

Office of Research Ethics

**Animal Care and Use Lab Protocol Form**

**Please direct all questions regarding the completion of this form to the ACC Coordinator in the Carleton University Research Ethics Office at:** **nora.large@carleton.ca****.**

**Submit this form as an attachment to the Event form for the approved protocol in** [**cuResearch**](https://ovpri.research.carleton.ca/Romeo.Researcher/Login.aspx?ReturnUrl=%2fRomeo.Researcher%2f)**.**

Top of Form

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| 1.  | For Office Use Only |
| 1.1.  | **Romeo Protocol #:** |

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| 2.  | Principal Investigator Information |
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| Date: Click or tap to enter a date. |
| Name: |  | Position: |  |
| Faculty/Department: |  |
| Office Telephone or Extension # |  | Alternative Telephone: |  |
| Emergency Contact Designate: |  | Emergency Contact Phone: |  |

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| 3.  | Project Description |
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| Title: |  |
| Start Date: | Click or tap to enter a date. | End Date: | Click or tap to enter a date. |

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| **4.** | **Award Information** |
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| **cuResearch/Romeo Award #:** |  | **Status:** |  |
| **Award Type:** |  | **Award Title:** |  |

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| **5.** | **Scientific or Pedagogical Merit Review** |
| **5.1.** | **Is this a research Protocol? Yes** [ ]  **No** [ ]  |
| **5.2.** | **Has this project been reviewed for** [**scientific merit**](https://carleton.ca/animalethics/animal-ethics/scientific-merit-review/)**?****Yes** [ ]  **No** [ ] **If No, contact** **nora.large@carleton.ca** **to arrange review through the Associate Dean (Research and Graduate Studies), Faculty of Science.** |
| **5.3.** | **Is this a teaching protocol?****Yes** [ ]  **No** [ ] **If ‘Yes’, contact** **nora.large@carleton.ca** **to begin the pedagogical merit review process for this submission.** |
|  | **5.3.1 What is the number of students per animal and student/teacher ratio?**

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|  | **Note: Please submit your Pedagogical Merit Review form as an attachment to this protocol submission.** |
| 6.  | Project team members – must have completed CCAC modules to be added to the protocol. |
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| Name | Position | Phone and Email | Procedures for which training is completed | CCAC Training Complete |
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|  *To add a row, hover your mouse cursor to the bottom-left corner and click on the “+” button. OR right click the cell and insert a row below.* |
|  | Note: Additional training can be arranged with ACVS or Turnstone trainer. |
| 7.  | Animal Information |
| 7.1. | **Purpose of Animal Use (PAU):** Choose an item. |
| 7.2. | **Category of Invasiveness (CI):** Choose an item.**Definitions can be found at** [**ACC Forms**](https://carleton.ca/animalethics/animal-ethics/acc-forms/)**.** |
| 7.3. | **In one or two sentences relate the Purpose of Animal Use to the Category of Invasiveness. For example: To study the effects of ghrelin on reproduction, food intake, body weights and reproductive cycles will be monitored in female rats.**

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| 7.4. | **Please fill out the following table:** |
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| **Species/Strain** | **Age/Size** | **Sex** | **Source** | **Total # required full aup** |
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|  *To add a row, hover your mouse cursor to the bottom-left corner and click on the “+” button. OR right click the cell and insert a row below.* |
| 7.5. | **Provide justification for the species and number of animals used (provide scientific and statistical justification)**

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| 7.6. | **Are transgenics being used? If ‘Yes’, complete remainder of this section****Yes** [ ]  **No** [ ]  |
| 7.7. | **What is the background strain for the species you are using?**

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| 7.8. | **Describe the genotype.**

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| 7.9. | **Describe the phenotype.**

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| 7.10. | **What abnormities are known to exist (or do you expect) in these animals and/or will these affect lifespan and/or breeding?d**

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| 8.  | **The Three Rs** |
| 8.1. | [**Replacement**](http://3rs.ccac.ca/en/research/replacement/)**: Justify, citing references where appropriate, why this research cannot be performed with non-animal alternatives, or replacing higher order animals with lower order animals.**

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| 8.2. | [**Reduction**](http://3rs.ccac.ca/en/research/reduction/)**: Describe the strategy applied to result in the fewest animals being used.**

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| 8.3. | [**Refinement**](http://3rs.ccac.ca/en/research/refinement/)**: Describe opportunities for refinement, such as modification of husbandry or experimental procedures to minimize pain and distress.**

