriate analgesia? (There have been substantial improvements in the type and availability of appropriate agents, e.g., buprenorphine.)
- Plans for veterinary emergencies? (e.g., does the researcher have access to a veterinarian in the case of illness beyond the researcher's competence to treat)
- Appropriate euthanasia? (e.g., cervical dislocation without anaesthesia or analgesia is acceptable under restricted circumstances)
- Pain testing? (Some worthwhile projects investigate the processes by which organisms protect themselves against pain, distress, and injury. These projects necessarily receive close scrutiny by the Committee. Over the past few years, the Committee and researchers have evolved procedures for minimizing the use and magnitude of pain tests in a manner that minimizes discomfort to the animal and achieves the worthy scientific objectives of the project.)

The Committee recognises that writing an ethics application is a balancing act between brevity and
completeness. The Committee assigns a spokesperson to each application to work with the applicants to fill in any gaps before the application is considered by the Committee. This procedure is intended to allow the Committee to consider approval of the project without delay and with all required information.