

Endorsed by: Dean/Director/ Deputy Dean/  
Deputy Director

XX

Date:XX



IACUC / 102

IACUC office use only

Date of receive:

Date of meet:

**INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE  
UNIVERSITI PUTRA MALAYSIA**

**Animal Utilisation Protocol (AUP) – Teaching / Display**

*This completed Animal Utilisation Protocol (AUP) needs to be submitted to The Secretariat, Institutional Animal Care and Use Committee, c/o Unit of Ethics Research, Level 4, Office of the Deputy Vice Chancellor (Research & Innovation), Universiti Putra Malaysia, and approved by UPM IACUC prior to commencement of the animal study. Direct all enquiries to [iacuc@upm.edu.my](mailto:iacuc@upm.edu.my) or 03-9769 1244/1605.*

**COURSE TITLE AND CODE:**

VPXXX- ???

*(Must include the animal species to be used in the course or display)*

**This course/display will be offered:**

**Once** : Starting Date: ..... Completion Date: .....

**Yearly** : Number of session / semester: X week/sem Semester/Year: Sem X 20XX/XX-20XX/XX

**1. PERSONNEL**

| Name  | Institution/Department  | Phone Number/e-mail   | Signature |
|---|---|---|-----------|
| <b>Course Coordinator, Lecturer or Instructor:</b><br>XX  | Department of XX<br>Faculty of XX<br>University Putra Malaysia,<br>43300 UPM Serdang, Selangor            | 03-XX<br>011-XX<br><a href="mailto:xx@upm.edu.my">xx@upm.edu.my</a> |           |
| <b>Other personnel:</b><br><i>Please indicate role (technical staff, demonstrator, GRA, students)</i> |   |   |           |
| En. XX<br>Assistant Veterinary Officer  | Animal XX,<br>Department XX<br>Faculty of XX<br>University Putra Malaysia,<br>43300 UPM Serdang, Selangor | 01X-XX<br><a href="mailto:xx@upm.edu.my">xx@upm.edu.my</a>          |           |
| En. XX<br>Technical staff   | "   | 01X-XX<br><a href="mailto:xx@upm.edu.my">xx@upm.edu.my</a>          |           |

|   |   |   |  |
|---|---|---|--|
| En. XX<br>XX staff  | “   | +60 17-xx<br><a href="mailto:xx@upm.edu.my">xx@upm.edu.my</a>       |  |
| Dr. XX<br>DVM, MVSc student   | Department of XX<br>Faculty of XX<br>University Putra Malaysia  | +60 17-xx<br><a href="mailto:xx@gmail.com">xx@gmail.com</a>         |  |
| <b>Attending Veterinarian:</b><br><i>(Please also read and sign on Appendix 1)</i><br>Dr XX | Department of XX<br>Faculty of XX<br>University Putra Malaysia, | 03-XX<br>011-XX<br><a href="mailto:XX@upm.edu.my">XX@upm.edu.my</a> |  |

## 2. CATEGORY

### Classification (check one):

- Acute** - utilising an animal for a brief period (less than 24 hrs.), followed by euthanasia or return of the animal to source, **or** humanely killing an animal upon receipt or after a brief housing period during which time no manipulations other than standard management procedures are performed, i.e. anaesthetized without recovery, euthanised for tissue collection, etc.
- Chronic** - maintaining the animal and performing experimental procedures during this time, i.e. feeding trials, antibody production, breeding colony, recovery surgery.

