

QUICK REFERENCE: DISPOSAL OF TRANSGENIC ANIMALS

Animal Research Subject to NIH Guidelines

All creation, crossing, and use of **TRANSGENIC ANIMALS** is subject to the **NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules** (rsNA Molecules) and requires review and approval by the Institutional Biosafety Committee (IBC). rsNA includes molecules that are constructed by joining natural or synthetic nucleic acid segments. Plasmids and CRISPR/Cas9 are included among common examples of tools used to create transgenic animals.

What are TRANSGENIC ANIMALS?

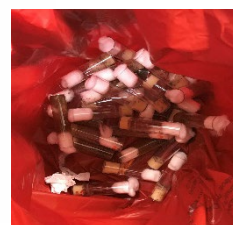
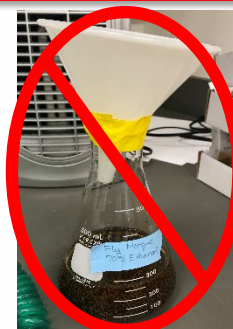
TRANSGENIC ANIMALS are animals possessing a modified genome. These animals may be purchased through a vendor, received from a collaborator, custom-made by a core or created in your lab. **TRANSGENIC ANIMALS** used at Penn include but are not limited to insects, nematodes, fish, amphibians, and rodents.

NIH Guidelines must be followed when disposing of dead transgenic animals or animals treated with rsNA

As required by the *NIH Guidelines*, all dead **TRANSGENIC ANIMALS** or animals treated with rsNA must be disposed of as biohazardous waste to prevent the release of such animals or rsNA material into the environment. Disposal of any **TRANSGENIC ANIMAL** or animal part in the regular trash or sewer is not allowed!

DISPOSAL POLICY FOR TRANSGENIC ANIMALS

- **ARTHROPODS** (flies, mosquitos, ants, and other insects)
 - Dispose of insects captured and killed in ethanol or oil as chemical waste. Cap waste when not in use. Request a pick-up using the online Chemical Waste Pickup Request form.
 - Place dead insects (free of chemicals) in a biohazard bag labeled “Do Not Autoclave” and leave in designated infectious waste collection bins.
- **NEMATODES** (*C. elegans*, *Strongyloides spp.*, and others)
 - Autoclave culture dishes with agar and worms. Dispose of autoclaved dishes in designated infectious waste containers.
- **FISH & AMPHIBIANS** (Zebra fish and frogs)
 - Place dead adult fish or amphibian in a biohazard bag labeled “Do Not Autoclave” and leave in designated “mourage” spaces within ULAR facility.
 - Wash bleach-inactivated fish or amphibian embryos down the drain.
- **OTHER ANIMALS** (mice, rats, and other macrofauna)
 - Place dead animals in a biohazard bag and leave in designated “mourage” spaces within ULAR facility.



All transgenic animals must be rendered non-viable prior to disposal. Alternate methods of disposal must be approved by the Penn IBC. Contact EHRS for details: ehrs@ehrs.upenn.edu or 215.898.4453.