

**ROBERT WOOD JOHNSON MEDICAL SCHOOL  
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE**

**ANIMAL USE FORM**

*Follow instructions carefully.  
Do not exceed length restrictions provided.*

This application may be signed electronically. We suggest that PI's SAVE A COPY of the completed application BEFORE adding their electronic signature, as once the form is electronically signed, it will be locked from further changes. Saving the completed application BEFORE signing will allow the PI to have a template to work from if modifications are needed in the future. The IACUC application instructions may be found on the Research Office website below: [http://rwjms.umdnj.edu/research/orsp/ra/iacuc\\_forms.html](http://rwjms.umdnj.edu/research/orsp/ra/iacuc_forms.html)

**FOR IACUC USE ONLY**

TRACKING NO.	
CATEGORY	
IACUC NO:	

The information in this application is confidential. Please do not circulate outside UMDNJ-Robert Wood Johnson Medical School.

<b>SECTION 1: PERSONNEL</b>	1.1 TITLE OF PROJECT		
	1.2 PRINCIPAL INVESTIGATOR INFORMATION		
	1.2.1 NAME (Last, First, Middle)	1.2.2 DEGREE(S)	1.2.3 ACADEMIC TITLE
	1.2.4 DEPARTMENT	1.2.5 MAILING ADDRESS (Room Number, Street, City, State, Zip Code)	
	1.2.6 CAMPUS		
	1.2.7 TELEPHONE AND FAX (Area Code, Number and Extension)	1.2.8 EMAIL	
	1.3 GRANT TITLE (IF APPLICABLE)		
	1.4 FUNDING SOURCE		

<b>SECTION 2: ANIMALS</b>	2.1 SPECIES Type:		Weight:
	Strain:		Age:
	Sex:		
	2.2 SUM TOTAL OF ANIMALS USED PER YEAR:		ESTIMATED NUMBER OF ANIMALS USED PER 3 YEARS:
	2.3 REQUESTED SOURCE OF ANIMALS (Optional)		
	2.4 SURGICALLY MODIFIED ANIMALS PURCHASED <input type="checkbox"/> Yes <input type="checkbox"/> No		
2.5 REQUEST FOR ANIMAL HOUSING (Check all that apply)			
<input type="checkbox"/> MEB <input type="checkbox"/> Piscataway <input type="checkbox"/> Camden <input type="checkbox"/> CINJ <input type="checkbox"/> CHINJ <input type="checkbox"/> Other (Specify):			
2.6 List all Room Numbers (Laboratories, etc.) outside the Vivarium where animal procedures will be performed and specify which procedures will be performed at these locations.			
ROOM NUMBER:	PROCEDURE:		

- Completed applications **MUST** be returned via **SECURE** e-mail **VIA** 'https://lift.umdnj.edu' **ONLY** to 'iacuc-rwjms@umdnj.edu' **OR** the application can be hand delivered on a CD or a flash drive to the ORSP.
  - Paper submissions will no longer be accepted.
  - IACUC Policies may be found here: 'http://rwjms.umdnj.edu/research/orsp/ra/iacuc\_policies.html'
- Phone: 732-235-4162 | Fax: 732-235-5534 | Email: iacuc-rwjms@umdnj.edu

Institutional Animal Care and Use Committee  
 Robert Wood Johnson Medical School  
 Office of Research and Sponsored Programs  
 675 Hoes Lane, Room R-109  
 Piscataway, NJ 08854

**ROBERT WOOD JOHNSON MEDICAL SCHOOL  
 INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE  
 ANIMAL USE APPLICATION**

<b>SECTION 2 (CONTINUED)</b>	2.7 Are animals held outside of the Vivarium? <input type="checkbox"/> Yes <input type="checkbox"/> No		
	If yes, please indicate the room locations(s) and the length of time that the animals will be housed outside of the Vivarium. (If you need to house your animals outside of the Vivarium or other authorized satellite facility for periods exceeding 12 hours, please consult with the veterinarian.)		
	ROOM NUMBER	DURATION	FREQUENCY (Occurrences per Week)
2.8 REQUEST FOR SPECIAL HOUSING ( <i>Optional</i> )			
<b>SECTION 3: ABSTRACT OF RESEARCH</b>	3.0 Briefly state the background for the project including hypothesis to be tested, rationale, objectives, public health significance or importance of the research. ( <i>Confine to the space provided</i> ):		

