NU–IACUC POLICY

Northeastern University Institutional Animal Care and Use Committee

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| Policy on Genetically Engineered Animals, the Use of Recominant Materials, & The Institutional Biosafety Committee (IBC) |

*Re-Approved: 02/08/2022*

Introduction

The purpose of this policy is to establish communication between the IACUC and the IBC when it comes to following NIH Policy on use, generation, and breeding of genetically modified animals.

Scope

All Principal Investigators and research staff must comply with this policy independent of the research funding source, as required by the [National Institutes of Health (NIH) Guidelines for Research Involving Recombinant DNA Molecules](http://osp.od.nih.gov/office-biotechnology-activities/biosafety/nih-guidelines). All animal work must be approved by IACUC prior to initiation. If the work involves genetically engineered vertebrate animals, including generation of new mutants or subsequent breeding, then the IBC must also give approval before the work may commence.

**Requirements:**

Exempt form IBC Review and Approval:

* Breeding transgenic or knockout rodents from one strain (propagation/colony maintenance) in BL1 containment.
* Breeding of knockouts (propagation) in BL1 containment.
* Breeding transgenic rodents from two strains (generating a new strain) providing neither parental rodent contains any of the following genetic modifications:
  + Incorporation of more than one-half of the genome of an exogenous eukaryotic virus form a single family of viruses.
  + Incorporation of a transgene that is under control of a gammaretroviral long terminal repeat (LTR).
  + The rodent that results from the breeding is not expected to contain more than one-half of an exogenous viral genome from a single family of viruses.
* Experiments with transgenic/knockout rodents in BL1 containment that do not involve the use of any recombinant DNA.
* Purchase or transfer of transgenic rodents that require BL1 containment.

Not Exempt form IBC Review and Approval:

* Creation of transgenic/knockout rodents.
* All experiments or housing of transgenic rodents at BL2 or higher, including breeding.
* Breeding transgenic or knockout rodents from two strains (generating a new strain) if the parental rodent contains any of the following genetic modifications:
  + Incorporation of more than one-half of the genome of an exogenous eukaryotic virus from a single family of viruses.
  + Incorporation of a transgene that is under control of a gammaretroviral long terminal repeat (LTR)
  + The rodent that results form the breeding is not expected to contain more that one-half of an exogenous viral genome from a single family of viruses.
* All experiments involving the use of recombinant or synthetic nucleic acids (e.g. rDNA, rRNA, siRNA)
* All experiments where two knockout strains are bred, potentially generating a new strain of mice.
* All experiments involving the use of transgenic rodents requiring BL2 or higher containment or the use of other transgenic animals at any biosafety level.
* Purchase or transfer of transgenic rodents requiring BL2 or higher containment or other transgenic animals at any biosafety level.

No work with these animals may begin until approval has been received from both the IACUC and the IBC. Contact the Biosafety Program Manager at [biosafety@neu.edu](mailto:biosafety@neu.edu) with question about the IBC approval process.

Procedure for IBC Approval of research with animals in the Non-Exempt Category:

1. Obtain IACUC Approval for the use of the animals.
2. Submit an Animal Hazardous Materials Addendum (AHA) and have it reviewed and approved by both the IACUC and the IBC. (In rare instances, the project may need to be referred to the NIH Office of Biotechnology Affairs (OBA) for NIH review, i.e., use of a modified animal that may pose a threat to agriculture (if released).