### Category of Invasiveness (check one):

|  |   |
|--|---|
| <b>A</b>                                     | Involve either no living materials or use of no living materials, or use of plants, bacteria, protozoa, - studies on tissues obtained from autopsy or slaughterhouse.<br><b>THIS CATEGORY DOES NOT NEED AN AUP</b>  |
| <input checked="" type="checkbox"/> <b>B</b> | Experiments on vertebrates species, expected to produce little or no discomfort<br>- mere restraint for blood sampling, injection of harmless substance, physical examination,<br>- experiment on completely anaesthetised animals which do not regain consciousness, food/water deprivation for few hours, standard methods of euthanasia (anaesthetic overdose or sedation/light anaesthesia follow by decapitation)  |
| <input type="checkbox"/> <b>C</b>            | Experiments that involve some minor pain/discomfort for short duration to vertebrate species<br>-exposure of blood vessels, implant chronic catheters, behavioural study involving short-term stressful restraint, immunization employing Freund's adjuvant, surgery under anaesthesia resulting in minor post-surgical discomfort  |
| <input type="checkbox"/> <b>D</b>            | Experiments that involve significant but unavoidable stress or pain to vertebrate species<br>-deliberate induction of behavioural stress, major surgical procedure resulting in significant post-operative discomfort, induction of anatomical/physiological deficit resulting in pain/distress, application of noxious stimuli from which escape is impossible, prolonged (> several hours) physical restraint, procedures that produce pain in which anaesthetics are not used (toxicity testing with death as end-point, production of radiation sickness, certain injections, stress and shock research resulting in pain approaching pain tolerance threshold/point of intense reaction) |
| <input type="checkbox"/> <b>E</b>            | Procedures that involve inflicting severe pain near, at, or above the pain tolerance threshold of unanaesthetised, conscious animals<br>-use of paralytic agent alone for surgical restraint without use of anaesthetics, severe burn or trauma infliction on unanaesthetised animals, inescapable severe stress or terminal stress   |

**Please comment briefly on:**

1. Justification on the use of live animals or animal preparations over a demonstration, film, videotape, computer simulation or other model.

Laboratory animal rotation is a compulsory course to DVM 4 students under VPKXX (Clinical Practice XX) which involve Animal Resource Unit (ARU) site visit and hands-on session at XX Laboratory. The rotation is estimated about three hours only. Before the session, the participants are needed to watch a demonstration video in Putrablast on lab animal handling, restraining and blood collection techniques so that they can visualize better and also minimize stress to animals. By the way, we feel the best approach is to expose themselves on hands-on examination using live animals

2. How you are maximizing the educational gain from the animals used.

A demonstration from an instructor will be carried out prior to hands-on activity. The participants will be allowed to perform hands-on activity on their own with the supervision by the instructor. Using the live animals during the practical allow all participants to practice the techniques, which could help in providing better understanding on the several laboratory animal techniques.

3. The on-site supervision provided for the students/participants working on animals during the teaching exercise.

A main instructor together with two experienced XX staffs will be helping during the practical sessions.

4. The expected number of students/participants.

8-10 students/week with the total of 120 DVM 4 students

5. The number of students/participants per animal or group of animals.

For each week: 1 rabbit/8-10 students, 1 rat/2 students, 1 mouse/student

6. The participant / instructor ratio.

8-10 students: 3 instructors

### 3. SOURCE

**Indicate the source or supplier:**

- UPM Animal Resource Unit     Client Owned     Client Donated     Resident Animal  
 Wildlife     Field studies     UPM Herd / Flock     Local suppliers/farms  
 Other institution(s)     Import (attach health certificate & import permit)  
 Transfer from other teaching/research (AUP No: \_\_\_\_\_)

For the above, please provide details:

| SPECIES   | SOURCE/<br>SUPPLIER                    | ADDRESS/ LOCATION                      | PHONE<br>NUMBER | MODE AND<br>CONDITION OF<br>TRANSPORTATION |
|---|--|--|-----------------|--|
| NZ white rabbit   | Animal<br>Resource<br>Unit<br>(En. XX) | Faculty of Veterinary<br>Medicine, UPM | 01X-XX          | Aircond car                                |
| SD rats   |  |  |                 |  |
| BALB/C mice   |  |  |                 |  |
| If you need more space for animals involved, please insert new rows |  |  |                 |  |

### 4. ANIMAL USE

List **ALL ANIMALS** involved in the study.