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| 9.  | **Project and Procedure Details** |
| 9.1. | **In non-scientific terminology (suitable for a press release and no more than 300 words), summarize how:****A limit of 300 words is allowed for this section.  Provide a summary of the experiment in language that the public can understand.  Using simple terms, briefly describe the nature of the work to be done. Indicate why and to whom the research is important, the anticipated outcomes and the benefits to the research field. For a guide on how to write a lay summary, visit** [**ACC Forms**](https://carleton.ca/animalethics/animal-ethics/acc-forms/)

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|  | **For this section, please list a short collection of bullet points that convey the core objectives and rationale of the study.  There should only be 3 – 5 bullet points with a maximum of 85 – 100 characters per bullet point (similar to “highlights” as required by many journals). These points provide readers with an at-a-glance overview of the main aspects of your experiments. Think of them as a quick snippet of the project—short and sweet.**

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| 9.2. | **Describe, clearly, all procedures and techniques using animals (details of post-mortem analysis are not required). If information is not provided in 8.2, provide a breakdown on the animal numbers by experiment. Diagrams, flowcharts and tables are encouraged. Reference approved Standard Operating Procedures where applicable.**

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| 9.3. | **How frequently will the animals be monitored during the course of the study, by whom, and what records will be maintained?**

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| 10. | **Housing and Environmental Enrichment** |
| 10.1 | **Are there any special housing or equipment needs? Reference guideline or sop.****Yes** [ ]  **No** [ ]  |
|  | **If yes, describe:**

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| 10.2 | **Are there any special diet requirements? Reference guideline or sop.****Yes** [ ]  **No** [ ]  |
|  | **If yes, describe:** |
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| 10.3 | **Are there any medications or treatments required?****Yes** [ ]  **No** [ ]  |
|  | **If yes, describe:** |
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| 10.4 | **Are there any special environmental conditions (temperature, humidity, light cycle) required?** **Yes** [ ]  **No** [ ]  |
|  | **If yes, describe:**

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| 10.5 | **Standard housing is provided to all animals. What additional environmental enrichment are you requesting?**

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|  | **In the unlikely event standard housing cannot be provided, provide a justification**

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| 10.6 | **Will animals be housed outside the animal holding room for more than 24 hours?****Yes** [ ]  **No** [ ]  |
|  | **If yes, describe:**

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| 11. | **Experimental Effects and Intervention** |
| 11.1 | **Identify any signs or symptoms that are expected based on the procedures described in 9.2**

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| 11.2 | **What signs or symptoms will result in removal from the study?**

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| 11.3 | **When one of the above signs or symptoms occurs, what will happen to the animal? (i.e. euthanasia, intervention, treatment)**

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|  | **Specify treatment(s) or Intervention(s), if applicable.** [ ] **N/A**

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| 12. | **Euthanasia** |
| 12.1 |  **Indicate the method of euthanasia as outlined in SOP EUTH-01 Rodent Euthanasia.**[ ]  **Isoflurane anesthesia followed by CO2 : followed by secondary physical method preferred method when using CO2**[ ]  **4.3. Isoflurane anesthetic overdose followed by a secondary method of euthanasia**[ ]  **CO2 as the sole method of euthanasia: requires special approval from the Animal Care Committee - the CCAC considers this Conditionally Acceptable and requires a scientific justification that is approved by the ACC. Please provide the scientific justification.**

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| 12.2 | **How are animals disposed of following euthanasia?**

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| 12.3 | **What happens to the animals, if not euthanized?**

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| 13. | **Analgesia, Anesthesia and Surgery** |
| 13.1. | **Is surgery required? Yes** [ ]  **No** [ ] **If yes, complete the remainder of this section.** |
| 13.2. | **Are these surgeries:** [ ]  **Survival** [ ]  **Non-survival** |
| 13.3. | **Describe surgical procedures, include a description of: reason for surgery, incision sites, tissue isolation methods, wound closure and estimate of time to complete surgery.**

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| 13.4. | **Describe procedures to maintain a sterile field during surgery (e.g. sterile instruments – specify method, sterile surgical gloves etc.)**

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| 13.5. | **Describe analgesics to be administered:** |
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| **Name** | **Dose** | **Frequency** | **Route of Administration** |
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|  |  *To add a row, hover your mouse cursor to the bottom-left corner and click on the “+” button. OR right click the cell and insert a row below.* |
| 13.6. | **Describe the post-anesthetic and post-surgical monitoring and care procedures, including:** |
|  | **Maintaining body temperature:**

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|  | **Suture or staple removal:**

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|  | **Who will perform monitoring, include frequency and duration:**

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|  | **Parameters that will be evaluated:**

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|  | **Measures to alleviate post-operative discomfort:**

