**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)**