| Quantity | Species/Strain | Weight/<br>Age | Gender   | Accommodation<br>Building | Experimental Room*<br>[Eg: procedure room/area, or<br>hatchery/pond/tank (for aquatic<br>animals)] |
|----------|----------------|----------------|----------|---------------------------|--|
| 1        | NZ rabbit      | Variable       | Variable | Animal Resource<br>Unit   | XXX Laboratory, FPV, UPM   |
| 60       | SD rats        |                |          |                           |  |
| 132      | BALB/C mice    |                |          |                           |  |

\*Please specify if experiments on infectious diseases can be carried out in the proposed area/room. Please note that experiments involving infectious diseases that can be a threat to healthy animals cannot be permitted in the same facility.

### 5. ANIMAL CARE & HUSBANDRY

**a) Specify provisions of basic requirements for each species/strain of animals used**

(For guide on species care and husbandry requirements, please refer to the UPM Code of Practice for the Care and Use of Animals for Scientific Purposes at [http://www.rmc.upm.edu.my/dokumen/PTPPY1\\_92272\\_upm\\_code\\_of\\_practice.pdf](http://www.rmc.upm.edu.my/dokumen/PTPPY1_92272_upm_code_of_practice.pdf)).

**Species/strain 1:** BALB/C mice

i. Caging:  Plastic  Metal  Aquarium  Tank  Others-specify \_\_\_\_\_ - \_\_\_\_\_  
For aquaculture research, please specify size & volume of space : \_\_\_\_\_ - \_\_\_\_\_

ii. Stocking density: 6 animal per cage (cage/pen/paddock/tank dimension or floor space)

iii. Flooring/Bedding:  Wood slatted  Wire mesh  Wood shaving  Newspaper  
 Others \_\_\_\_\_ - \_\_\_\_\_

iv. Temperature of room:  Not regulated  Regulated at 21-24°C

v. Ventilation:  Not regulated  Regulated

vi. Feed:  Custom-formulated  Commercial – name of manufacturer Gold Coin (M)

vii. Water: Source Filtered water Delivery:  Bottle  Water bowl  
 Others \_\_\_\_\_ - \_\_\_\_\_

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**Species/strain 1:** Sprague Dawley

i. Caging:  Plastic  Metal  Aquarium  Tank  Others-specify \_\_\_\_\_  
For aquaculture research, please specify size & volume of space : \_\_\_\_\_

ii. Stocking density: 2/3 animal per cage (cage/pen/paddock/tank dimension or floor space)

iii. Flooring/Bedding:  Wood slatted  Wire mesh  Wood shaving  Newspaper  
 Others \_\_\_\_\_ - \_\_\_\_\_

iv. Temperature of room:  Not regulated  Regulated at 21-24°C

v. Ventilation:  Not regulated  Regulated

vi. Feed:  Custom-formulated  Commercial – name of manufacturer Gold Coin (M)

vii. Water: Source Filtered water Delivery:  Bottle  Water bowl  
 Others \_\_\_\_\_ - \_\_\_\_\_

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**Species/strain 1:** New Zealand rabbit

i. Caging:  Plastic  Metal  Aquarium  Tank  Others-specify \_\_\_\_\_  
For aquaculture research, please specify size & volume of space : N/A

ii. Stocking density: 1 animal per cage (cage/pen/paddock/tank dimension or floor space)

iii. Flooring/Bedding:  Wood slatted  Wire mesh  Wood shaving  Newspaper  
 Others \_\_\_\_\_ - \_\_\_\_\_

iv. Temperature of room:  Not regulated  Regulated at 19-21°C

v. Ventilation:  Not regulated  Regulated

vi. Feed:  Custom-formulated  Commercial – name of manufacturer XXX

vii. Water: Source Filtered water Delivery:  Bottle  Water bowl  
 Others \_\_\_\_\_ - \_\_\_\_\_

