



**UMT RESEARCH ETHIC COMMITTEE (JKEP)
UNIVERSITI MALAYSIA TERENGGANU**

**Application for Approval
of a Project Involving the Use of Animals,
and Approval as an Investigator for the Project**

1. Please complete the application form in accordance with the UMT Research Ethic Committee (JKEP) Guidelines, an incomplete application will result in the return of the application and a delay in the granting of the approval.
2. Researchers shall consider the principles of '3R' in using animals namely:
 - Replacement of animals with other methods for example in vitro methods.
 - Reduction in the number of animals used / no wastage of live animals.
 - Refinement of techniques to reduce potential adverse impacts on animals such as pain and suffering.
3. Please submit any relevant documents as appendices (attach a copy of the proposal: research / elective / teaching / other).
4. Please submit the **SOFT COPY** of the checklist and application form to sekretariat.jkep@umt.edu.my for complete verification before submitting the hard copy.
5. If further clarification is needed by the UMT JKEP Committee regarding the application, the principal researcher or co-researcher (non-student) **MUST** be present at the committee meeting to present/ answer questions regarding the application.
6. UMT JKEP approval is required for the use of **vertebrates and invertebrates** for scientific purposes (research, teaching and testing).
7. Please submit the application and direct all inquiries to the following address:

Secretariat of Research Ethic Committee (JKEP), Research Management Office Universiti Malaysia Terengganu (UMT), Universiti Malaysia Terengganu, 21030 Kuala Nerus, Terengganu.

CHECKLIST OF UMT ANIMAL ETHIC APPLICATION, PLEASE TICK (√) IN THE SECTION BELOW

Name of Principal Researcher			
No.	DOCUMENTS SUBMITTED	APPLICANT PLEASE TICK (√)	UMT JKEP PLEASE TICK (√)
1.	Animal Approval Application Form * The application form must contain complete information on the procedures to be performed on animals		
2.	Declaration and signature of principal researcher		
3.	Declaration and signature of all co-researchers		
4.	Flowchart of methods		
5.	Proposed commencement date and end date		
6.	Additional related documents including appendices (please specify) a. b. c.		
7.	Endorsement from Dean of Faculty/Director of Institute		

(Signature of Principal Researcher)

Date:

(JKEP Haiwan UMT Secretariat Signature)

Date:

TYPE OF APPLICATION: [Please tick (/)]

1. APPLICANT (PRINCIPAL INVESTIGATOR)

A.	NAME	
B.	UMT STAF NO	
C.	FACULTY/INSTITUTE/CENTER	
D.	EMAIL & MOBILE NO.	

2. RESEARCH PROJECT

A.	TITLE		
B.	GRANT NO.		
C.	FUNDING INSTITUTION		
D.	DURATION OF STUDY/RESEARCH/TEACHING (MAXIMUM 3 YEARS)	DD/MM/YYYY	DD/MM/YYYY

3. TYPE OF APPLICATION

Type of application	Details	(✓)
Research		
Teaching (State the course)		
Breeding		
Commercial product testing (State the company and product/s)		
Others (Specify)		

4. TYPES OF ANIMALS:

Animal	Please Tick (/)	Animal	Please Tick (/)
Laboratory Animal		Aquaculture	
Wildlife Animals		Insects	
Aquatic Animals		Invertebrates	
Domestic Animals		Others (Please Specify):	

**5. HAVE YOU APPLIED FOR OTHER ETHICAL CLEARANCE FOR THIS PROJECT:
YES / NO**

1. PROPOSAL

1.1 Project Title:

1.2 Project Objectives:

1.3 Summary of the Project (not more than 250 words):

1.4 State the Ethical Implications of the Project:

1.5 Explain why techniques, which do not use animals, have been rejected as unsuitable.

1.6 Duration (Please note that ethical clearance can only be given for a maximum period of 3 years starting from the commencement date. The JKEP UMT should be informed in writing the actual date of commencement of the project.)

Proposed commencement date :

1.7 Estimated duration from : dd/mm/yyyy to: dd/mm/yyyy
 Investigators / Collaborators / Students:

Please list the names of persons involved in this animal project (including laboratory staff).