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| 13.7. | **Are animals used in more than one major surgical procedure from which they recover? Yes** [ ]  **No** [ ]  |
|  | **If yes, describe and justify:**

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| 13.8. | **Is a neuromuscular blocking agent used?****Yes** [ ]  **No** [ ]  |
|  | **If yes, indicate the following: rationale, drug name, dosage, route of administration, frequency, monitoring methods**

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| 14. | **Hazardous Materials – Human Safety** |
| 14.1. | **Are any materials hazardous(i.e biohazard, chemical, drug)?****Yes** [ ]  **No** [ ]  **If yes, complete the remainder sections** |
| 14.2. | **Specify each agent:****Biological (e.g. bacteria, virus, fungi) Yes** [ ]  **No** [ ]

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|  | **Biosafety Permit Number:**

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|  | **Chemical (e.g. carcinogen, hormone, etc.) Yes** [ ]  **No** [ ]

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|  | **Radioisotope(s): Yes** [ ]  **No** [ ]

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|  | **Radiation Permit Number:**

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| 14.3. | **For each agent, complete the table below:** |
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| **Specific Agent** | **Dose** | **Route of Administration** | **Frequency** | **How excreted by Animal** | **Duration of Exertion** |
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|  |  *To add a row, hover your mouse cursor to the bottom-left corner and click on the “+” button. OR right click the cell and insert a row below.* |
| 14.4. | **Describe the control measures used to avoid hazardous exposures (containment level, personal protective equipment, emergency procedures, waste management, etc.)**

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| 15. | **Breeding Colony** |
| 15.1 | **Is this protocol for a breeding colony?****Yes** [ ]  **No** [ ]  **If yes, complete the remainder sections** |
| 15.2 | **How many animals (breeders) will be used to maintain the breeding colony and describe the breeding scheme (e.g. monogamous, harem).**

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| 15.4 | **Estimate the percentage of animals that will not be used for research or breeding (e.g. culled litter mates, wrong genotype, etc.). Explain why these animals will not be used and what will be done to minimize this number. What is the fate of these animals?**

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| 15.5 | **Indicate how individuals will be genotyped and identified/labeled.**

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| 15.6 | **Identify who will be responsible for colony management, including weaning and record keeping?**

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| 15.7 | **If you are generating a novel transgenic strain, provide a timetable for this process and indicate when you expect to report back to the ACC on the phenotype obtained.**[ ]  **N/A or:**

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| 16. | **Food/Water Restriction** |
| 16.1. | **Is food/water restriction a component of the protocol?****Yes** [ ]  **No** [ ]  **If yes, complete the remainder sections** |
| 16.2. | **Indicate the purpose of the restriction or scheduling. Justify the need to employ the restriction or scheduling.**

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| 16.3. | **State the duration of the food/water restriction**

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| 16.4. | **Describe the restricted state that is to be maintained (e.g. 85% of body weight of age match control)**

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| 16.5. | **Provide details on the regimen used to initially achieve the state and the monitoring methods employed to assure that the desired state is not exceeded (e.g. daily body weight measurements). Note: records need to be maintained at the animal holding room).**

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| 16.6. | **Indicate the minimal amount of food/water the animal will receive per day (provide in mg/kg or ml/kg).**

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| 17. | **Aquatics** |
| 17.1. | **How is the water quality established and determined prior to the introduction of animals?**

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| 17.2. | **How is the water filtered to remove nitrogenous/animal waste compounds?**

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| 17.3. | **Briefly describe the system design and housing (include type of water circulation, tank size etc.)**

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| 17.4. | **Provide the approximate housing density**

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| 17.5. | **How often and how will tanks and equipment be sanitized**

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| 17.6. | **What type of environmental enrichment is being provided in the tank/housing? If none, provide a justification.**

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| 18. | **Declaration** |
|  | **By clicking “agree” you are confirming that you will comply with all the statements listed below:**1. **All personnel carrying work out on this protocol are listed as Project Team Members and will complete appropriate training prior to undertaking experimental work. Any changes to this need to be submitted on the Change to Personnel Amendment (Event Form).**
2. **This animal use protocol has been approved and submitted by the principal investigator listed on the submission.**
3. **All animals in this project will be cared for and used in accordance with the principles of the Canadian Council on Animal Care as stated in the "Guide to the Care and Use of Experimental Animals."**
4. **All techniques and facilities used will be in accordance with the Guidelines of the Canadian Council of Animal Care and the requirements of the Government of Ontario’s Animal Research Act (1980).**

**The Animal Care Committee will be notified immediately of any revisions to this experimental protocol.**[ ]  **I Agree** |