**b) Specify the frequency of the following activities (if applicable) and who will be performing**

| Activity | Frequency | Performed by (name) |
|----------|-----------|---------------------|
| Feeding  | -         | -                   |

|  |   |   |
|--|---|---|
| Changing water bottle/bowl/tank        | - | - |
| Changing bedding/litter tray/filter    | - | - |
| Changing/cleaning cage/pen/tank/filter | - | - |

c) **Specify any enrichment provisions, i.e. space, specific materials or objects provide, if any.**  
(*e.g. tissue paper, cardboard shelter, cardboard tube etc.*)

None

## 6. PROCEDURES

- a) Using a **FLOW DIAGRAM WITH TIMELINE**, describe sequence of research procedures that involve animals in this project. **THE COMPLETE FLOW DIAGRAM WITH TIMELINE SHOULD ONLY DESCRIBE THE PROCEDURES FROM THE POINT OF PURCHASE OR PROCUREMENT TO WHEN AND HOW THE ANIMALS ARE EUTHANISED.** Please provide reference(s) where appropriate.

In cases of surgical procedures, description of the following should be included; patient preparation before surgery, pain and distress management, frequency of monitoring during and post-surgery as well as technical description of surgical procedures and post-operative care.

**FLOW DIAGRAM MUST BE CONCISE**

Rabbit = 1 only - Use the same rabbit for 12 weeks

Rats = 5 animals/session x12 weeks = 60 rats

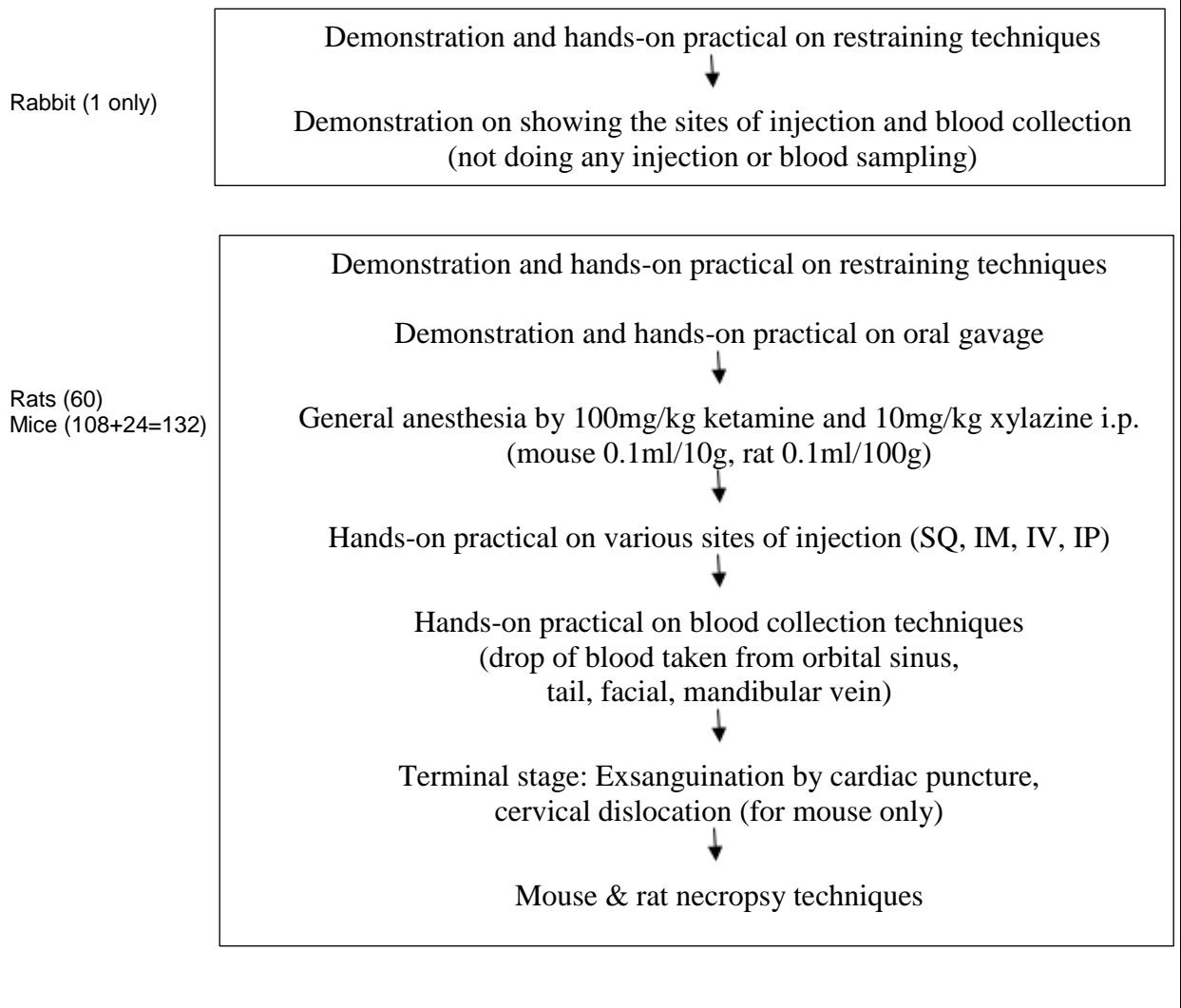
Mice = 11 animals/session x12 weeks = 132 mice