No.	Name & Qualification	Faculty/ Institute	IC / Passport No.	Contact No.	Signature & Date
1.					
2.					
3.					
4.					
5.					
6.					

2. CLASSIFICATION OF PROJECT (Please tick (/) one or more)

A	Project requires animals to be sacrificed for the isolation of embryos and tissue/organ specimens.	
B	Procedure(s) carried out under anaesthesia and animals sacrificed without regaining consciousness.	
C	Survival after an intervention, which causes major or prolonged stress (e.g. major surgery and prolonged restraint).	
D	Survival after an intervention, which causes minimal stress of short duration (e.g. venepuncture, brief restraint and skin irritation).	
E	Animal behavior experiments, including pain assessment.	
F	Infective or biohazard experiments (including radiation).	
G	Genetic modification of animals (approval from UMT Biosafety & Security Committee is also necessary).	
H	Toxicity studies (please provide the appropriate established guideline for Toxicity Studies such as from OECD)	
I	Reproductive studies (breeding, teratology studies).	
J	Production of antisera.	
K	Other procedures – Please specify.	

3. ANIMALS REQUIRED

3.1 TABLE OF PROPOSED ANIMAL USAGE:

(NOTE: Ethical Clearance can only be given for studies involving **LIVE VERTEBRATES/ INVERTEBRATES** for a maximum period of three calendar years only.)

No.	<i>Scientific</i> and Common Name	Male (No.)	Female (No.)	Total (No.)
1.				
2.				
3.				
	Grand Total			

3.2 SOURCES OF ANIMALS:

(Address of Source/Supplier:)

3.3 LOCATION OF ANIMALS:

(Please indicate where the animals will be housed during the experimental period)

3.4 CAGING/HOUSING/MAXIMUM NUMBER OF ANIMAL PER CAGE

3.5 ENVIRONMENTAL ENRICHMENT:

(Please indicate type(s) of environmental enrichment (special/specific) to be used)

3.6 FOOD AND WATER REQUIREMENTS

(Food type, quantity, feeding regime, water quantity and regularity)

3.7 CULTURE / REARING DURATION AND CONDITIONS

(Physical parameters that will be used during culture/rearing)

3.8 CARE OF ANIMALS:

(State the name and contact address of the persons responsible for the daily care of animals (including after office hours, weekends and public holidays))

3.9 PERMITS REQUIRED:

(If protected native species or genetic modification (GM), provide details of appropriate permits/approvals held- e.g: Fisheries/Wildlife Permit)

Holder :

Issuing Agency :

Date of Issue :

Serial No. :

Period of Validity

3.10 JUSTIFICATION FOR THE USE OF ANIMALS

(Animal Ethic UMT Committee must be satisfied that the use of animals is justified, based on whether the scientific or educational value of the work outweighs the potential impact on the animal being used)

- (a) Justify the choice of species / strain of the animals to be used or studied (provide references)
- (b) Justify the number of animals requested based on statistical calculations, guidelines, published study or other methods (*Minimum number of animals to be used to achieve the objectives of the project*).
- (c) What alternatives have been considered and why is this animal use justified.
- (d) Provide a flowchart of the study and indicate the number of animals to be used in the flowchart (to be attached as an appendix ie. APPENDIX A).

4. EXPERIMENTAL METHODS

4.1 Category of the procedure/activity. (Please tick (/))

Non-invasive observational studies <i>(e.g. normal, non-invasive husbandry, behavioural studies)</i>	
Minor conscious intervention without anaesthesia <i>(e.g. injections, fin clipping, shearing, blood withdrawal)</i>	
Animal unconscious without recovery <i>(e.g. live animals euthanised for scientific use)</i>	
Minor operative procedures with recovery <i>(e.g. sedation or anaesthesia for injections, blood withdrawal)</i>	
Surgery with recovery <i>(e.g. castration without anaesthesia)</i>	

4.2 Procedures to be carried out on the animals: (Please circle)

- (a) Surgery: YES / NO
(If YES, answer 4.2 and 4.3)
- (b) Anaesthesia: YES / NO
(If YES, answer 4.4 and 4.5)
- (c) Other: YES / NO
(If YES, answer 4.6 and 4.7)

