Hello and thank you for accessing this form from the University of Maryland, Baltimore County Institutional Animal Care and Use Committee web site.

Prior to submitting, please ensure that spelling and grammar are correct; this will assist in the timely review of this form during the IACUC evaluation process. Complete all sections of the protocol application (indicate N/A in the section not applicable to your protocol). "See attached proposal" or “See the previous section” are not an acceptable responses.

Enter information by clicking the [ ]  box or typing in the **Click here to enter text.** area.

**Please go to UMBC** [**IACUC website**](http://research.umbc.edu/institutional-animal-care-and-use-committee-animal-care-use/) **for all up-to date guidance and information regarding the below questions.**

Investigator/Instructor: Click here to enter text.

Phone/E-mail: Click here to enter text.

Title of Protocol: Click here to enter text.

Please check:

[ ]  New protocol [ ]  Continuation of a previous approval – IACUC # Click here to enter text.

[ ]  Research [ ]  Teaching [ ]  Field Studies

Anticipated Project Period (MM/YY to MM/YY- total of three years): Click here to enter text.

List ALL funding sources that will support the animal work described in this protocol (if pending, indicate submission date).

|  |  |  |
| --- | --- | --- |
| **Award Title** | **Project Dates** | **Proposal or Award ID**  |
| Click here to enter text. | Click here to enter text. | Click here to enter text. |
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The IACUC is required to assure congruency between animal procedures funded in external grant applications and the corresponding IACUC protocol. Please attach a copy of the components of grant applications and contract proposals related to the care and use of animals [e.g. Vertebrate Animal Section (VAS)]

**(1) ANIMALS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Speciese.g. Laboratory Mouse, *Mus musculus,* BALB/c | Age and Gender  | Year 01 | Year 02 | Year 03 | Source: (e.g. commercial vendor, bred in-house, or wild-caught) | Where housed (room #) |
| *Common Name* Click here to enter text.*Latin Name* Click here to enter text.*Strain* Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| *Common Name* Click here to enter text.*Latin Name* Click here to enter text.*Strain* Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
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| **TOTALS =============🡺** |  | **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** |  |  |

1. Will animals be obtained from a commercial supplier?[ ]  Yes [ ]  No

If **Yes,** please confirm below using the list of approved commercial suppliers at <http://research.umbc.edu/umbc-iacuc-forms-and-procedures/#purchase>

**Click here to enter text.**

If No, describe the source and supplier: **Click here to enter text.**

***Note that animals from non-commercial suppliers must be quarantined and tested by UMB Veterinary Resources before they are placed in the UMBC colonies.***

1. **Sentinel animals (rat and mouse protocols only):** There are sentinel animals in each of the animal rooms. These animals are placed in each room by the UMBC Veterinarian for monitoring the health status of each room. Please do not handle these animals or use them. These animals are periodically euthanized and tested for disease. There should be a minimum of 2 animals placed in each room. Please identify the room numbers where sentinels will be placed: **Click here to enter text.**
2. **Housing and husbandry:** Please complete the below. If special housing or husbandry is required, state those requirements in the applicable section(s). When using mice, pay attention to the [IACUC’s guidance on maximum cage population densities](http://research.umbc.edu/special-topics-of-concern-to-the-iacuc/#cagedensity).
3. Preferred Room Temperature: **Click here to enter text.**

If cages/tanks will be supplied with ancillary heating or cooling (e.g.: heat lamps, tank heaters, etc.), please describe: **Click here to enter text.**

1. Light Cycle (i.e., 12 hrs. light/ 12 hrs. dark): **Click here to enter text.**
2. Type of food(s): **Click here to enter text.**

Note: Commercially prepared foods must be stored in sealed containers.

1. Feeding frequency: **Click here to enter text.**
2. Cleaning of Animal Enclosures (If containers of various sizes are used, please state frequency for each.)