(108 of BAL/B mice will be obtained from approved AUP: UPM/IACUC/AUP-RXXX).

Additional mice requested for VPK3932: 132-108= 24 mice

Non-productive breeding mice/rats at XX will be sacrifice for teaching class VPXXX.

Total animals use for VPK3932= 1+ 60 + 132= 193



**b) List ALL procedures, manipulations, and/or measurements that will be performed on the animals.**

\*Indicate the Category of Invasiveness as stated in page 2 for each procedure listed.

Please consult your AV for procedures involved the usage of drug (dosage, route, volume etc.).

| <b>PROCEDURE(S)</b><br>E.g. transportation, physical restraint, blood sampling, administration of compounds or chemicals, injection of anaesthetics, analgesics, antibiotics, behavioural test, euthanasia etc.<br>(Please list procedures in sequence) |   | <b>Compound name, dosage, route &amp; volume</b><br><br>(if applicable)         | <b>No. of animals involved</b> | <b>Frequency and duration</b> | <b>State category of invasiveness</b><br>*B-E (Please refer to page 2) |
|---|---|---|--------------------------------|-------------------------------|--|
| 1   | Rest (observation)  | -   | 1 rabbit                       | 1x/w for 12w                  | B  |
|   |   | -   | 192                            | 1                             | B  |
| 2   | Restraining techniques/week   | -   | 1 rabbit                       | 1x/w for 12w                  | B  |
|   |   | -   | 192                            | 1                             | B  |
| 3   | Oral gavage with 0.9% NaCl  | 0.2-0.5 ml (mice)<br>0.5-1 ml (rat)   | 192                            | 1                             | B  |
| 4.  | General anaesthesia   | Ketamine 100mg/kg<br>Xylazine 10 mg/kg<br>(IP: 0.1ml/10g mouse, 0.1ml/100g rat) | 192                            | 1                             | B  |
| 5.  | Various sites of injection techniques (IP, IM, IV, SQ)  | -   | 192                            | 1                             | B  |
| 6.  | Blood collection techniques: tail vein, retroorbital sinus, facial vein, intracardiac puncture  | -   | 192                            | 1                             | B  |
| 7.  | Humane endpoint technique by exsanguination, cervical dislocation (mouse only) and KTX overdose | -   | 132                            | 1                             | B  |
| 8.  | Mouse & rat necropsy  | -   | 192                            | 1                             | -  |
| If you need more space for animals involved, please insert new rows   |   |   |                                |                               |  |