4.3 State surgical procedures to be carried out on the animals:

4.4 Name the person(s) having experience in performing the procedures:

4.5 Anaesthetic to be used:

Name :
Dose :
Route of Administration :

Duration :

Clinical signs to ensure anaesthesia are adequate:

4.6 Neuromuscular Blocking Agent to be used: YES / NO

If YES,

Agent :

Dose :

Route of Administration :

Duration :

Justification for use of neuromuscular blocking agent:

4.7 Outline the procedure:

4.8 Name the person(s) having experience in performing the procedure:

4.9 Supervision during experimentation:
(Detail the extent and method of supervision of animals during experimentation, including methods to be used for assessing and preventing pain and distress).

4.10 Post-procedural care:
(Detailed 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).

4.11 Post-procedural survival time for the animals: (hours / days / months / years)

4.12 Repeated use of animal? (YES / NO); if YES please provide the detail procedures on the animal.

5. HEALTH OR SAFETY RISK

Does the project involve exposure of live animals to any of the following:

5.1 Ionising Radiation: YES / NO

If YES, Agent:

5.2 Carcinogen / Teratogen: YES / NO

If YES, Agent:

5.3 Pathogenic Organisms: YES / NO

If YES, Agent:

5.4 Other: YES / NO

Please give details.

If YES to any above;

Please indicate the health risks to human and / or animals involved in the project:

6. GENETIC MATERIALS

6.1 Will you be isolating the DNA? YES / NO

6.2 Will you be inserting DNA into live animals? YES / NO
If yes, state the detail procedures.

6.3 State the location of the DNA extraction/insertion will be conducted: _____

6.4 Who will be carried out the molecular procedures (DNA/RNA) extraction etc)?:
Please state: _____

7. HUSBANDRY AND MONITORING

(a) Who will carry out the daily husbandry and monitoring of animal, including weekends and holiday?
Provide name and contact number.

(b) Monitoring during and after procedures/interventions; List specific signs to be monitored and their frequency. Please provide the monitoring checklist you will use to record these observations. (Please provide monitoring checklist as APPENDIX B)

8. COMPLETION OF PROJECT

8.1 Animals to be sacrificed: YES / NO

If YES,

- (i) state the method to be used:
- (ii) name of the person performing euthanasia:
- (iii) method of disposal of euthanized animals:
- (iv) If animals are not sacrificed, state what happen to them:

9. ANY OTHER COMMENTS

10. DECLARATION BY PRINCIPAL INVESTIGATOR / COORDINATOR / CHAIRPERSON:

I hereby declare that I and / or co-investigators / co-coordinators / vice chairperson have the appropriate qualifications and experience to perform the procedures described in this project. I am familiar with the provisions of the Universiti Malaysia Terengganu (UMT) rules and regulations in animals for the Care and Use of Animals for Scientific Purposes; and accept responsibility for the conduct of the experimental procedures detailed above; in accordance with the requirement of the rules and regulation laid down by UMT’s Research Ethic Committee (JKEP).

I agree that I have considered the **3Rs** of animal welfare:

- Replacement of animals with other methods or alternatives.
- Reduction in the number of animals used.
- Refinement of the techniques used to reduce adverse impacts and stress on animals.

I further declare that the procedures described in this project do not constitute unnecessary repetition of work previously carried out by other research workers or myself, and that each person engaged in this project has been adequately instructed in, and is competent to perform, procedures that they are to carry out. If they are not already skilled in the procedures, I will be responsible for seeing that they obtain the necessary training in advance, so that each procedure on an animal will be carried out in the most appropriate manner.

.....
 Signature : Principal Investigator
 Date :

I hereby endorse that this applicant is appropriately qualified in the research area involved to conduct the proposed research project and is capable of undertaking this research study in a safe and ethical manner.

Signature : _____
 (Dean of Faculty /Director of Institute)
 Name : _____
 Date : _____

Stamp :

10. CERTIFICATION OF THE JKEP (Chairperson / Authorised Representative)

Name :

Signature : _____

Date :