

Guidance for completing the NIH Recombinant & Synthetic Nucleic Acid Research registration for Insect Labs

All labs at Penn working with arthropods containing or expressing recombinant & synthetic nucleic acid molecules (transgenic) must have them registered with the IBC. This includes flies, ants, and other insects.

Training: All staff involved with creating, crossing, or working with transgenic insects must be listed on the registration and have completed “Recombinant DNA Training” found online in KnowledgeLink.

Registration: Register all crossing, creation, and use of transgenic insects in the **Penn IBC Electronic Registration System** (PIERS) <https://apps.research.upenn.edu>.

Description: Include the following information in your description of proposed project description in PIERS.

- Focus of research study involving transgenic insects
- Purpose and function of introduced nucleic acid molecules (genes/proteins) in the insect
- The vector or vehicle used to introduce the recombinant or synthetic molecules into the insect (for CREATING transgenic insects)
- Source of transgenic animals (created in lab, created elsewhere, purchased, transferred from collaborator, crossed)
- Containment method of the insects during the research
- Method of disposal of killed/dead insects, such as chemical or physical disposal method and where the waste will be collected (biohazard or chemical waste)

Crossing: Select “Crossing and/or Using Transgenic Animals” in PIERS. List the insect species (Genus/species) being crossed under the “Transgenic Animals” section. For fly labs, if many genes will be used, you may upload a list as an additional document on PIERS.

Creating: Select “Creating Transgenic Animals” in PIERS. Under the “Creating Animals” section, select type of animal, enter name of new strain, identify who is making the insect and the method of gene transfer.

Use of existing transgenic insects (purchased): Select “Crossing and/or Using Transgenic Animals” in PIERS. List the insect species (Genus/species) being registered under the “Transgenic Animals” section. Mention “Use of” in the title of the registration (i.e. Use of XYZ transgenic animals in the study of ...). List transgenic strains being use or attach a list of genes/ fly stocks.