**Biosafety Application Form**

**Appendix T - Research Involving Transgenic (Tg) Animal, Whole Animal and rDNA**

Does your work involve the use of animal (vertebrate, invertebrate (including arthropods) or animal derived material/cells?  Yes  No

If Yes, please check all that apply:

Vertebrate  Invertebrate  Tissue  Cells  Bodily Fluids

List Specie(s):

**Categories of Experiments and Research/Regulatory Compliance Criteria**

1. **Whole Animal Work** (select all that apply)

Creating Tg animals.

Breeding Tg animals.

Purchasing or transferring Tg animals.

Exposure of animals to or the use of animals in conjunction with biohazardous materials.

The use of animals for primary cell culture or tissue samples.

Other

1. **Animals with Biohazards**   **No - skip to section C.**

Does your research involve the use of biohazardous materials in **conjunction with live animals**?

Biohazardous materials which require registration may include, but are not limited to:

Please check all that apply:

Recombinant nucleic acid molecules (ex: plasmids with inserts, viral vectors, etc. or whole animals and plants with introduced recombinant materials)

Synthetic nucleic acid molecules, including those that are chemically or otherwise modified but can base pair with naturally occurring nucleic acid molecules

Cells, organisms, and viruses containing recombinant or synthesized nucleic acid molecules

Infectious agents (viral, bacterial, fungal, parasitic, or prion), to include RG 1, 2, and 3

Infected animal blood and/or tissues

Human blood, blood products, or fluids

Human derived cell lines or tissues

Live vaccines

**Creation or Breeding of Tg Animals**

Does your research involve either the creation of, or the breeding of (either propagation of single strain or breeding of new strains) transgenic animals?  Yes  **No - skip to section E.**

1. **Creation of Tg Animals**  **N/A - skip to section D.**

Please select all that apply to your research. PLEASE NOTE: Creation of transgenic animals refers to the alteration of the germ line.

Creation of Tg or knock out rodents.  Creation of Tg animals other than rodents.

Creation of recombinant or synthetic nucleic acid modified arthropods

1. **Creation of Tg Rodents** (select all that apply)

Introduced recombinant or synthetic nucleic acid is from a non-viral source. **(Section III-E-3)**

Introduced recombinant or synthetic nucleic acid is from a source <2/3 of the genome of a virus which affects eukaryotes or the animal contains sequences from viral vectors which do not lead to transmissible infection. **(Section III-E-3)**

Introduced recombinant or synthetic nucleic acid comes from >2/3 of the genome of a virus which affects eukaryotes or from RG2, 3 or restricted agents. **(Section III-D-4-b)**

1. **Creation of transgenic animals other than rodents** (select all that apply)

Introduced recombinant or synthetic nucleic acid is from a non-viral source. **(Section III-D-4-a)**

Introduced recombinant or synthetic nucleic acid is from a source <2/3 of the genome of a virus which affects eukaryotes or the animal contains sequences from viral vectors which do not lead to transmissible infection. **(Section III-D-4-a)**

The introduced recombinant or synthetic nucleic acid comes from >2/3 of the genome of a virus which affects eukaryotes or from RG2, 3 or restricted agents. **(Section III-D-4-b)**

1. **Creation of recombinant nucleic acid modified arthropods**

**Introduced recombinant or synthetic nucleic acid is from:** (select all that apply)

A non-viral source. **(Section III-D-4-a)**

A source <2/3 of the genome of a virus which affects eukaryotes or the animal contains sequences from viral vectors which do not lead to transmissible infection. **(Section III-D-4-a)**

>2/3 of the genome of a virus which affects eukaryotes or from RG2, 3, 4 or restricted agents. **(Section III-D-4-b)**

**D. Breeding of Tg Animals** (select all that apply)  **N/A - skip to section E.**

Breeding of Tg or knock out rodents from one strain (propagation/colony maintenance).

Breeding of Tg rodents or knock out rodents from two strains (generating a new strain).

Breeding of Tg animals other than rodents. **(Section III-D-4)**

Breeding of recombinant nucleic acid modified arthropods.

1. **Breeding of Tg or Knock-Out Rodents from One Strain (propagation)** (select all that apply)

Introduced recombinant or synthetic nucleic acid came from a non-viral source. (**Section III-F)**

Introduced recombinant or synthetic nucleic acid came from a source <2/3 of the genome of a virus which affects eukaryotes or the animals contains sequences from viral vectors which do not lead to transmissible infection. **(Section III-F)**

The introduced recombinant or synthetic nucleic acid came from >2/3 of the genome of a virus which affects eukaryotes or is from RG2, 3 or restricted agents. **(Section III-D-4-b)**

1. **Breeding of Tg of Knockout Rodents from Two Strains (generation of new strain)** (select all that apply)

Either of the parental rodents must be housed under ABSL2 or higher. **(Section III-E-3)**

