# General Information

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Principal Investigator (PI): | | | | |  | | Direct Phone Number: | |  |
| Academic Position/Title: | | | | |  | Email: | |  | |
| Dept. or Company Name: | | | | |  | | | | |
| Mailing Address: | | |  | | | | | | |
| PI Years with Procedure(s): | | | | |  | | | | |
| PI Years with Species: | | | |  | | | | | |
| List Name of Personnel:  (add additional lines for personnel as needed) | | | | Completed personnel training IPTC-1 form included with this submission  Completed personnel training IPTC-1 form included with this submission  Completed personnel training IPTC-1 form included with this submission | | | | | |
| If hands on training is needed contact [andovervivarium@uml.edu](mailto:andovervivarium@uml.edu) | | | | | | | | | |
| Protocol Title: |  | | | | | | | | |
| Protocol Type: | | Research  Teaching/Training Course #:   3-year submission – previous #: | | | | | | | |
| Funding Source and Information: | | | **Departmental or Subcontractor** – Speed Chart Number: Fund Number:  **Grant or Contract Funding** – Agency: Grant Number:  A copy of the vertebrate animal section of grant is included with this application submission. | | | | | | |

# Verification of other Regulatory Approvals

|  |
| --- |
| Check the box(es) that correspond to this IACUC protocol. The **Principal Investigator** is responsible for ensuring the appropriate permit(s) & approval(s) remain current. |
| Institutional Biosafety Committee (IBC) – **Registration Number(s)**: |
| Environmental Health and Safety (EHS) – **Name Hazardous Chemical(s)**: |
| Radiation Safety |
| Protocol requires the use of Controlled Substance(s) - **Name(s) of drug(s)**: |

# Protocol Objective(s) and Justification

Federal regulations mandate this section is written using **lay terms. Simplify** or **define** all field-specific terms and phrases so they are understandable at an *8th grade reading level*. The target audience include non-scientists that must understand the procedure(s) objectives and importance for use of animals.

|  |  |
| --- | --- |
| **1. Specific OBJECTIVE(S) -** State the hypothesis(es) of each study in a clear and concise sequential description of the procedures to be tested and provide explicit goals (use new table for each study and number as **Study #1**, **Study #2** etc.). | |
|  | |
| **2. Describe the potential CONTRIBUTIONS and SIGNIFICANCE of this STUDY** to human/animal health, the advancement of knowledge, or good of society. | |
|  | |
| **3. Justify the** **USE of Animals –** consider the replacement of live animal model (in vitro, computer stimulation, etc.) to accomplish the objective(s) of the proposed study. Select the applicable justification(s) that explain why the use of live animals is required. If none apply, choose “**Other**” and provide rationale. Alternatives refer to methods or approaches which result in refinement of procedures that lessen pain and/or distress; reduction in numbers of animals required; or replacement of animals with non-whole-animal systems or replacement of one animal species with another, particularly if the substituted species is non-mammalian or invertebrate. | |
|  | The complexity of the process(es) or mechanism(s) being studied cannot be duplicated with an in vitro model (e.g., cell culture), computer simulation, or a simpler species (e.g. invertebrates). | |
|  | There is not enough information about the process(es) being studied to design in vitro or use a non-living model. | |
|  | Animal tissues are required for the development of an in vitro system. | |
|  | Methods have already been tested in vitro and must now be performed in live animals; or preclinical studies in living animals are necessary prior to human testing. | |
|  | This is a behavioral, learning, or developmental study which must be performed in live animals. | |
|  | Participant(s) must interact with live animals to develop competence in animal handling and performing procedure(s) (i.e. Teaching/Training Protocol). | |
|  | Other: | |

# Species Information

|  |  |  |
| --- | --- | --- |
| 1. List Species (and Study # when there are multiple studies) being used: | |  |
| 1a. Transgenic Animals, will be used, created, or bred: YES  NO | | |
|  | **I confirm\*** that neither parental transgenic animal contains the following genetic modifications:   * incorporation of more than one-half of the genome of an exogenous eukaryotic virus from a single family of viruses; or * incorporation of a transgene that is under the control of a gammaretroviral long terminal repeat (LTR); and * the transgenic animal that results from this breeding is not expected to contain more than one-half of an exogenous viral genome from a single family of viruses. | |
| \*I'm confirming the transgenic animal(s) listed above is exempt from NIH Guidelines and IBC approval is not required. | | |