**c) List ALL individuals who will carry out the procedures listed in 9 b).****Provide their technical qualifications and relevant experience in performing these procedures.**

| <b>Name*</b>    | <b>Procedure(s) to be performed</b><br>(list the corresponding procedure number as listed in table 9b above e.g. 1, 2, 3) | <b>Qualifications/experience with these procedures</b> |
|-----------------|---|--|
| Dr. XX          | 1-8   | DVM, PhD   |
| Dr. XX          | 1-8   | DVM, MVSc student                                      |
| En XX           | 1-3, 5-8  | AVO, ARF staff   |
| 120 XX students | 1-8   | XX students with supervision of PI & staffs            |



|  |  |  |
|--|--|--|
|  |  | If you need more space, please insert new rows |
|--|--|--|

\*All individual names should also be listed in page 1. Procedure involved the **usage of controlled drug should be done by AV.**

|   |
|---|
| <p><b>d) Specify the criteria used to assess the level of anaesthesia required for invasive procedures (if relevant)</b></p> <p><input type="checkbox"/> Not applicable   <input type="checkbox"/> Respiratory rate   <input type="checkbox"/> Heart rate   <input type="checkbox"/> Corneal reflex   <input type="checkbox"/> Toe pinch   <input type="checkbox"/> Tail pinch<br/> <input checked="" type="checkbox"/> Response to procedures   <input type="checkbox"/> Others – specify:</p>   |
| <p><b>e) Specify the methods/criteria for monitoring the condition/level of pain and distress of the animals following the above listed procedures.</b><br/> <b>(Please attach Template of Animal Assessment/Monitoring Sheet)</b></p> <p><input type="checkbox"/> Not applicable   <input type="checkbox"/> Loss of appetite   <input type="checkbox"/> Loss of weight   <input type="checkbox"/> Restlessness<br/> <input type="checkbox"/> Laboured breathing   <input checked="" type="checkbox"/> Loss/reduce mobility   <input type="checkbox"/> Abnormal resting posture   <input checked="" type="checkbox"/> Unresponsiveness<br/> <input type="checkbox"/> Failure to show natural inquisitiveness   <input type="checkbox"/> Failure to groom/unkept appearance<br/> <input type="checkbox"/> Red stains around eyes of rats   <input type="checkbox"/> Guarding/protecting painful area<br/> <input type="checkbox"/> Licking, biting, scratching, shaking of affected area<br/> <input type="checkbox"/> Others – specify:</p> |
| <p><b>f) Specify frequency of animal observations:</b></p> <p>1. Daily husbandry routine:   throughout procedures ___N/A___times per hour / day / week <i>*(delete where not relevant)</i><br/> 2. Following experimental procedures: ___N/A___times per hour / day / week <i>*(delete where not relevant)</i></p>  |

## 7. EXPERIMENTAL AND/OR ANIMAL USE ENDPOINT

When experimental procedures produce animals that may become ill, it is necessary to define an endpoint to ensure that an experimental animal's discomfort, pain and/or distress is terminated, minimised or reduced.

|  |
|--|
| <p><b>a) List any clinical conditions or abnormalities <u>expected</u> as a result of the proposed study (e.g. behavioural changes such as increased grooming, vocalization or postural changes, or physical abnormalities such as anorexia, dehydration, diarrhoea, etc.). All expected clinical abnormalities that could arise need to be included in Animal Assessment/Monitoring sheet as stated in 6e).</b></p> |
| <p>Restlessness, defecate and urinate due to stress upon handling, poorly responsive, reduce mobility, XX</p>  |
| <p><b>b) List the criteria to <u>trigger the decision to remove an animal from the experiment, or to terminate the experiment</u> (e.g. moribound, 20% body weight loss for a week, etc.). If death is required as the endpoint, please justify.</b></p>   |
| <p>Excessive bleeding due to procedures, moribound, XXX</p>  |

## 8. DISPOSAL OF ANIMALS

| SPECIES, quantity                 | TO BE RETAINED/ SOLD TO/ DONATED TO/ TRANSFERRED TO/ ADOPTED BY (specify location or to/by whom and purpose if animals are retained) | TO BE EUTHANISED (specify method/drug/dose. If a physical method of euthanasia is to be used i.e. cervical dislocation, justify its use)<br><b>CARCASS DISPOSAL (specify method)</b> |
|-----------------------------------|--|--|
| SD rats (60)<br>BALB/C mice (132) | Dispose as clinical waste  | To be euthanized by terminal exsanguination or cervical dislocation under GA (Ketamine-xylazine)   |
| Rabbit (1)                        | To be donated to XX.   | N/A  |

**9. EMERGENCY VETERINARY CARE**

Is routine veterinary care appropriate for animals in this project?  YES  NO

If NO, attach specific instructions in case an emergency should arise.