4.0 Describe, in **lay language**, and sequence, in chronological order, **exactly** what will be done to the animals (*Detailed descriptions of in-vitro fertilization methodologies are unnecessary*):

If required, please use the continuation pages 13 & 14

SECTION 4: PROCEDURES

**ROBERT WOOD JOHNSON MEDICAL SCHOOL  
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE  
ANIMAL USE APPLICATION**

NOTE: Use of Hazardous Agents requires approval from the RWJMS Institutional Biosafety Committee, Laboratory Safety Committee, EOHSS, and/or REHS. Links to some of the standard forms or respective websites are available under the "Required Approvals" section of the ORSP website (<http://rwjms.umdnj.edu/research/orsp/ra/>). All forms or letters should be submitted simultaneously to expedite the process of approval. Final IACUC approval will be given only after the use of **all** hazardous agents has been approved.

5.1 Does the use of chemicals or other agents pose potential danger to humans?  Yes  No

5.2 Can the natural or experimental disease or pathological condition under study be transmitted to humans?  Yes  No

If **yes**, what precautions are you taking to protect persons who will come into contact with these animals?

5.3 Indicate if your study involves any of the following. If any of these items are checked, clearance from the RWJMS Institutional Biosafety Committee, RWJMS Laboratory Safety Committee, EOHSS, and/or REHS is necessary. Please fill out the appropriate form and submit to the Office of Research and Sponsored Programs or the appropriate agency/committee.

Office of Research and Sponsored Programs  
675 Hoes Lane, Room R-109  
Piscataway, NJ 08854

Ph: 732-235-4338  
Fx: 732-235-5534  
E: [iacuc-rwjms@umdnj.edu](mailto:iacuc-rwjms@umdnj.edu)

Coriell Institute for Medical Research  
403 Haddon Avenue  
Camden, NJ 08103

Ph: 856-757-2570  
Fx: 856-968-9563  
E: [melerape@umdnj.edu](mailto:melerape@umdnj.edu)

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Acute Toxins               | <input type="checkbox"/> Human and/or Animal Pathogens | <input type="checkbox"/> Radioactive Materials |
| <input type="checkbox"/> Chemical Carcinogens       | <input type="checkbox"/> Human Cells                   | <input type="checkbox"/> Recombinant DNA/RNA   |
| <input type="checkbox"/> Genetically Modified Cells | <input type="checkbox"/> Infectious Agents             | <input type="checkbox"/> Other (Specify):      |

Identify agent(s) listed above:

AGENT:	DOSE:	ROUTE:	FREQUENCY:	DURATION

5.4 Describe the potential health problems to humans and/or animals:

SECTION 5: HAZARDOUS AGENTS

**ROBERT WOOD JOHNSON MEDICAL SCHOOL  
 INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE  
 ANIMAL USE APPLICATION**

SECTION 5: HAZARDOUS AGENTS (CONTINUED)

5.5 Describe special animal care required for biohazards and chemical hazards:

5.6 Describe special precautions for all personnel potentially exposed to this hazard:

5.7 Will tumor cells, stem cells, tissue, sera, or other biological specimens from either animal or human sources be used as part of this protocol?  Yes  No

List the supplier

Human  Animal (*if animal is selected, list the species. Reference Policy #6*):

SECTION 6: GENOTYPING/IDENTIFICATION

6.1 Breeding (Reference Policy #2)  Yes  No  
 If yes is genotyping required?  Yes  No If yes answer questions 6.2 **AND** 6.3

6.2 Genotyping (Reference Policy #8)  Tail Sample (specify length)  
 Other (specify tissue):  
 Age at tail clipping (specify):

6.3 Identification  Ear Tag:  
 Ear Punch  
 Tattoo  
 Toeclip (Provide justification, see Policy #9)

This section intentionally left blank.