## Aquatics Not Applicable

|  |  |
| --- | --- |
| **Housing** | |
| Brief description of housing including tank size and number of animals per tank. |  |
| Describe how tanks will be sanitized. |  |
| Sanitation schedule of tank(s) and equipment. |  |
| **Water Quality** | |
| Brief description of the system design including type of water circulation. |  |
| How is the water quality established and determined prior to the introductions of animals? |  |
| How is the water filtered to remove nitrogenous / animal waste compounds? |  |
| **Feeding** | |
| Describe diet that will be used, & where/how the diet will be stored. |  |
| Describe the feeding schedule. |  |
| Environmental enrichment will be provided: | YES, type:  NO, provide scientific justification: |

# V. Regulatory Exceptions

In accordance with federal regulations, the following procedures must be approved by the IACUC - check the appropriate box(es) below and provide justification as applicable.

|  |
| --- |
| 1. **Multiple Major Survival Surgeries** will be performed on the same animal? Major survival surgery penetrates and exposes a body cavity, produces substantial impairment of physical or physiologic functions, or involves extensive tissue dissection or transection. Some surgical procedures characterized as minor may induce substantial post-procedural pain or impairment and shall be similarly justified when performed more than once in a single animal.   **Provide scientific justification** for these multiple surgeries & the timeframes between them: |
| 1. **Prolonged Restraint** (> 30-minutes) will be used on unanesthetized animals (See [Physical Restraint Policy](file:///\\fs.uml.edu\umlfiles\IRBMembers\IACUC\Policy%20and%20Guidelines\Rodent%20Physical%20Restraint%20Policy.pdf))   **Provide scientific justification**: |
| 1. **Non-pharmaceutical grade (NPG) substances** will be used in live animals (open links for availability of [animal pharmaceuticals](https://animaldrugsatfda.fda.gov/adafda/views/#/search) and [human pharmaceuticals](http://www.accessdata.fda.gov/scripts/cder/daf/index.cfm))  |  | | --- | | **Indicate justification below when using a NPG substance** |   No pharmaceutical grade veterinary or human drug is available or consistently available.  Although a pharmaceutical grade drug is available, the NPG drug is required to replicate methods from previous studies.  The available pharmaceutical grade formulation contains preservatives or inactive ingredients that confound the research goals of the study.  Other - provide justification:  Indicate the methods to be used to ensure sterility, stability & physiological compatibility for NPG substances administered parenterally (IV, IP, IM, SC or other non-oral method): |
| 1. **Food** and/or **Water** be restricted at some time during this study |
| **4a.** Provide scientific justification for restriction:  **4b.** State duration of restriction: |

# VI. Non-Standard Animal Housing and Care

Describe specialized care and housing practices that do NOT constitute Regulatory Exceptions (Section V. above).

|  |
| --- |
| **1.** **Non-standard housing/caging or** **specialized husbandry practices** that are not regulatory exemptions (e.g. use of metabolic caging, pinnacle caging, etc.): |
|  |
| **2.** **Non-standard drinking water** For ANY chemical/additive supplementing the drinking water provide the following: |
| 2a. Name of chemical/additive  2b. Composition include concentration/dose/volume of formulated water  2c. Frequency and/or Duration of water |
| **3.** **Non-standard diet** For ANY specialized diet used in place of the standard chow provide the following: |
| 3a. Name of diet  3b. Dietary composition, including name & concentration of any drugs formulated into the diet  3c. Frequency and/or Duration of diet  3d. Diet is not nutritionally balanced - provide justification: |
| **4.** **Non-standard enrichment** For ANY restriction or enhancement of enrichment provide the following: |
| 4a. Conditions: |

# VII. Experimental Design

Explain the experimental design addressing the following:

* Organize each Study by number or letter and **use the same system in Section XIII** “Animal Number Justification”.
* Outline the experimental design sequentially. Flow charts add clarity and are recommended.
* Describe all procedures and time intervals between them.
* Include information on Study duration and Scientific Endpoints.

