**Application to Amend an Approved Protocol for the Use of Experimental Animals in the Biological Resource Centre**

**Part 1 - Changes in Animal Species**

1. **Approved IACUC Protocol No.:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. **Title of Project:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Principal Investigator (PI)**

If there are any changes, please add text to box.

|  |  |
| --- | --- |
| Name |  |
| Research Institution / Company |  |
| Department |  |
| Address |  |
| Work telephone number |  |
| Mobile phone number |  |
| E-mail address |  |

1. **This application is for changes in**:

 Animal species

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of PI: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **This application is for:**

|  |  |
| --- | --- |
| i) Adding new species to approved protocol | [ ]  Yes [ ]  No  |
| ii) Replacing the species of approved protocol | [ ]  Yes [ ]  No  |
| iii) Deleting species from the study  | [ ]  Yes [ ]  No If “Yes”, name the species: Text Field |

1. **Are you using a new procedure?**

|  |  |
| --- | --- |
| [ ]  Yes (Please complete Amendment Form Part 3) | [ ]  No |

1. **Identify the new species. Indicate the pain classification for each, and the number that will be used over the three-year period. *Please note that ONLY an increase of up to 30% of the approved animal numbers from the original protocol is allowed.***

|  |  |  |  |
| --- | --- | --- | --- |
| Animal Details | Pain Classification | Total number of animals **used** (includes those bred but were euthanized because not required) each year | 3-year total number of animals |
| Year 1 | Year 2 | Year 3 |
| Species/Strain/LineSourceAge/WeightSex | Please select |  |  |  |  |
| Species/Strain/LineSourceAge/WeightSex | Please select |  |  |  |  |

**Scientific justification for animal species and number requested**

1. **Describe other features of the species (e.g. anatomical, physiological, genetic, etc.) that make it desirable for this model. Contrast with other available models, if any.**

|  |
| --- |
|  |

1. **Justification for animal numbers**. Describe and justify (e.g. provision of power of analysis) the number of groups and group size inclusive of experimental and control animals in accordance to the procedures to be performed on each group. You are encouraged to provide this information in a table or diagrammatic illustration as an attachment. Please ensure that numbers add up correctly.

|  |
| --- |
|  |

**Consideration of Alternatives to Animals**

*Animals and Birds Act (Care and Use of Animals for Scientific Purposes) Rules 2004 requires consideration of the use of alternatives to procedures that may cause more than momentary or slight pain or distress to animals (pain categories D and E).*

1. **The 3 R’s**

Provide written assurances that the following 3R’s were given due consideration when planning the project:

**Replacement –** Alternative to using live animals (e.g. in vitro models, computer models) or the use of invertebrate species. Indicate clearly which non-animal alternatives were considered for the study:

|  |
| --- |
|  |

**Reduction –** Reduction in the number of animals used (e.g. using appropriate statistical methods in the design and analysis of the study) without compromising scientific validity of the project. State clearly the reasons for the numbers of animals you wish to use:

|  |
| --- |
|  |

**Refinement** **–** Do you intend to use alternative or improved techniques or procedures to minimize potential pain, distress and discomfort of the animals?

|  |
| --- |
|  |

Methods used to search for alternatives (indicate all that apply):

Some useful websites include:

1. USDA Animal Welfare Information Centre, Alternatives and Searches:

<https://www.nal.usda.gov/services/literature-searching-animal-use-alternatives>

1. Johns Hopkins University Centre for Alternatives to Animal Testing: <http://caat.jhsph.edu/>
2. Fund for the Replacement of Animals in Medical Research (FRAME):

<https://frame.org.uk/resources/searching-for-alternatives/>

1. National Centre for the Replacement Refinement & Reduction of Animals in Research:

<https://nc3rs.org.uk/who-we-are/3rs#anchor_1>

**Please retain your search data on file for the duration of the project, so that AVS may inspect if they wish to.**

**Database searched - provide details of any database searches** **relating to the 3R’s**:

|  |  |
| --- | --- |
| Date of the most recent search for 3R’s: |  |
| Years covered by search: |  |
| Key words used (specific to animal use and should relate to the project): |  |
| Search strategy used/ Database searched: |  |
| Conclusion – justification to proceed as described: |  |

**Euthanasia / Disposition of Animals**

1. **What will determine the endpoint(s) of the study?**

(i.e., state the specific time points, state the specific tumour size, etc.)

|  |
| --- |
|  |

1. **Will the animals be euthanized at the end of the study?**

[ ]  Yes. Please answer (a)

[ ]  No. Please answer (b)

* 1. For rat and mouse fetuses up to 15 days’ gestation - euthanasia of the mother or removal of the fetuses should ensure rapid death of the fetus due to loss of blood supply and non-viability of fetuses at this stage of development.
	2. For rat and mouse fetuses over 15 days’ gestation and neonates up to 10 days’ of age – decapitation with a sharp pair of scissors or cervical dislocation is recommended.
	3. For rat and mouse neonates 10 days of age and older (e.g. weaners, adults) – use CO2
1. **Euthanasia Table for Rat / Mouse**

|  |  |  |  |
| --- | --- | --- | --- |
| Rat / mouse age | Fetus to 15D gestation | Fetus > 15D to Neonate 10D | Animals > 10D  |
| Agent (e.g. CO2, chemical) |  |  |  |
| Dosage |  |  |  |
| Route of administration |  |  |  |
| \* Physical method (e.g. decapitate, cervical dislocation, other) |  |  |  |

\*Animals euthanized by physical methods must be anaesthetised or sedated prior to euthanasia, unless scientific justification is provided in the box below and adequate experience in the technique can be demonstrated to the veterinarian and approved by the IACUC.

Euthanasia Table for **Other Species**

|  |  |  |
| --- | --- | --- |
| Name of species |  |  |
| Agent (e.g. CO2, chemical) |  |  |
| Dosage |  |  |
| Route of administration |  |  |
| Other method – please describe |  |  |

Provide scientific justification if your experimental protocol requires euthanasia of un-sedated or un-anaesthetised animals:

|  |
| --- |
|  |

1. **If “NO”, describe their final disposition:**

|  |
| --- |
|  |

1. **Death as an Endpoint**

# Will death be used as an experimental endpoint? Such circumstances are rare, and if applied for, will receive additional scrutiny by the IACUC. You are strongly encouraged to consider other alternative endpoints (to be included under paragraph 11, Humane Endpoints).

|  |  |
| --- | --- |
| [ ]  **YES**  | [ ]  **NO** |

# If “YES”, please provide relevant and current scientific justification, including why an alternative to death cannot be used as an end-point:

|  |
| --- |
|  |

1. **Humane Endpoints**

To avoid prolonged pain and/or distress to the animals, they are to be euthanized for humane reasons prior to death and removed from the study.

For studies involving cancer, see IACUC Guidelines for Cancer Research in Mice and Rats (Appendix IV). Describe the criteria that will be used to decide when euthanasia will be performed.

|  |
| --- |
| e.g. when the animal becomes moribund; tumour size exceeds a certain diameter, percentage body weight loss etc. |