**ROBERT WOOD JOHNSON MEDICAL SCHOOL  
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE  
ANIMAL USE APPLICATION**

SECTION 7: ANIMAL USE JUSTIFICATION

7.1 What is the rationale for using animals in this study? (*Check all that apply*):

- This research requires behavioral measurements from living animals.
- This research requires biological measurements of tissue samples from living animals.
- Animals are used to provide primary cell cultures.
- Computer or other models cannot be used to replace animals in this research.
- This research can not be done in-vitro.
- Other (*Explain*):

7.2 Explain why the species used is appropriate for your research. (*Check all that apply*):

- This research is a direct extension of previous work done on this species.
- This research seeks to extend previous findings from other species specifically to this species.
- Nothing is known about the physiological/behavioral phenomena of interest in this species.
- More is known about related aspects of the physiological/behavioral phenomena of interest in this species than any other.
- This species represents the best compromise between the simplest (lowest) organism that can be used and the most recent relevant model system for human physiology/behavior.
- Other (*Explain*):

7.3 Justify the appropriateness of the number of animals to be used. (*Check all that apply*):

- This number represents the lowest number needed for statistically significant tests of the hypothesis.
- A large number of physiological/behavioral parameters need to be measured in parametric fashion.
- A significant number of animals to be used are for breeding purposes.
- The physiological/behavioral parameters to be measured exhibit greater variability, thus requiring a larger number of animals for statistically significant analysis.
- Meaningful data cannot be obtained from every animal used due to technical reasons, thus requiring a larger number of animals.
- Other (*Explain*):

**ROBERT WOOD JOHNSON MEDICAL SCHOOL  
 INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE  
 ANIMAL USE APPLICATION**

**SECTION 8: TOTAL ANIMALS**

8.0 Define the number of animals to be used **per year**. (Outline experiments in as much detail as needed. Append a table or flow chart if necessary to provide committee members with an understanding of the experimental design.)

In your description of your experimental design please indicate, where appropriate, the Experiment Title, the Number of Groups per Experiment, the Number of Animals per Group and the Number of Animals per Experiment. Please distinguish between the number of animals to be used per year from the total number of animals per project. Please use continuation pages 13 & 14 if necessary.

To help the committee understand your intentions, please provide an estimate of the total number of animals to be used over the 3-year life of this protocol.

Sum total of animals used per year: \_\_\_\_\_ Estimated number of animals used per 3 years: \_\_\_\_\_

**SECTION 9: EXPERIMENTAL**

9.0 Experimental use of animals: conditions that may create pain or distress (*Check every appropriate category*):

Non-treated animals, euthanasia followed by tissue harvest. (*If only this item is checked, proceed to SECTION 10.2*).

Animals will suffer no pain or distress greater than that induced by routine injections or venipuncture and, therefore, will receive no anesthetics, analgesics, or tranquilizers.

Animals will receive anesthetics, analgesics, and/or tranquilizers to minimize or alleviate pain or distress during (*check all that apply*):

Non-surgical procedures                       Survival surgery                       Non-survival surgery

Animals may experience pain or distress greater than induced by routine administrations or venipuncture, but will not receive anesthetics, analgesics, or tranquilizers, since this will adversely affect the study. (**MUST** answer SECTION 11.11 if this category is checked).

**SECTION 10: INVESTIGATIVE ALTERNATIVES**

10.1 You must investigate alternatives to procedures likely to cause pain or distress. In addition this investigation should provide evidence that the proposed research is not unnecessarily duplicative [A painful procedure is defined as any procedure that would reasonably be expected to cause more than slight or momentary pain and/or distress in a human being to which the procedure is applied. Examples: terminal surgery, Freund's Complete Adjuvant use, and extensive irradiation.] List the sources or methods that were used to determine that non-painful alternatives are not available. The search or method should also include concepts of refinement and reduction in order to minimize animal pain and distress when it cannot be eliminated.