**Note:** Some details are requested in other sections (e.g. VIII Procedural Details, IX Surgery Description etc.) avoid unnecessary duplication.

|  |
| --- |
|  |

# VIII. Procedural Details

1. Indicate each substance administered **(copy and paste table for each Substance and Species)**.

Do not include anesthetics, analgesics, water, or diet provisions addressed in separate sections.

|  |  |
| --- | --- |
| Substance Name |  |
| Dose Concentration |  |
| Dose Volume |  |
| Species |  |
| Administration Route | IM IP IV PO (oral gavage) RO (retro-orbital) SQ Other: |

Provide justification for any needle larger than recommended sizes below:

**Recommended needle gauge for administration substances**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Species** | **IM** | **IP** | **IV** | **PO** | **RO** | **SQ** |
| Mouse | 27 G | 25-27 G | 26-28 G | 18-24 G | 27-29 G | 23-30 G |
| **Rat** | **25 G** | **23-27 G** | **21-23 G** | **13-20 G** | **27-29 G** | **20-27 G** |

1. **Anesthesia/Sedation** **NOT** used for surgery or euthanasia - Add additional rows, as necessary. **Copy and paste table for each regimen based on study procedure and species.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name of procedure(s)/Study number | | |  | | | |
| Species |  | | | | | |
| **Anesthetic/Sedative Name** | | **Dose** | | | **Route** | **Re-dose/Maintenance** |
|  | |  | | |  | and  or |
|  | |  | | |  | and  or |
| Method(s) used to monitor anesthetic/sedative  (Check all that apply): | | | | Responsiveness to stimuli | | |
| Respiratory rate/effort | | |
| Other: | | |
| All animals are monitored continuously while under anesthesia.  Supplemental heat provided when an animal is under anesthesia for longer than 5 minutes. Justify otherwise: | | | | | | |

1. **Implant** - **copy and paste table for each species**.

|  |  |  |  |
| --- | --- | --- | --- |
| Type and material of implant |  | | |
| Species |  | | |
| Site(s) of implantation |  | | |
| Size of implant |  | | |
| Method of sterilization for implant |  | | |
| Length of time of implantation |  | | |
| Removal procedure (N/A if post-mortem) | |  | |
| For substances administered via pump or pellet, provide dosage (in mg/kg/day) & confirm how sterility of the substance will be ensured prior to loading. | | |  |

1. **Survival Blood Collection - (copy and paste table for each species)** (see [Rodent Blood Collection Policy](file:///\\fs.uml.edu\umlfiles\IRBMembers\IACUC\Policy%20and%20Guidelines\Rodent%20Blood%20Collection%20Policy.pdf))

|  |  |  |
| --- | --- | --- |
| Name of experimental procedure(s) |  | |
| Species |  | |
| Method of blood collection AND site used |  | |
| Maximum volume for each sample |  | |
| Frequency of draws |  | |
| Maximum number of draws per animal |  | |
| Provide scientific justification for any request larger than the recommended volume | |  |

1. **Behavioral Test -** Add a row for each test below.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Behavioral Test Study Name | Time required for each testing or training session | | | | Frequency of testing or training session | Duration of testing or training sessions | Interval between sessions |
|  |  | | | |  |  | |
| **METHOD(S) USED** | | | | | | | |
| Describe the goals and performance expected for each test. | | | | | | | |
|  | | | | | | | |
| Will an apparatus be used? | | NO YES, describe here: | | | | | |
| Will aversive stimuli be used? | | NO  YES, describe stimulus, its intensity, duration, and frequency of administration here: | | | | | |
| Describe limits to deprivation or aversive stimuli if desired response does not occur. | | | |  | | | |
| Will reward or other technique be used? | | | NO  YES, describe here: | | | | |

1. **Experimental Tumor Growth**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **A.** Indicate if spontaneous neoplasia or induced tumor (*If spontaneous, skip to E.)* | | | | | | |  |
| **B.** Identity and source of the tumor | |  | | | | | |
| **C.** Is the tumor of **rodent origin** or been passaged **in rodents** | | | | | | YES  NO | |
| **D.** Is the tumor of **human origin** | NO YES (**IBC Registration Number Required**) | | | | | | |
| **E.** Provide primary site(s) of anticipated tumor growth and any expected sites of metastasis, if applicable. | | | | |  | | |
| **F.** Provide method of measuring tumor growth | | |  | | | | |
| **G.** Provide maximum size and dimension of tumor | | | |  | | | |