For either of the parental rodents there is incorporation of more than one-half of the genome of an exogenous eukaryotic virus from a single family of viruses. **(Section III-E-3)**

For either of the parental rodents there is incorporation of a transgene that is under the control of a gammaretroviral long terminal repeat (LTR). **(Section III-E-3)**

The Tg rodent 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. **(Section III-E-3)**

The resulting genome consists of >2/3 of the genome of a virus which affects eukaryotes or introduced nucleic acids are from RG2, 3, 4 or restricted agents. **(Section III-D-4-b)**

None of these are applicable. **(Section III-F-8 & App C-VIII)**

1. **Breeding of Recombinant or Synthetic Nucleic Acid Modified Arthropods**

Please select any that apply to the referred to arthropods:

The resulting genome did not originate from a viral source. **(Section III-F)**

The resulting genome consists of <2/3 of the genome of a virus which affects eukaryotes or the animals contains sequences from viral vectors which do not lead to transmissible infection. **(Section III-F)**

The resulting genome consists of >2/3 of the genome of a virus which affects eukaryotes or introduced nucleic acids are from RG2, 3, 4 or restricted agents. **(Section III-D-4-b)**

**E. Purchase or Transfer of Tg Animals** (select all that apply) **N/A - skip to section F.**

Purchase or transfer of Tg rodents. **(App C-VII) (see E.-1 below)**

Purchase or transfer of Tg animals other than rodents. **(Section III-D-4)**

Purchase or transfer of recombinant or synthetic nucleic acid modified arthropods. **(Section III-D-4)**

**E.-1 Purchase or Transfer of Tg Rodents**  **N/A - skip to section F.**

**Source of animals:** (select all that apply)

Created in the UCD Transgenic Core.  Vendor (please specify):

A non-commercial source (please specify):

**Containment levels for animals:** (select all that apply)

Purchased or transferred Tg rodents are for experiments that require ABSL1. **(App C-VII)**

Purchased or transferred Tg rodents are for experiments that require ABSL2 or higher. **(Section III-D-4)**

1. **Experiments with Animals – Transgenic or Otherwise** (select all that apply)  **N/A**

Tg rodents.  Recombinant or synthetic nucleic acid modified arthropods

associated w/plants.

Tg animals other than rodents.  Recombinant or synthetic nucleic acid modified arthropods not

associated w/plants.

1. **Experiments with Tg Rodents** (select all that apply)

**Does not** involve the use of recombinant or synthetic nucleic acids **and** can be conducted at ABSL1. **(App C-VII)**

Involves the use of recombinant or synthetic nucleic acids administered to Tg rodents and requires ABSL1. **(Section III-D-4-a)**

Involves the use of recombinant or synthetic nucleic acids administered to Tg rodents and requires ABSL2 or higher. (**Section III-D-4-b)**

Requires ABSL2/BSL2 containment and **does not** involve the administration of recombinant or synthetic nucleic acids to Tg rodents. (**Section III-D-4-b)**

1. **Experiments with Tg Animals (other than rodents)** (select all that apply)

Tg animal(s) is housed at ABSL1. (**Section III-D-4-a)**

Tg animal(s) is housed at ABSL2 or higher. (**Section III-D-4-b)**

1. **Experiments with Recombinant or Synthetic Nucleic Acid Modified Arthropods Assoc. w/Plants**

Please select any that apply to the experiments with these animals:

Tg arthropods(s) is housed at ABSL1. (**Section III-E-2-b-(5))**

Tg arthropods(s) is housed at ABSL2 or higher. (**Section III-E-2)**

1. **Experiments with Recombinant or Synthetic Nucleic Acid Modified Arthropods Not Assoc. w/ Plants**

Please select any that apply to the experiments with these animals:

Experiment(s) w/Tg arthropods(s) is housed at ABSL1. **(Section III-D-4-a)**

Experiment(s) w/Tg arthropods(s) is housed at ABSL2 or higher. **(Section III-D-4-b)**

1. **Experiments with Recombinant or Synthetic Nucleic Acid in an Animal (transgenic or otherwise)**

Please select any that apply to your research.

Recombinant or synthetic nucleic acid modified microbes (virus that is only capable of vertical transmission) in animals. **(Section III-D-4-a)**

**RG2** recombinant or synthetic nucleic acid modified microbes in animals. **(Section III-D-4-b)**

**RG3** recombinant or synthetic nucleic acid modified microbes in animals. **(Section III-D-4-b)**

Recombinant or synthetic nucleic acid modified **restricted agent** in animals. **(Sections V-A, V-G, V-L)**

Recombinant or synthetic nucleic acid modified **animal pathogens** in animals. **(Section III-D-4)**

Introduction of <2/3 of the genome of a virus affecting eukaryotes into a non-human vertebrate or invertebrate. **(Section III-D-4-a)**

Propagation of animals containing viral vector sequences not leading to transmissible infection. **(Section III-D-4-a)**