Frequency of cage/tank cleaning: **Click here to enter text.**

Description of cleaning procedure: **Click here to enter text.**

1. Environmental Enrichment (describe if species-specific enrichment will be provided): **Click here to enter text.**

**This information must be replicated in the Protocol Summary Sheet for Animal Care Staff**

**form (Part 3 of this application)**

If ***field studies*** are involved, will animals will be held in captivity ***temporarily*** but for more than 24 hours [ ]  Yes [ ]  No **OR** ***permanently*** [ ]  Yes [ ]  No?

If **YES to temporary,** describe the planned duration of the captivity, the temporary holding facilities intended (e.g. specifying cage size/type), feeding strategies, plans for maintaining suitable environmental conditions and release procedures.

**If YES to permanently**, describe the duration of quarantine, acclimatization process to captivity and the presence of researchers and lab techs, housing facilities including cage size/type, sanitation procedures, social grouping or solitary housing and the reasons for such housing, health monitoring procedures and food supplementation and/or restrictions.

1. Will this research be [conducted in a field setting](http://research.umbc.edu/umbc-iacuc-forms-and-procedures/#fieldstudies) where procedures or activities alter or influence the activities of the animal(s) studied? [ ]  Yes [ ]  No

If **Yes,** please address the field study questions in relevant sections below.

**(2) PERSONNEL (Attach a CV for the PI to this application)**

A. Provide the name, title, the duties will this person perform relating to the animal studies, dates of training completion for animal care (CITI) and occupational safety and health (OSHP) and qualifications of each person involved in the animal use. List how and when protocol personnel were or will be trained to perform procedures on live animals. NOTE: **Training must be completed before personnel may work on an approved animal protocol.** If you need information about training completion dates, please contact the ORPC. Details about training is found on the [IACUC site](http://research.umbc.edu/animal-care-and-use-training/).

**Current Training Dates**

Name Title Role CITI OSHP Qualifications

|  |  |  |  |  |  |
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B . What occupational health hazards exist for personnel? Describe all PPE that will be used by personnel including, gloves, respirators, goggles or face shields, etc. How will these risks be minimized?

 **Click here to enter text.**

**(3) MANDATORY NARRATIVES**

A. **RATIONALE IN LAY TERMS***.* Provide a brief (100 word) description summarizing in language that individuals outside your field of expertisecan understand, the aims and objectives of this project including its long‑term goals and briefly explain the relevance this work will have to human or animal health, the advancement of knowledge or the good of society. If animals in this proposal will be used for instructional purposes, list the course objectives.

**Click here to enter text.**

**B. ANIMAL USE.** Justify the use of animals, the choice of species, the numbers to be used, and the length of stay in the animal facility.

1. Please provide a clear and concise explanation that demonstrates that you used the best available data and/or personal experience to determine the most appropriate sample size.State the number of animals used/required for each procedure. A power analysis is required if preliminary data is being used to demonstrate sample size. Whenever possible, the number of animals (i.e. sample size) should be statistically justified. Or use a flow diagram, where appropriate.Note if animal living conditions be altered for the research in question. *Note: The animals selected for a procedure should be of an appropriate species and quality and the minimum number required to obtain valid results. Methods such as mathematical and statistical models, computer simulation, and in vitro biological systems should be considered. (*[*http://grants.nih.gov/grants/olaw/references/phspol.htm#USGovPrinciples*](http://grants.nih.gov/grants/olaw/references/phspol.htm#USGovPrinciples)*)*

**Click here to enter text.**

2. Procedure and sources used for consideration of animal alternatives. Investigators are required to conduct a search of at least two databases to search for suitable alternatives to the use of animals, to substitute procedures that may cause more than momentary, slight pain or distress to the animals and to prevent unintended and unnecessary duplication of research. This is an AWA requirement and is specified in the government principles for use and care of animals in the PHS policy. Alternatives can include non-animal models, procedures that cause less pain or distress, or non-mammalian models.  At least two (2) databases must be consulted that address the “3 R’s” - ***R***eplacement – ***substitute animal models with non-animal techniques or lower organisms; R***eduction – ***minimized the number of animals used***; and ***R***efinement - ***use of techniques and procedures that reduce pain and distress.***

Note that IACUC requires a literature search for “***refinement***” only if protocol procedures fall within USDA pain and stress categories E. Examples include potentially painful or stressful procedures that are not relieved with anesthetics, analgesics and/or tranquilizer drugs. Withholding anesthesia/analgesia must be scientifically justified in writing and approved by the IACUC. Replacement and reduction search results must accompany all IACUC submissions.