1. **Use of Antibody Preparations or Other Biologics**

|  |  |  |
| --- | --- | --- |
| **A.** Are antibody preparations used? | YES (check appropriate boxes below), Indicate species: | |
| Antibodies will be obtained commercially (off the shelf)  Antibodies will be custom made:  In Vitro tissue culture techniques used  In Vivo techniques used in live:  in-house production (describe in Section VII) *OR*  vendor produced | | |
| **B.** Are other biologics (e.g., blood, serum, cellular components) used? | | NO YES |

# IX. Surgery Description

Surgery, **copy and paste table for each surgery & species**. (See [Survival Surgery in Rodents Policy](file:///\\fs.uml.edu\umlfiles\IRBMembers\IACUC\Policy%20and%20Guidelines\Conducting%20Survival%20Surgery%20in%20Rodents%20Policy.pdf)). Exsanguination (that requires a skin incision to expose the vessel) and Perfusion need to be described as terminal surgeries.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Surgery/Study Name** | |  | | | | | | | Survival or Terminal | | |
| **Species** | |  | | | | | | | | | |
| **Name of person performing surgery** | | | |  | | | | | | | |
| **Anesthetic details -** Add rows, as necessary. | | | | | | | | | | | |
| **Anesthetic Name** | | | **Dose** | | | | | **Route** | | **Re-dose/Maintenance** | |
|  | | |  | | | | |  | | and or | |
|  | | |  | | | | |  | | and or | |
| **Methods used to monitor anesthetic depth** (check all that apply): | | | | | | | Pedal reflex (firm toe pinch) | | | | |
| Respiratory rate and effort | | | | |
| Other: | | | | |
| **Describe surgeries in detail including skin incisions, manipulations, closures, and suture information.** | | | | |  | | | | | | |
| Initial dose of analgesia will be given prior to making the incision. Justify otherwise:  Sutures and wound clips will be removed 7-14 days post-operatively. Justify otherwise: | | | | | | | | | | | |
| **Analgesic regimen -** Multiple analgesics may be chosen to provide flexibility - Add rows, as necessary. | | | | | | | | | | | |
| **Analgesic Name** | **Dose** | | | | **Route** | **Duration of Treatment** | | | | | **Re-dose/Maintenance** |
|  |  | | | |  |  | | | | | and or |
|  |  | | | |  |  | | | | | and or |

# X. Animal Care and Monitoring

In animal health emergencies, animals may be treated or euthanized by the animal care staff to relieve suffering. When possible, animal care staff will make reasonable efforts to contact Principal Investigator prior to diagnostic testing, treatment, therapy, or euthanasia. Principal Investigator MUST notify animal care staff in **Advance** of any therapeutic restrictions in your research in the case animal care staff is unable to make contact during a health emergency.

|  |  |  |
| --- | --- | --- |
| 1. **Adverse Effects -** Describe expected experimental effects, distress, pain, significant discomfort, or morbidity that may occur because of the experiment, procedure, genetic phenotype, or from surgery (including infection, inflammation, erosion, or accidental removal of implants).  Indicate how adverse effects will be alleviated (e.g. with analgesia, nursing care, nutritional support, etc.): | | |
| **1a.** | | |
| 1. **Justification for Category E procedure(s) -** Provide **scientific justification** when pain and/or distress is an unavoidable part of the research experiment(s) studies/procedure(s) and why it cannot be alleviated: | | |
| **2a.** | | |
| 1. **Health Monitoring -** Indicate the frequency and duration that ALL animals will be observed to evaluate pain and/or distress. This includes observation of animals on and off studies, as well as post-operative care and monitoring. When necessary, explain how monitoring will change if health status changes. Protocol personnel are responsible for this monitoring. **NOTE:** Routine health checks by animal care staff does NOT fulfill this requirement. | | |
| Experiment Study # and Name | | Frequency and Duration of Observations, Care, and Monitoring |
|  | |  |
|  | |  |
|  | |  |
| 1. **Humane Endpoint -** List the criteria used to determine when euthanasia will be performed, even if prior to the experimental endpoint (e.g. tumor size, necrosis, % body weight gain/loss, body condition loss, inability to eat or drink, behavioral abnormalities, clinical symptoms, signs of toxicity, etc.): | | |
| **4a.** | | |
| 1. **Documentation for Medical Records -** Check all criteria below that will be documented for “Health Monitoring” and “Humane Endpoint” determination. Records must be made available to IACUC and animal care staff upon request. See [Animal Health Record Maintenance Policy](file:///\\fs.uml.edu\umlfiles\IRBMembers\IACUC\Policy%20and%20Guidelines\Animal%20Health%20Record%20Maintenance%20Policy.pdf) for additional information. | | |
|  | Body weight(s) | |
|  | Tumor measurement(s) | |
|  | Blood, urine, or other laboratory tests | |
|  | Physical conditions (i.e. abnormal posture, excessive licking or scratching, etc.) | |
|  | Abnormal behavior (i.e. increased aggression, apathy, not eating, not drinking, etc.) | |
|  | Other - indicate other scoring systems or measurable criteria used (e.g. EAE, seizure (Racine) scale, etc.): | |