***IN THE EVENT OF AN ANIMAL HEALTH EMERGENCY, IF THE PERSONNEL LISTED IN SECTION 1 COULD NOT BE CONTACTED, THE DECISION OF A CLINICAL VETERINARIAN APPOINTED BY THE IACUC WILL BE FINAL.***

**10. HAZARDS:**

Does this project involve hazardous agent or animal?  YES  NO

If YES, please complete the details as below.

| TYPE   | SPECIFY AGENT, DOSAGE, ROUTE, FREQUENCY |
|--|---|
| Radio-Isotope  | N/A                                     |
| Carcinogen   | N/A                                     |
| Dangerous chemical   | N/A                                     |
| Contagious pathogen to humans <input type="checkbox"/> animals <input type="checkbox"/>                          | N/A                                     |
| *Recombinant DNA/RNA   | N/A                                     |
| Other (e.g. *GMO, electroshock)  | N/A                                     |
| <b>Precaution step(s) and/or special animal care or containment procedure required for the hazard(s):</b><br>N/A |   |

**\*Project involving Recombinant DNA/RNA/GMO needs to apply for acknowledgement (contain used) or approval (field trial) from National Biosafety Board or UPM Institutional Biosafety Committee (IBC).**

## 11. INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE APPROVAL

Upon approval, a protocol number will be assigned. This number must be used when ordering animals. This Animal Utilisation Protocol is valid for the duration of the project pending on submission of annual progress report by the investigator and recommendation by the animal facility manager.

| PRINCIPAL INVESTIGATOR'S DECLARATION  | TICK                                |
|---|-------------------------------------|
| By signing this form, I certify that:   |                                     |
| 1. this project will be conducted in accordance with the Animal Welfare Act 2015 ( <a href="https://www.aaalac.org/resources/Malaysia.pdf">https://www.aaalac.org/resources/Malaysia.pdf</a> ), UPM policy and Code of Practice for the Care and Use of Animals for Scientific Purposes ( <a href="http://www.tncpi.upm.edu.my/upload/dokumen/20180522091735PTPPY1_92272_ethicspolicy.pdf">http://www.tncpi.upm.edu.my/upload/dokumen/20180522091735PTPPY1_92272_ethicspolicy.pdf</a> ) and Institutional Care and Use Committee (IACUC) guidelines, and any other applicable federal/state laws and regulations. | <input checked="" type="checkbox"/> |
| 2. the information provided in this AUP is complete and accurate.   | <input checked="" type="checkbox"/> |
| 3. the proposed experimental activities described above have not been carried out by myself or other researchers in this institution or elsewhere.  | <input checked="" type="checkbox"/> |
| 4. all activities are designed to assure that pain/distress/discomfort of animals is minimized.   | <input checked="" type="checkbox"/> |
| 5. all personnel listed in section 9c are aware of, and will follow the approved procedures outlined in this form. They will be appropriately trained and qualified, and that I am responsible for the supervision, training, and work of said personnel.   | <input checked="" type="checkbox"/> |
| 6. I will maintain appropriate animal records (e.g. animal monitoring sheet, veterinary care, euthanasia, surgery, anesthesia etc.).  | <input checked="" type="checkbox"/> |
| 7. veterinary care will be available when necessary, and provided by the qualified attending veterinarian (AV). I will immediately notify his/her regarding any unexpected study results that negatively impact the animals, and any unanticipated pain or distress, morbidity or mortality will be documented and reported to the IACUC.   | <input checked="" type="checkbox"/> |
| 8. the information provided in this AUP will be kept current and any changes must be notified by submitting Form IACUC/105. I aware that IACUC approval must be obtained prior to performing the revised animal procedures described therein.   | <input checked="" type="checkbox"/> |
| 9. I understand that approval of proposed project is valid for a maximum of one (1) year from the date of approval. I aware that extension of the approval need to be requested at least one (1) month prior to project completion by submitting Form IACUC/106.  | <input checked="" type="checkbox"/> |
| 10. I will notify and submit Form IACUC/106 following the completion of project. I understand that my new AUP application will not be processed before report submission.   | <input checked="" type="checkbox"/> |
| 11. I understand that the IACUC may approve the application as submitted, required modifications in order to receive approval, or rejected, and the approval may be subject to further review.  | <input checked="" type="checkbox"/> |
| <p style="text-align: right;"><b>Please read and tick the above declaration</b></p>   |                                     |
| <p><b>By submitting this form, I have read and understood the above declaration.</b></p>  |                                     |
| Project Title:<br>VPXXX- ???  |                                     |