Investigators conducting wildlife/field research may find that using traditional databases for searching for alternatives may not produce results to satisfy the alternatives requirement. Several taxon-specific guidelines include species-specific references to provide references to include with an IACUC submission. See the [IACUC website](https://research.umbc.edu/umbc-iacuc-forms-and-procedures/#alternatives) for details.

Contact the ORPC at the time of protocol submission with questions about this requirement

ORPC has created a [Literature Search for Alternatives](http://research.umbc.edu/files/2014/10/Literature-Search-for-Alternatives-Worksheet-05.30.2014.docx) worksheet to assist investigators with this process A variety of resources to complete the database search are on the [UMBC Library site](http://www.umbc.edu/aok/main/index.html#databases) as well as the [Animal Welfare Information Center](http://awic.nal.usda.gov/literature-searching-and-databases/databases). Please note that Medline, PubMed & Current Contents extract from the same database and should NOT be considered as two separate searches.

**All literature searches must be performed within three (3) months of protocol submission.**

**Replacement**

Can you replace your animal model with a non-animal model or less sentient species?

[ ]  Yes [ ]  No

Why or why not?:**Click here to enter text.**

Date of search: **Click here to enter a date.**

Databases used: **Click here to enter text.**

Dates included in search: **Click here to enter text.**

Key word search strategy, relevant to the protocol, used: **Click here to enter text.**

**Reduction**

Did you find any ways to reduce animal numbers? [ ]  Yes [ ]  No

If so, describe why you can or cannot use them: **Click here to enter text.**

Date of search: **Click here to enter a date.**

Databases used: **Click here to enter text.**

Dates included in search: **Click here to enter text.**

Key word search strategy, relevant to the protocol, used: **Click here to enter text.**

**Refinement**

Did you find any methods that minimize pain or distress? [ ]  Yes [ ]  No

If so, describe why you can or cannot use them: **Click here to enter text.**

Date of search: **Click here to enter a date.**

Databases used: **Click here to enter text.**

Dates included in search: **Click here to enter text.**

Key word search strategy, relevant to the protocol, used: **Click here to enter text.**

Please provide any additional information regarding these searches:

**Click here to enter text.**

3. Describe potential biohazards (e.g., carcinogens, radioactive material, infectious agents, recombinant DNA, etc) that may be used in the protocol and explain how its use will be consistent with regulatory and university guidelines. Explain methods in detail.

**Click here to enter text.**

Consult the [Biosafety information](http://research.umbc.edu/biosafety-institutional-biosafety-committee/) regarding the use of hazardous materials in animal protocols. If such materials are planned for use, provide the date of approval from the UMBC Institutional Biosafety Committee. **Click here to enter a date.**

4. Are you using a controlled substance? **Yes** [ ]  **No** [ ]

*If yes, complete the below.*

All investigators must maintain records of the drugs, store them as required by the DEA, and conduct an inventory as required by Environmental Safety and Health. DEA registration information is found on the [ESH website](http://www.umbc.edu/safety/).

Do you have a DEA license and a Maryland state license?  **Yes** [ ]  **No** [ ]

Provide the DEA and Maryland license # covering the use of these substances

**Click here to enter text.**

Who will purchase these drugs (name): **Click here to enter text.**

Identify the substance(s) and completely describe their use, including how will be injected or given to the animal(s): **Click here to enter text.**

**C. METHODS.**

1. Describe the experimental protocol in detail. Include information on behavioral, dietary, environmental, pharmacologic, physiologic, surgical, and non-surgical manipulations, etc, manipulations. Please describe the relevance and value of research addressed, including research design. In particular, describe procedures designed to minimize discomfort, distress, pain and injury to the animals.