# XI. Location of Animals

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. **Are live animals ever used outside of the centralized facility?**   NO YES (complete sections 1a. and 1b. below) Other Location:       (Complete section 2a. below)  **NOTE:** Animals can only be outside of the centralized facility for **less than** 12 hours (USDA species) and **less than** 24 hours (other species) unless the area is an IACUC approved satellite facility. | | | | |
| **1a. Type of procedure or housing** | **Species** | **Building &**  **Room Number** | **Is the room currently approved by the IACUC?** | **Duration animals will be present** |
| survival surgery |  |  | YES  NO |  |
| non-survival surgery |  |  | YES  NO |  |
| satellite housing |  |  | YES  NO |  |
| other: |  |  | YES  NO |  |
| **1b. Provide justification for removing animals from central facility:** | | | | |
| **2. Provide description(s) and justification for field studies and use of other locations:** | | | | |
| **2a.** | | | | |

# XII. Disposition of Animals Following Study

Provide details of euthanasia **for each species**, even if euthanasia is not part of the experimental plan, protocols must include an emergency plan in the event of unforeseen circumstances. **Copy and paste table for each species.**

* When an inhalant is selected as the euthanizing agent, a secondary method of euthanasia is required. See [Euthanasia Policy](file:///\\fs.uml.edu\umlfiles\IRBMembers\IACUC\Policy%20and%20Guidelines\Euthanasia%20Policy.pdf)
* Justify any deviation from AVMA Guidelines on Euthanasia [*AVMA Guidelines*](https://www.avma.org/sites/default/files/2020-02/Guidelines-on-Euthanasia-2020.pdf).

|  |  |
| --- | --- |
| **Species name** |  |
| **Euthanasia Primary Method** (i.e.,CO2, Overdose (MS-222)) |  |
| **Confirm Secondary Euthanasia Method is used when required** | Cervical Dislocation,Decapitation, Thoracotomy,  Major organ removal following Primary Method (**used w/surgery procedures)** |

|  |
| --- |
| **A physical method of sacrifice will be used without prior anesthesia or sedation** (i.e. conscious cervical dislocation or decapitation). **Provide justification**: |
| Euthanasia is not expected or required – Emergency Only |

