



ANIMAL ETHICS COMMITTEE

**GUIDELINES FOR COMPLETING THE ANIMAL ETHICS
APPLICATION FOR RESEARCH AND TEACHING**

GENERAL INFORMATION

Research on animals is subject to both federal and state legislation, and the University of Wollongong is committed to ensuring that all research conducted at this university is fully compliant with the following:

Australian Code of Practice for the Care and Use of Animals 2004
Animal Research Act 1985
NSW Animal Research Regulation 2005.

Paragraph 3.1.1 of the *Australian Code of Practice for the Care and Use of Animals for Scientific Purposes (2004)* states:

“Investigators and teachers have personal responsibility for all matters related to the welfare of the animals they use and must act in accordance with all requirements of the Code. This responsibility begins when an animal is allocated to the project and ends with its fate at the completion of the project”.

It is mandatory that all researchers are familiar with the Code, and with their legal responsibilities as specified in Section 3 of the Code: "Responsibilities of Investigators and Teachers". These documents can be obtained at:

- Australian Code of Practice for the Care and Use of Animals, 2004
<http://www.nhmrc.gov.au/ethics/animal/issues/index.htm#a1>
- Animal Research Act 1985 <http://www.agric.nsw.gov.au/reader/arrp-legislation/act.htm>
- NSW Animal Research Regulation 2005
http://www.austlii.edu.au/au/legis/nsw/consol_reg/arr2005225/

These are also available from the Ethics Officer, Research Services Office.

This includes a responsibility to protect and promote the welfare of animals used. It is important to consider the following principles embodied in the Code of Practice when designing and carrying out projects:

- Reduction of animal use
- Replacement of animal use
- Refinement of animal use.

Under the Animal Research Act (1985), approval by an Animal Ethics Committee (AEC) is required for the use of any vertebrate animals for research and teaching purposes. **Approval can be given for up to 3 years.** Annual renewal of approval is conditional on submission of all required paperwork and compliance with the Code. In assessing applications it is often difficult for the AEC to obtain a clear “picture” of what happens to individual animals from the beginning to the end of the project. The AEC must assess the impact of all procedures and the project as a whole on animals.

The Application

Focus on what is happening to the animals and what is being done to ensure their wellbeing.

- The application should state clearly what happens to individual animals from the beginning to the completion of the project. The impact of procedures needs to be detailed.
- Provide a step by step explanation of all treatments (substances, dose rates, routes, volumes, anaesthetics, surgical procedures, etc.) and the expected effects. (Flow charts or sequence of events tables are often of assistance.)
- Detail factors that will impact on animals such as housing (type, duration, opportunity for social interaction should be considered).
- Justify animal use and why the species and number of animals have been chosen.
- Provide details of qualifications and experience of personnel regarding procedures to be performed.

Applications must be written primarily for an interested, intelligent lay person, not a specialist. The use of specialist language may delay processing of an application while explanations are sought. Investigators should be familiar with:

Frequency of Meetings

The Animal Ethics Committee usually meets eight times per year (deadlines for agenda items are listed at <http://www.uow.edu.au/research/rso/ethics/UOW009369.html>).

Number of Copies

Forms can be downloaded from: <http://www.uow.edu.au/research/forms/index.html>. Applications must be submitted in hardcopy and should be sent to: The Animal Ethics Officer, Research Services Office, University of Wollongong, Northfields Avenue, Wollongong, NSW 2522. Please supply the original plus 16 copies of the application. This form replaces any previous initial and renewal animal research forms.

COMPLETION OF ANIMAL RESEARCH/TEACHING APPLICATION FORM

SECTION 1: ADMINISTRATION

Q2 Researchers

State clearly the name and role of each investigator on the project, together with their qualifications and experience. Indicate their experience with the species used and the procedures to be undertaken. If the researcher has no experience, state how training will be given. In the case of sole researchers another qualified individual must be identified to look after animals in case of illness or other absence.

Q2.1 Provide details of any participating investigator(s) who has had an animal research authority or animal suppliers licence cancelled. Include the name of the person(s), the date on which the authority or licence was cancelled, who cancelled the authority or licence and the reason for the cancellation.

SECTION 2: JUSTIFICATION FOR ANIMAL USE

Q8-10 Aim and significance of the project in lay terms

Briefly describe the aims, significance and expected benefits of the project (the description should be designed for a lay audience). Summarise the procedures to be used in this research in reaching its aims and explain why this research is important. State what the expected benefits of the research are (eg in increasing our understanding, improving animal management, and/or achieving educational objectives). You must justify potentially severe or ethically contentious procedures. For example:

- unrelieved pain and distress including where the planned end-points will allow severe adverse effects to occur;
- death as the end point;
- reuse of animals;
- prolonged restraint or confinement;
- production of monoclonal antibodies by the ascites method and
- the use of non-human primates.

Q11-12 Reasons for animal use

Alternatives to animals must be investigated and implemented wherever possible. If alternatives exist you must explain why these cannot be used.

SECTION 3: NUMBERS AND TYPE(S) OF ANIMALS

Q14-16 Numbers and type(s) of animals

Clearly explain why the number of animals was chosen. Note: too few animals (resulting in statistically insignificant data) may be as much of a problem as too many animals (in terms of wastage).

Q17 Breeding Programs

Consider making excess animals available to other researchers so that animal use is kept to a minimum.

SECTION 4: ANIMAL SOURCE, HOUSING, AND MAINTENANCE

Q18 Source

Under the legislation, non-exempt animals must be obtained from a licensed animal supplier. Issues such as capture of wild animals or obtaining animals from remote sources that will necessitate prolonged transport will also need to be considered by the Committee and the answer should be as complete as possible including location, capture methods, handling/restraint, effect on population and release. If you are using a non-standard supplier please provide name and contact details in the application.

Q19 Housing, caging and enrichment

Standards of animal housing and management can have a significant impact on animal wellbeing and on experimental results. It is therefore important that a full description of housing is provided taking into account the following factors: location, isolation, group housing (stocking rates, sexes), shelter, bedding, hiding areas, environmental enrichment, the animal's temperature and lighting needs and duration held.

Details of the type and amount of diet should be provided together with frequency of feeding, measurement of intake and method of assessing the effects of the intake if applicable.

Q20 Effects of project on animal well-being, plans to minimize distress and monitoring procedures

Q20.1, 20.2, 20.4, 20.6 and 20.7 Animal monitoring

Animal monitoring by suitably qualified and experienced personnel is of utmost importance. The level of monitoring required will vary according to the type of research and animals used as well as acclimatisation. Although some of this information may have already been provided in other monitoring statements, pertinent information should be reiterated for the assistance of the Committee. Details should include methods used and frequency of monitoring.

Q20.3 Detailed description of sequence of events

It is important to present this section so that it is clear what is happening to animals from the beginning to the end of the project and over what time sequence. Start with where animals are being obtained, and give a detailed description of the sequence of events through to euthanasia or transfer. Flow charts and other diagrams are often helpful. Where several groups of animals receive different treatments, listing them in tabular form may assist (include information about control groups). Information required will vary with the nature of the project. For example:

- *Genetic manipulation* should state methods and potential effects.
- *In vitro studies* should state source of animals, duration held, and method of euthanasia.
- *Toxicology studies* should state substance, volume, route (+/- anaesthetic or analgesic), frequency of treatments and total number per animal, local and systemic effects, restraint, animal monitoring (methods, frequency), endpoint/duration.

➤ Where *surgical procedures* are involved note the following:

- Where *anaesthesia* is being given please provide details of drug, dose, method, monitoring, any fasting and where each of these steps will be performed.
- Where there is *blood/body fluid collection* state volume, method, whether any anaesthetic or analgesic is given, frequency and restraint.
- Details of any *drug treatments* should state substance, volume, method of application, whether any anaesthetic or analgesic is given, frequency and total amount per animal and any local and systemic effects.

Q20.8-20.10 Impact on animal well-being

It is very important that this question is answered as fully as possible, stating clearly what effects each factor and procedure will have on the animal, and how these effects will be minimised. If behaviour is being modified via stimulus, please show type, duration and frequency of stimulus. This information should include a) how you will seek to minimise adverse impact on animals, b) how the impact will be monitored, assessed and managed, and c) procedures to identify and respond to unforeseen complications.

If surgery is being performed, the following should be taken into account: anaesthesia, location of pre-operative preparation area, pre-operative preparation, surgical procedure (site, technique), sterile technique (instruments, drapes, surgeon), location of and housing in post-operative recovery area, post-operative management, post-operative monitoring (methods, frequency, duration), use of analgesics (type, dose, route, frequency, means of determining necessity for use), expertise.

Q21 Fate of animals

This question relates to the release or euthanasia of the animals. If released, state clearly when and where this will be done; if euthanased, state euthanasing agent used, site of administration and dose. Euthanasia must be carried out by experienced personnel.

SECTION 6: DECLARATION OF RESPONSIBILITIES

If recombinant DNA technology or infectious, toxic, radioactive or carcinogenic agents that may be harmful to other animals or persons are being employed, a Risk Assessment Form should be completed (and counter-signed by your Head of Department) and submitted with the application.