**Click here to enter text.**

**Address where applicable:**

When using anesthetics, analgesics or tranquilizers, describe the agent, dose (mg/kg), route of administration, frequency and duration of use, the estimated duration, magnitude and relief of discomfort. **Click here to enter text.**

When taking blood samples, describe the needle gauge and length, how the collection site is prepared, the location of collection site, sample volume, frequency of sampling(s), total samples per animal, how long an animal is retained for sampling, and indicate the percent blood loss per sample based on the animal’s body mass, how fluid volume will be restored, and describe how animal(s) will be monitored **Click here to enter text.**

If the protocol involves a behavioral or observational study, describe the procedure including frequency, duration of each observational session, the number of observers, and the type of equipment to be used **Click here to enter text.**

If transporting animals outside of an animal facility, describe how animals will be transported between animal facilities and a procedure room. **Click here to enter text.**

If rodents are used, please describe the animal enrichment devices for animals are to be singly housed. **Click here to enter text.**

If ***field studies*** are involved, describe the nature of the research procedures and measures taken to assure that these procedures will not alter or influence the activity of the animals

**Click here to enter text.**

2. Describe plan for monitoring post procedure or post-intervention care if utilizing procedures that may cause pain, discomfort, or distress. State how animal health, including pain and distress, will be assessed and specify the plan of action in case of animal illness or injury. State the criteria (for example, tumor size, percentage body weight gain or loss, inability to eat or drink, behavioral abnormalities, clinical symptoms, signs of toxicity) for terminating procedures and/or for euthanasia if your experiments involve tumors, biologics, radiation or toxic chemicals. ***Replicate this information, where applicable, in Part 2 Animal Surgery Information.***

**Click here to enter text.**

3. Restraints. Please justify the use of restraint devices. What restraint devices will be used? What is the duration of the restraint? How often will animals be observed? Will animals be conditioned to the device?

**Click here to enter text.**

4. If surgery (survival or non-survival) is required, explain procedures in detail, including methods, anesthetics, pre ­and post-operative care, aseptic techniques, room location, etc.

**Click here to enter text.**

5. If ***field studies*** are involved, provide details as applicable. Note that some protocols may require information not specifically listed here.

1. Wildlife capture:[ ]  Yes [ ]  No Describe equipment to be used; planned duration of trapping/restraint; monitoring protocol/schedule for traps; potential for trapping non-target species; disposition of trapped animals; if anesthesia or immobilization is planned please complete those sections of this form; and how injuries or conditions resulting from pursuit, capture, or manipulation will be addressed. List any federal or state permits required to capture, handle, or mark animals below. **These permits must accompany the IACUC application at the time of submission**. The IACUC recommends investigators obtaining the appropriate permits as soon as possible in order to conduct the field research in a timely manner.**Note that having a permit is not IACUC approval of the research.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Species** | **Permit type or other form or written authorization** | **Permit number, if any** | **Expiration date**  |
| **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** |
| **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** |

1. Animal transportation [ ]  Yes [ ]  No Describe how animals will be transported from a capture location to a field camp or processing site or facility and returned; and if an animal (live or dead) is to be transported from the field, describe measures to be taken to avoid potential disease transmission to researchers and other animals.

**Click here to enter text.**

1. Physical restraint following capture [ ]  Yes [ ]  No Describe the method(s) to be used, planned duration of restraint, equipment to be used, including dimensions of equipment, observation schedule during confinement, and detailed justification and protocol if animals are to be physically restrained for longer than 1 hour at a time.

**Click here to enter text.**

1. Decontamination procedures [ ]  Yes [ ]  No Describe where appropriate, the decontamination procedures for equipment that will be used to capture, transport, contain, etc. animals and frequency of decontamination.