Literature Search was conducted. Name of database searched:  ALTBIB    AltWeb    PubMed    Other (*Specify*) \_\_\_\_\_

Date of search: \_\_\_\_\_

Years covered by search: \_\_\_\_\_

Keywords or search strategies used: \_\_\_\_\_  
 The word "Alternative" **MUST** be used as one of the search terms.

The Animal Welfare Information Center of the National Agricultural Library was consulted.

Recognized experts in the field were consulted (*give name and affiliation*): \_\_\_\_\_

NAME	AFFILIATION

Other (*Explain*): \_\_\_\_\_

10.2 I certify that this proposed research is not unnecessarily duplicative and I have completed a database search

Name of database search: \_\_\_\_\_

Date of search: \_\_\_\_\_      Keywords or search strategies used (do not duplicate the keywords used in Section 10.1): \_\_\_\_\_

**ROBERT WOOD JOHNSON MEDICAL SCHOOL  
 INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE  
 ANIMAL USE APPLICATION**

11.1 Euthanasia followed by tissue harvest. (If only this procedure is involved with the protocol, describe below.)

11.2 Describe the non-surgical procedure, drug or cell injections, behavioral testing, blood sampling, etc.

11.3 Are you using an anesthetic, analgesic, or tranquilizer for a non-surgical procedure?  Yes  No

DRUG	DOSE(S) mg/Kg	ROUTE	FREQUENCY	PERSON ADMINISTERING

11.4 Are you collecting fluids?  Yes  No

FLUID/SITE	VOLUME PER SAMPLE	NUMBER OF SAMPLES	FREQUENCY OF SAMPLING SCHEDULE

11.5 List the substances or drugs you are administering (*Other than those listed in 11.3*).

DRUG/SUBSTANCE	DOSE(S) mg/Kg	ROUTE	FREQUENCY	DURATION OF TREATMENT

SECTION 11: NON-SURGICAL PROCEDURES



**ROBERT WOOD JOHNSON MEDICAL SCHOOL  
 INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE  
 ANIMAL USE APPLICATION**

SECTION 11: NON-SURGICAL PROCEDURES (CONTINUED)

11.6 Will adjuvants be used for antibody production? (Use of Freund's adjuvant **must** be justified, please use continuation pages).  Yes  No

	INITIAL	BOOSTERS
ANTIGEN:		
ADJUVANT:		
INJECTION ROUTE:		
INJECTION SITE:		
VOLUME/SITE:		
TOTAL VOLUME:		
INJECTION SCHEDULE:		

11.7 Will conscious animals will be restrained for observation?  Yes  No

NOTE: Short term (minutes) and skillful restrain of animals for purposes of observation, physical examination, or routine non-stressful experimental procedures need not be described.

FREQUENCY	DURATION	METHOD OF RESTRAINT

11.8 Does this protocol require the use of animals that have a natural or experimental disease or pathological condition?  Yes  No

If **yes**, specify how long animals will be maintained in that state and the methods to minimize or eliminate eventual pain or distress (e.g. euthanasia prior to onset of clinical signs). If death is the endpoint, justify and list the alternatives you have considered.

11.9 Could this condition ultimately cause death?  Yes  No

Will animals be euthanized at the onset of clinical signs of pain or distress?  Yes  No

If **yes**, describe the clinical signs that will be monitored, the frequency of monitoring, and the criteria for euthanization.

Tumors (See Policies #1, #3 and #5)       EAE (See Policy #7)       Other Diseases/Conditions (See Policies #3 and #5) Specify Below

11.10 Will animals be subjected to stressful physical conditions such as high intensity noise, water immersion, temperature extremes, or shock.  Yes  No

If **yes**, describe the stress, the level, and the frequency:

11.11 Will you be performing a procedure which may result in unalleviated pain or distress?  Yes  No

If **yes**, will you administer analgesics or tranquilization?  Yes  No

If **no**, please provide the scientific justification for omitting analgesia or tranquilization (See Section 9.0)

11.12 Will dietary manipulations be performed?  Yes  No

If **yes**, describe the dietary manipulation.