# XIII. Animal Number Justification

|  |
| --- |
| **1. JUSTIFICATION FOR THE EXPERIMENTAL NUMBER OF ANIMALS REQUESTED.**  Identify the experiments the same way they are organized in Section VII (i.e., Study #) and explain how many animals are needed for each. Include justification for group sizes, the number of groups per experiment, the number of conditions, timepoints, repetitions, etc. The number of animals must be the minimum number required to meet the goals of the study. **Tables or flowcharts are encouraged**. |
|  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **2. Total number of Animals used for Breeding** | | | | | |
| Mouse: |  | Rat: |  | Species Name: |  |
| Total number includes adult breeders plus offspring generated. All animals born must be accounted for, even if not used in experiment study(ies)*.* Provide a table or chart below that organizes the number expected from breeding. Estimate litter size, litters per female, and how many offspring that may be culled based on Mendelian genetics or other methods. If average litter size is unknown, estimate 10 pups per pregnancy for rodents. | | | | | |
| Table or Chart: | | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **3**. TOTAL NUMBER OF ANIMALS - Identify the total number of animals required during the 3-year approval period of this protocol by species. All animals used in experiment study(ies), for maintenance breeding must be accounted for in the corresponding category. Indicate how many animals are utilized in each Pain/Distress Category:  Category C – Procedure involves no pain, distress, or use of pain-relieving drugs.  Category D – Procedure involves accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.  Category E – Procedure involves accompanying pain or distress to animal and for which the use of appropriate anesthetic, analgesic or tranquilizing drugs would adversely affect the procedure, result or interpretation of teaching, research, experiment, surgery, or tests. | | | |
| **Species name:** |  |  |  |
| Category C |  |  |  |
| Category D |  |  |  |
| Category E |  |  |  |
| **Total number requested:** |  |  |  |

# XIV. Literature Search for Alternatives (Replacement, Reduction, Refinement)

Federal regulations require investigators to consider alternatives for procedures that may cause more than momentary pain or distress. Investigator must provide a written narrative description of the methods and sources that were used to determine that alternatives were not available. This only applies to **Category D** & **Category E** procedures.

|  |  |
| --- | --- |
| **1. Alternative Search Information** | |
| Database(s) searched |  |
| Date that search was conducted |  |
| The years covered for the search (>10 yrs.) |  |
| **2. Provide Methods and Narrative Description for each Search** –  Suggested search strategy: “procedure” + “species” + “alternative” [e.g.: skin incision + mouse + alternative]  Provide a written narrative of the methods and sources used for each alternative search. The Committee must be able to assess if the search was appropriate and sufficiently thorough. | |
| **2a.** | |

# XV. Principal Investigator Assurance of Compliance

An IACUC Personnel Training Checklist (IPTC-1) must be completed for All Protocol Personnel. All personnel must complete their IACUC requirements prior to being approved protocol personnel. Contact the IACUC office [iacuc@uml.edu](mailto:iacuc@uml.edu) with any questions.

**As the PI and individual responsible for this study, I confirm the following:**

The information contained in this protocol is true and accurate, and to the best of my knowledge conforms to University of Massachusetts, Lowell (UML) IACUC, NIH, USDA, DEA, and MDPH policies on the use of animals in research, training, and teaching.

I have considered alternatives to the biological models used in this study and have found these other methods unacceptable on scientific or educational grounds.

I certify that I have determined that the research proposed herein is not unnecessarily duplicative of previously reported research.

I accept responsibility for ensuring that all personnel involved in this study will be trained regarding any potential biological, chemical, and radiological hazards, relevant safety practices, and emergency procedures. If applicable, I confirm that all relevant institutional regulatory requirements (e.g., Chemical Safety Plan, IBC Registration, Radioactive Materials Permit, etc.) will be followed.

I will complete all IACUC personnel requirements, **prior** to working with animals **OR** within 2 months of the approval of my protocol, **whichever comes first**.

All personnel involved in this study will be added to the protocol using IPTC.All personnel involved will agree to participate in the study and will be aware of the approved procedures by reading the most current approved protocol. All individuals involved will be instructed in the humane care, handling, and use of animals, and I will review their qualifications. I will properly train all individuals performing euthanasia and will maintain training records as required in the [Euthanasia Policy](\\\\fs.uml.edu\\umlfiles\\IRBMembers\\IACUC\\Policy and Guidelines\\Euthanasia Policy.pdf)

No change will be made to a procedure(s), care, or housing without prior written notification to and approval by the IACUC.

I understand that it is non-compliant to release an IACUC approval date without documentation of a congruency comparison conducted by the IACUC Office.

I accept responsibility for complying with Material Transfer Agreement requirements.

I understand that failure to comply with IACUC policies and procedures will jeopardize University of Massachusetts, Lowell (UML) Animal Welfare Assurance on file with the NIH and may lead to revocation of my privileges to conduct animal research at this institution.

In the text box below, insert a picture of your signature.

By signing above, you are submitting an electronic signature that confirms you understand and adhere to the above statements and IACUC policies. This is considered legal documentation and confirmation of your agreement to execute all activities as approved.