**Click here to enter text.**

1. Marking or tagging [ ]  Yes [ ]  No Describe the marker type and why that particular type is to be used, mass of the device as a proportion of body mass, recommended device mass proportionate to body mass, method and mass of attachment method, and expected effect, if any, on behavior, health, or social status of an individual.

**Click here to enter text.**

**D. EUTHANASIA AND DISPOSITION**

1. Explain the methods to be used for euthanasia and the reasons for their selection. Specifically describe study end points and indicate the time point, if any, when animals will be euthanized and how the death of the animal will be confirmed. Using the guide at the below, list agents, dosages and routes of administration. Refer to the [UMB Attending Veterinarian’s Resource for Recommended Methods of Euthanasia](http://www.umbc.edu/iacuc/UMBAttendingVetRecommendedMethodsEuthanasia_August2013.pdf) for species used in research at UMBC. Please contact the [veterinarian](http://medschool.umaryland.edu/vetmedicine/contact.asp) with questions for other species.

|  |  |  |
| --- | --- | --- |
| **Species** | **Acceptable** | **Acceptable w/ Conditions** |
| Rodents | Injected barbiturates, barbituratecombinations, dissociative agent combinations | Inhaled anesthetics, CO2, CO, tribomoethanol, ethanol, cervical dislocation, decapitation, focused beam microwave irradiation |
| Avian | Intravenous barbiturates | Inhaled anesthetics, CO2, CO, N2, Ar, cervical dislocation (small birds and poultry),decapitation (small birds) |
| Finfish | Immersion in buffered benzocaine orbenzocaine HCl, isoflurane, sevoflurane,quinaldine sulfate buffered Tricane mesylate (MS-222), 2- phenoxyethanol, injected pentobarbital, rapid chilling (appropriatezebrafish/research setting) | Eugenol, isoeugenol, clove oil, CO2-saturated water(aquarium fish facilities/fisheries), decapitation/cervical transection/manually appliedblunt force trauma followed by pithing, rapid chillingfollowed by adjunctive method (aquarium fishfacilities), maceration (research setting) |
| Amphibians | Injected barbiturates, dissociative agents andanesthetics as specified, topical buffered Tricane mesylate (MS-222) or benzocaine HCl | Inhaled anesthetics as specified, CO2, penetrativecaptive bolt or firearm, manually applied blunt forcetrauma to the head, rapid freezing |

*Table courtesy of Annabelle Crusan, DVM*

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Drug** | **Dose (mg/kg, % or conc.)** | **Route** |
| **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** |
| **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** |
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| **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** |

2. Upon euthanization, describe the final disposition of the animal.

**Click here to enter text.**

3. If animals **will not be euthanized**, check below what will be done with any (describe the disposition of) animals at the completion of a protocol (i.e. that are bred in excess of your needs, or those that don't meet your needs of the approved protocol). Note: it is the responsibility of the investigator to ensure that the final disposition of the animal is both humane and acceptable.

[ ]  euthanize and dispose

[ ]  transfer to other IACUC approved protocols (must have IACUC approval)

[ ]  transfer to another OLAW assured institution (must have IACUC approval)

**(4) COLLABORATIONS.**

 If you are collaborating with an investigator at another institution or organization,

or if you are housing your animals at another institution, briefly describe the collaborative activity and include a copy of that institution’s official IACUC protocol approval and protocol with this application.

**Click here to enter text.**

**Principal Investigator Assurances**

By typing my name, email address and date, I certify that I, the principal investigator/instructor, am responsible for all aspects of my animal protocol. The information contained on this form provides an accurate description of the animal care and use protocol and all personnel working on projects covered by this protocol have received adequate and proper training in research procedures. I agree to abide by governmental regulations and university policies concerning the use of animals and that compliance with the standards for the humane treatment of animals that are described in the *Guide for the Care and Use of Laboratory Animals* and the “Animal Welfare Act” is a prerequisite for purchasing, housing and using animals at UMBC.

I understand that any changes to proposal design involving animal use or changes to personnel involved in the project will be reported to the IACUC. I understand that unauthorized animal use is reportable to the Office of Laboratory Animal Welfare (OLAW). I understand that any unanticipated adverse events, morbidity, or mortality must be reported to the IACUC immediately.

I will allow veterinary care to be provided to animals showing evidence of pain or illness. If the information provided for this project concerning animal use should be revised, or procedures changed, I will so notify the committee of those changes. All proposed changes will not be implemented until full IACUC approval has been granted. I understand that failure to report significant changes may place the university and me in violation of federal regulations.

I have conducted a search of at least two databases to assure that my research does not unnecessarily duplicate the research of others and I have submitted one written copy of that search. I have conducted a search of data bases for alternatives to use of live animals and have submitted one written copy of that search. I have considered alternatives to procedures that may cause more than momentary or slight pain or distress to the animals and by my signature I stipulate that I have submitted one written copy of evidence of searches for alternatives.

PHS policy on the humane care and use of animals requires that all institutions receiving federal research grants verify that the use of animals and the numbers of animals specified in a grant or grant application are correspond with the use of animals and the numbers of animals specified in all IACUC-approved animal use protocols associated with that grant or grant application. I verify that the use of animals and the numbers of animals specified in my grant or grant application correspond with the use of animals and the numbers of animals specified in the animal use protocol.

Finally, I understand that if I or any of the project personnel have a financial interest related to the research or sponsor (e.g. payment for services, equity interests, etc.) that it must be disclosed according to [UMBC Conflict of Interest](http://www.umbc.edu/research/ORPC/coi_procedures_umbc.html) policy.

**By typing your name, email address and date, the investigator(s) certify they will abide by all UMBC IACUC policies and procedures and understand that no research activities will be conducted with animals prior to obtaining the required approvals. The investigator(s) will inform the IACUC at the earliest possible date of (1) any significant changes in the project with respect to animal care and use, (2) any adverse reactions or unexpected responses observed involving animals, and (3) any need for continuation of the project activities beyond the approval date.**

Name: Click here to enter text.

Email: Click here to enter text.

Date: Click here to enter a date.

**Electronically submit the protocol and any accompanying documents to** **iacucsubmissions@umbc.edu****.**

IACUC Animal Research Protocol Form – 07/31/2018

#### Animal Surgery Information (Part 2)

**NOTE:** Leave blank if not applicable

|  |  |
| --- | --- |
|  Name of All Participating Surgeons, Technicians and Students |  Indicate Certification by Either Training or Experience--Explain |
| **Click here to enter text.** | **Click here to enter text.** |
| **Click here to enter text.** | **Click here to enter text.** |
| **Click here to enter text.** | **Click here to enter text.** |

|  |  |  |  |
| --- | --- | --- | --- |
| 1. Species Used |  Number Used |  S = Survival N = Nonsurvival\* |  Building/Room Where Surgery Performed |
| **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** |
| **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** |
| **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** |

\*Non-survival surgery animal not allowed to awaken, once anesthetized

2. Check following procedures that apply. If procedure is not listed, please use an additional page and describe completely or attach literature reference article.

[ ]  Biopsy: target organ/tissue **Click here to enter text.**

[ ]  Laparotomy [ ]  Intracranial [ ]  Thoracotomy [ ]  Orthopedic

[ ]  Other **Click here to enter text.**

3. PREOPERATIVE PROCEDURES

Have unhealthy animals been exempt for surgery? [ ]  Yes [ ]  No

Person responsible for evaluating health status of animals: **Click here to enter text.**

4. ANESTHETIC PROCEDURES

|  |  |  |  |
| --- | --- | --- | --- |
|  Drug |  Dose |  Route |  Duration |
| **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** |
| **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** |

5. POSTOPERATIVE PROCEDURE

|  |  |  |  |
| --- | --- | --- | --- |
| Analgesics/Anti-infective |  Dose |  Route |  Duration |
| **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** |
| **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** | **Click here to enter text.** |

If postoperative analgesics will not be used, provide justification

 **Click here to enter text.**

Sterile technique must be used on all surgical procedures, including non-recovery procedures. This includes a minimum of sterile instruments and gloves, a surgical mask, and surgical scrub of the surgery area. All animals must be attended until they are able to right and stabilize themselves.