|  |          |
|--|----------|
| Signature and stamp of Principal Investigator:<br><br>Dr. XX | Date: XX |
|--|----------|

**Appendix 1**

| <b>ATTENDING VETERINARIAN'S DECLARATION</b>   | <b>TICK</b>  |
|---|--|
| By signing this form, I certify that:   |  |
| 1. I should provide input in protocol review, the development of study removal criteria, and responsible conduct of research activities and can be invited to attend the IACUC meeting together with the research team if required.   | <input checked="" type="checkbox"/>                |
| 2. I oversee the well-being and clinical care of animals used in research, testing and teaching. The responsibility extends to monitoring and promoting animal well-being at all times during animal use and during all phases of the animal's life. Well-being is determined by considering physical, physiological and behavioural indicators.  | <input checked="" type="checkbox"/>                |
| 3. I shall provide guidance to investigators and all personnel involved in the care and use of animals to ensure appropriate husbandry, handling, medical treatment, immobilization, sedation, analgesia, anaesthesia and euthanasia.   | <input checked="" type="checkbox"/>                |
| 4. I shall provide guidance and oversight to surgery and perioperative care involving animals in accordance with current established veterinary medical and nursing procedures, if applicable.  | <input checked="" type="checkbox"/>                |
| 5. I am expected to carry out daily observation of all animals in the study project to assess their health and well-being. However, the daily observation of animals may be accomplished by someone else other than myself provided that there is a mechanism of direct and frequent communication between the researchers and I so that timely and accurate information on problems of animal health, behaviour, and well-being is conveyed to me. | <input checked="" type="checkbox"/>                |
| 6. if I am on leave or will be otherwise unavailable to provide any general or emergency veterinary care, interim arrangements are made to ensure that there is always ready access to veterinary care. Timely provision of veterinary medical care and emergency veterinary care is always available after working hours, on weekends, and on holidays.  | <input checked="" type="checkbox"/>                |
| 7. any unethical events or animals are not kept to optimum welfare care or found during an audit will be reported to the IACUC. I aware that the IACUC will initiate investigations where the researchers and I can be summoned for explanation and deliberation on the matter.   | <input checked="" type="checkbox"/>                |
| 8. following the completion of project, I will notify the PI to submit a final report to the IACUC on the care and ethical use of animals in the project, including animal monitoring log if necessary.   | <input checked="" type="checkbox"/>                |
| <b>By submitting this form, I have read and understood the above declaration.</b>   | <b>Please read and tick the above declaration.</b> |
| Project Title:<br>VPXXX- ???  |  |
| Name of Principal Investigator: Dr. XX  |  |

|  |                                       |
|--|---------------------------------------|
| Signature and stamp of Attending Veterinarian: | Annual Practicing Certificate number: |
| Dr. XX   | 2019- XX                              |
|  | Date:XX                               |