**ROBERT WOOD JOHNSON MEDICAL SCHOOL  
 INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE  
 ANIMAL USE APPLICATION**

**SECTION 12: SURGICAL PROCEDURES (NON-SURVIVAL)**

12.1 Will a non-survival procedure be performed on an anesthetized animal which will not awaken from anesthesia?  Yes  No  
 If **no**, proceed to section 13

12.2 List the person(s) performing the surgery:

12.3 Describe the procedure(s). (Please use continuation pages 13 & 14 if necessary):

12.4 Specify the following:

ANESTHETIC	DOSE(S) mg/Kg	ROUTE	PERSON ADMINISTERING

**SECTION 13: SURGICAL PROCEDURES**

Aseptic technique includes wearing of sterile surgical gloves, gowns, caps, and facemasks; and requires the use of sterile instruments and aseptic preparation of the surgical field. Survival surgery on rodents does not require a special facility, but should be performed using sterile instruments, surgical gloves, and aseptic procedures to prevent clinical infections. (For rodent aseptic surgery reference Policy #10):

13.1 Will the animals recover from surgery?  Yes  No

13.2 Will the animals be subject to more than one recovery surgery?  Yes  No

13.3 Person(s) performing the surgery:

13.4 Describe the surgical procedure(s). (Please use continuation pages 13 & 14 if necessary):

13.5 Describe the anesthesia, analgesia, or sedatives used for the surgical procedure(s) Reference Policy #10 & #11:

ANESTHETIC	DOSE(S) mg/Kg	ROUTE	PERSON ADMINISTERING

13.6 If surgery will be performed on non-rodent animals, it must be done in an approved surgical facility.  
 Name of Facility:  
 Location:

**ROBERT WOOD JOHNSON MEDICAL SCHOOL  
 INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE  
 ANIMAL USE APPLICATION**

NOTE: Postoperative care must be in accordance with current established veterinary, medical, and nursing procedures (Animal Welfare Act). Postoperative care includes: Observing the animal to ensure uneventful recovery, providing adequate care for surgical incisions, and maintaining appropriate medical records. Administration of analgesics, or other medications and supporting fluids, is done as required.  
 (Public Health Service Policy).

SECTION 14: POSTOPERATIVE CARE

14.1 Name the person(s) providing postoperative care:

NAME	NAME

14.2 Provide a postoperative care plan by including detailed answers to the following:

FREQUENCY OF POSTOPERATIVE EXAMS	ESTIMATED DURATION OF MONITORING

14.3 What complications could reasonably be expected?

If there are any complications indicate that you will notify Veterinary Staff and follow their recommendations.

14.4 List post-procedure analgesics / tranquilizers

MEDICATION	DOSE(S) mg/Kg	ROUTE	FREQUENCY	DURATION

SECTION 15: ANESTHETICS

15.0 A volatile anesthetic will be used (e.g. isoflurane)  Yes  No  
 If **yes**, how will this be vented?

What is the location of the venting equipment?

**ROBERT WOOD JOHNSON MEDICAL SCHOOL  
 INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE  
 ANIMAL USE APPLICATION**