 CHECK THE FOLLOWING PROCEDURES THAT APPLY TO THIS PROJECT

[ ]  Body temperature recorded [ ] Surgical record kept

[ ]  Veterinarian available [ ] Kept on warm blanket until conscious

[ ]  Veterinary technician available during procedure [ ]  Sutures removed at (when) **Click here to enter text.**

[ ]  Food and water withheld until fully conscious  [ ] Notation made when animal eats/drinks

[ ]  Dressing changes (frequency) **Click here to enter text.**

[ ]  Other: describe: **Click here to enter text.**

6. Will animals be subjected to more than (1) survival surgery?

[ ]  Yes [ ]  No If yes, provide justification for multiple survival surgeries. (Cost is not a valid justification) **Click here to enter text.**

7. Describe arrangements for after-hours, weekend and holiday provision of the post-op care of your animals

 **Click here to enter text.**

#### Protocol Summary Sheet for Animal Care Staff (Part 3)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IACUC USE ONLY** | Protocol Number |  | Expiration Date |  |

Title of Protocol: **Click here to enter text.**

Research Personnel (to contact for information, questions or concerns)

Name Title Department Office Phone # Emergency Contact #

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |

For veterinary emergencies, contact the UMBC Attending Veterinarian or [Veterinary Resources](http://medschool.umaryland.edu/vetmedicine/contact.asp) in the Comparative Medicine Program at UMB.

Animal Information *(copy from (1) Animals in the protocol application)*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Speciese.g. Laboratory Mouse, *Mus musculus,* BALB/c | Age and Gender  | Year 01 | Year 02 | Year 03 | Source: (e.g. commercial vendor, bred in-house, or wild-caught) | Where housed (room #) |
| *Common Name* Click here to enter text.*Latin Name* Click here to enter text.*Strain* Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| *Common Name* Click here to enter text.*Latin Name* Click here to enter text.*Strain* Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| *Common Name* Click here to enter text.*Latin Name* Click here to enter text.*Strain* Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| *Common Name* Click here to enter text.*Latin Name* Click here to enter text.*Strain* Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |
| *Common Name* Click here to enter text.*Latin Name* Click here to enter text.*Strain* Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. | Click here to enter text. |

Animal Husbandry Requirements *(copy from 1.A.c. in the protocol application)*

Preferred Room Temperature: **Click here to enter text.**

If cages/tanks will be supplied with ancillary heating or cooling (e.g.: heat lamps, tank heaters, etc.), please describe: **Click here to enter text.**

Light Cycle (i.e., 12 hrs. light/ 12 hrs. dark): **Click here to enter text.**

Type of food(s): **Click here to enter text.**

Note: Commercially prepared foods must be stored in sealed containers.

Feeding frequency: **Click here to enter text.**

Cleaning of Animal Enclosures (If containers of various sizes are used, please state frequency for each.)

Frequency of cage/tank cleaning: **Click here to enter text.**

Description of cleaning procedure: **Click here to enter text.**

Environmental Enrichment (describe if species-specific enrichment will be provided): **Click here to enter text.**

If there are special requirements for maintaining animals, indicate here **Click here to enter text.**

Check all that apply:

Biohazard [ ]  Yes [ ]  No Agent

Radioisotope [ ]  Yes [ ]  No Agent

Chemical Carcinogen [ ]  Yes [ ]  No Agent

recombinant DNA [ ]  Yes [ ]  No Agent

Consult the Biosafety information found at, <http://research.umbc.edu/special-topics-of-concern-to-the-iacuc/#biohazard> regarding the use of hazardous materials in animal protocols.