It is the responsibility of the investigator to ensure that all facets of animal care and use meet the requirements of the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes. This includes a responsibility to protect and promote the welfare of animals used.

The Code of Practice embodies the principles of:
- Reduction of animal use
- Replacement of animal use
- Refinement of animal use.

It is important to consider these principles when designing and carrying out projects.

Under the NSW Animal Research Act, approval by an Animal Care and Ethics Committee (ACEC) is required for the use of any vertebrate animals for research and teaching.

In assessing applications it is often difficult for the ACEC to obtain a clear picture of what happens to individual animals from the beginning to the end of the project. The ACEC must assess the impact on animals of all procedures and of the project as a whole.

The application should therefore focus on what is happening to animals and what is being done to ensure their well-being. It is important that this information is presented in a way that shows clearly what is happening to individual animals from the beginning to the completion of a project. The impact of procedures needs to be clearly detailed. The investigator should provide a step by step examination 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. In addition, factors that will impact on animals such as housing (type, duration, opportunity for social interaction) should be considered.

The application should also explain clearly why the use of animals is justified, why the species and number of animals have been chosen and that the qualifications of personnel are suitable for the procedures to be performed.

It is important for applicants to remember the composition of the ACEC. Applications must be written primarily for an interested, intelligent person without a scientific background, not for a specialist. The use of specialist language is not helpful to the committee and may delay processing of an application while explanations are sought.
Investigators should be familiar with:

* Australian Code of Practice for the Care and Use of Animals for Scientific Purposes, published jointly by the National Health and Medical Research Council (NH&MRC), CSIRO, and the Australian Agricultural Council (AAC)

* NSW Animal Research Act 1985

14. **Aim of the project in lay terms**
A brief description of the aims and significance of the project would usually be adequate. There needs to be a balance between brevity and completeness but remember the description should be designed for a lay audience (people with no scientific background).

16. **Reasons for animal use**
Alternatives to using animals must be investigated and used wherever possible. The ACEC must be informed of alternatives that exist and why these cannot be used.

20. **Number of animals**
It should clearly be explained why the number of animals has been chosen. Too few animals (resulting in statistically insignificant data) may be as much of a problem as too many animals (in terms of wastage of the use of animals).

22. **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. Flow charts and other diagrams are often helpful. Where several groups of animals receive different treatments, listing them in tabular form may assist.

23. **Impact**
It is very important that you provide all the relevant information and answer the questions as fully as possible. The **CHECKLIST** that accompanies the form will help you in this.

25. **Monitoring**
The level of monitoring required will vary according to the type of research and animals used. Some of this information may have already been provided in answer to the question on impact but it should be repeated for the assistance of the committee. Details should include methods used and frequency of monitoring.

28. **Animal housing and management**
Standards of animal housing and management can have a significant impact on animal well-being and thus on experimental results. It is therefore important that a full description of housing is provided.

34. **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.

40. **Technical competence**
Describe if experience is relevant to the species to be used as well as type and length (years) of experience.

**Acknowledgments**
The assistance of the following in producing a draft form is gratefully acknowledged: Ms Gail Briody (University of Sydney), Dr Stephen Burman (Pitman Moore), Ms Renate Domel (ANSTO), A/Prof Rosemarie Einstein (University of Sydney), Ms Francine Kelly (Royal North Shore Hospital), Prof Michael Perry, (University of NSW), A/Prof Margaret Rose (ARRP), Mrs Margaret Wright (University of NSW).
SECTION 1: ADMINISTRATION

1 Title of project:

2 Name and designation of Principal Investigator:

    Telephone: (work)                          (home)
    Department:
    Department address (and building code if applicable):

3 Description of relationship of Principal Investigator with the institution (e.g. employee, collaborative research etc):

4 Proposed date of commencement:

5 Proposed date of completion:

6 Is the project being supported by an external organisation? □ Yes □ No

7 Has an application been lodged for external support? □ Yes □ No

8 If the answer to either 6 or 7 is yes, state the name of the organisation and date of application and whether the application has to date been successful:
9 If a funding application is not successful, will the project still go ahead?
☐ Yes  ☐ No  ☐ Not applicable

10 Please indicate whether this application is for:

10.1 a new project?  ☐ Yes  ☐ No

10.2 a project which has (previously or simultaneously) been submitted to this or another ethics committee?  ☐ Yes  ☐ No

If Yes, provide reasons for re-submission or simultaneous submission and the name of the ACEC(s)

10.3 a significantly revised current protocol?  ☐ Yes  ☐ No

If Yes, quote the approval number and species and number of animals used to date

11 Does the project involve recombinant DNA technology or infectious, toxic, radioactive or carcinogenic agents that may be harmful to other animals or persons?  ☐ Yes  ☐ No

If Yes:

11.1 Will adequate precautions be taken in accordance with statutory requirements and have relevant personnel been informed?  ☐ Yes  ☐ No

11.2 Has the appropriate authority or licence been obtained?  ☐ Yes  ☐ No  ☐ Not applicable

12 Does the project involve native, imported or protected species?  ☐ Yes  ☐ No

If Yes,

12.1 Have the relevant licences been obtained from the National Parks and Wildlife Service or other authorities?  ☐ Yes  ☐ No

Permit issued by:

ARRP Guideline 12 Updated February 2000
Animal Research Application Form (Model)

Animal Welfare Branch, NSW Department of Primary Industries, Locked Bag 21, Orange NSW 2800 Ph (02) 6391 3149 Fax (02) 6391 3570
or Sydney Office, PO Box 100, Beecroft NSW 2119 Ph (02) 9772 0570 Fax (02) 9872 6938
Permit number:

13 Please identify all the locations at which research using animals will be conducted. Full street addresses should be supplied where applicable.
SECTION 2: JUSTIFICATION FOR ANIMAL USE

Aim of the project in lay terms

The Code of Practice states that Animal experiments may only be performed when the scientific merit justifies the use of animals.

Your answer is crucial for the assessment of scientific merit and the necessity of animal use. Use lay terms & terms that will be understood by a person without a scientific background.

14 Describe the aims of the project in lay terms. Comment on the significance of the research that you believe justifies the use of animals.

Specify what you hope to achieve.

15 If the project repeats previously reported experiments, give the reasons for the experiments to be repeated.

Reasons for animal use

ARRP Guideline 12 Updated February 2000
Animal Research Application Form (Model)
16 Why is it necessary to use animals in this experiment?

17 What alternatives to animals have been considered and why is it not possible to use these?

18 What species of animal will be used? Give the scientific and common name (and strain, age, sex and weight if applicable).

19 Why has this species (and strain, age, sex and weight if applicable) of animal been chosen?

**Numbers of animals**

20 How many animals will be required?

21 Explain, on the basis of experimental design, why this number of animals will be required.
A. Assessment of the impact on animal well-being

Sequence of events

22 Give details (sequentially) on what happens to the animal(s) from the time you obtain them until the time the project is completed.

A flow chart or sequence of events table may assist in making this information clear.
Impact

23 Identify all factors and procedures that may have an impact on an animal's well-being. This may include handling, housing etc as well as specific experimental procedures.

(Refer to the CHECKLIST to ensure all details have been considered.)
24 Describe each factor or procedure and detail how any adverse impact will be minimised.

Details should include treatment substances, dose rates, routes of administration, anaesthetic and analgesic regimes etc. if applicable.
(Refer to the CHECKLIST to ensure that all details have been considered.)
Animal monitoring

25 Who will monitor the animals? Include names, qualifications and experience with the species being used.

25.1 During weekdays?

25.2 At night (if applicable)?

25.3 During weekends and holidays?

26 How will animals be monitored while the procedures are carried out? Include frequency and methods used.

27 How will animals be monitored for the duration of the project? (Include frequency and methods used.)

Animal housing and management

28 Where will animals be housed?

29 Describe the type of housing to be provided.
30 What will be the maximum and minimum number of animals per cage/pen?

31 Where will procedures be performed?

32 What will animals be fed, and how often will they be fed?

33 Who will be responsible for the management of emergencies and how will you ensure that the nominee(s) can be contacted?

**Source**

34 Where will you get the animals from?

**Duration**

35 What will be the maximum time an individual animal is held?

**Re-use**

36 Does this project involve the use of any animals that have been the subject of previous research? □ Yes  □ No

If Yes
36.1 What has previously been done to these animals? Include project name(s) and identification number(s).

**Fate of animals**

37 What will happen to animals at the completion of the project?

38 Will factors affecting animals determine the endpoint of the project (eg tumour size, maximum weight loss)?

Yes  No

If Yes, give details.
If No, what will be the end point?

39 If animals are to be euthanased:

39.1 How will this be done?

39.2 Where will euthanasia be carried out?

39.3 Who will do it, and what is their experience in the technique to be used?

39.4 Could animal tissue be shared with other investigators?
B. Technical competence

40 List the qualifications and experience of all personnel who will be participating in the animal components of the project? Detail whether the experience is with the species being used, as well as whether the experience is with the procedures being undertaken.

<table>
<thead>
<tr>
<th>Name and Qualifications</th>
<th>Experience in procedures to be undertaken and the species being used (if no experience, describe how relevant experience will be obtained)</th>
<th>Telephone numbers work and home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate investigators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor (if applicable)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other people participating</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

41 Have any of the people participating in the project had any animal research authority or animal supplier’s licence cancelled?
☐ Yes    ☐ No

If Yes please provide details including the name of the person, the date on which the authority or licence was cancelled, who cancelled the authority or licence and the reason for the cancellation.
Declaration by the Principal Investigator

I certify that the use of animals in this project will conform with the NSW legislation and the general principles of the NH&MRC/CSIRO/AAC Australian Code of Practice for the Care and Use of Animals for Scientific Purposes. I accept responsibility for the conduct of all procedures detailed in this application and for the supervision of all personnel delegated to perform any such procedures.

I confirm that all personnel have read this application and have agreed to comply with procedures described and any conditions imposed by the ACEC.

Principal Investigator: Date:

Declaration by Head of Department/School (if applicable)

I have read this application and am satisfied that the use of animals is justified on scientific, educational or diagnostic grounds.

Head of Department/School: Date:
CHECKLIST

What is happening to the animals?
What will be the effects?
How will the effects be minimised?

**Anaesthesia**
- Fasting
- Induction & drug, dose, route
- Maintenance & drug, dose, route
- Methods of monitoring anaesthesia and recovery
- Additional support during anaesthesia and recovery (e.g., heat, intravenous fluids)
- Location of induction and recovery areas

**Behaviour modification**
- Stimulus (type, duration, frequency)

**Blood/body fluid collection**
- Volume
- Route
- Frequency
- Anaesthesia or analgesia
- Restraint
- Animal monitoring (methods, frequency)

**Diet/water modifications**
- Type
- Amount
- Effects
- Measurement of intake
- Animal monitoring

**Drug treatments**
- Substance
- Volume
- Route
- Frequency/total number per animal
- Local and systemic effects
- Anaesthesia or analgesia
- Possible side effects
- Restraint

**Euthanasia**
- Method
- Location (where procedure will be performed)
- Expertise of personnel

**Genetic manipulation**
- Methods
- Potential effects

**Housing**
- Location
- Isolation
- Group housing (stocking rates, sexes)
- Shelter
- Bedding
- Hiding areas
- Environmental enrichment
- Duration held
- Conditioning period

**In-vitro studies**
Source of animals
Duration held
Euthanasia

Surgery
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

Toxicology
Substance
Volume
Route
Frequency of treatments / total number per animal
Local and systemic effects
Anaesthesia or analgesia
Restraint
Animal monitoring (methods, frequency)
Endpoint/duration

Transport
Type
Duration
Confinement
Numbers of animals
Airconditioning

Tumour/neoplasia induction
Method
Site
Endpoint
Animal monitoring (methods, frequency)

Teaching
Source of animals
Housing
Duration held
Method of disposal

Wildlife studies
Location
Methods
Capture methods
Handling/restraint
Housing
Monitoring
Release
Effects on population