<b>SECTION 16: EUTHANASIA</b>	16.0 Euthanasia, check or describe method(s) selected (Reference Policy #4):
	<input type="checkbox"/> CO2 Inhalation ( <i>using compressed gas <b>ONLY</b></i> ) followed by: <input type="checkbox"/> Pneumothorax <input type="checkbox"/> Cervical Dislocation <input type="checkbox"/> Exsanguination
	<input type="checkbox"/> Exsanguination under anesthesia ( <i>specify anesthesia and the physical method:</i>
	<input type="checkbox"/> Pentobarbital sodium 100 mg/Kg (for mice: 150 mg/Kg) <i>specify</i> : <input type="checkbox"/> I.V. <input type="checkbox"/> I.P. ( <b>Rodents ONLY</b> )
	<input type="checkbox"/> Neonates ( <i>E16 to P9</i> ): <input type="checkbox"/> Decapitation <input type="checkbox"/> Injectable Anesthetic O.D. <input type="checkbox"/> Cervical Dislocation
	<input type="checkbox"/> Other ( <i>specify and justify</i> ):
<b>LIST OF IACUC POLICIES</b>	This section lists all of the applicable policies that pertain to IACUC applications. They may be found at the UMDNJ-RWJMS web-site below: <a href="http://rwjms.umdj.edu/research/orsp/ra/iacuc_policies.html">http://rwjms.umdj.edu/research/orsp/ra/iacuc_policies.html</a>
	1). Tumor Endpoints
	2). Overcrowding
	3). Moribund Animals
	4). Euthanasia
	5). Body Weight
	6). Cell Line Usage
	7). EAE
	8). Mouse Tail Biopsy for Genetic Analysis
	9). Mouse Toeclip
	10). Guidelines for Rodent Survival Surgery
11). Expired Drugs Policy	
This section intentionally left blank.	

Please use this section for any additional information that could not be accommodated for in the application. (Text entry ONLY)

CONTINUATION PAGE:

Please use this section for any additional information that could not be accommodated for in the application. (Text entry ONLY)


CONTINUATION PAGE.

**ROBERT WOOD JOHNSON MEDICAL SCHOOL  
 INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE  
 ANIMAL USE APPLICATION**

SECTION 17: RESEARCH PERSONNEL	17.0 Designate the Research personnel to be contacted in case of emergency. (Prior to starting this project off campus contact information <b>must</b> be provided to the Vivarium office.): Please contact the Vivarium to provide confidential emergency contact information.		
	NAME:	EMAIL:	OFFICE PHONE:
	PI:		
	SECONDARY:		
	ALT (1):		
	ALT (2):		
	ALT (3):		
	ALT (4):		

SECTION 18: TRAINING AND EXPERIENCE	18.1 Describe your training and experience with the procedures and techniques to be used on the animals you will be using in this protocol. If you are inexperienced in these procedures or with this species, describe how you will obtain the appropriate training.

SECTION 18: TRAINING AND EXPERIENCE	18.2 List all individuals (including institution and title) who will be involved in the use of animals and indicate their experience with the specific experimental procedures and species employed in this application. If those individuals are inexperienced, indicate your plans for directly supervising them during training.			
	NAME	EMAIL	TITLE/INSTITUTION	TRAINING AND EXPERIENCE IN PROPOSED PROCEDURES

SECTION 19: SIGNATURES	Please indicate by check marks that you agree to all of the following statements:	
	<input type="checkbox"/> I declare that the information provided in the application is accurate to the best of my knowledge. <input type="checkbox"/> I will notify the IACUC in writing of any changes to the animal care and use protocol. The request for these changes must be forwarded promptly in writing to the IACUC for approval. Changes include: species; drugs administered; method of anesthesia, analgesia, or euthanasia; surgical procedures; procedures that cause pain or distress in conscious animals; use of prolonged restraint; use of hazardous substances that involves possible exposure of personnel or animals in the animal facility; or change in number of animals used or change in personnel (deletions/additions). If adding personnel you, as the PI, must attest that new personnel either have experience in the procedures to be performed in this study or if not that you will personally train the new personnel <input type="checkbox"/> I agree to abide by the provisions of the PHS/NIH Guide for the Care and Use of Laboratory Animals. As principal investigator, I assume responsibility for my co-investigators and other personnel involved in this project, with regard to their compliance with the above stated Policies. <input type="checkbox"/> All animal studies proposed in the grant application cited are described and covered by this animal care and use protocol. <input type="checkbox"/> All individuals listed in Section 18.2 have read and are familiar with the contents of this protocol.	
	A copy of this document is filed in the office of the Associate Dean for Research, RWJMS, Piscataway.	
	PRINCIPAL INVESTIGATOR: 	DATE: