# Genetically Modified (GM) Animals and Plants

## Do I Need IBC Approval?

<table>
<thead>
<tr>
<th>Activity (not an inclusive list)</th>
<th>IBC Approval Required</th>
<th>IBC Approval Required</th>
<th>No IBC Approval Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>full committee review at a monthly meeting</td>
<td>review by IBC Chair on behalf of committee</td>
<td></td>
</tr>
</tbody>
</table>

### GM Rodents

- **Purchasing an existing line** of GM rodents from a commercial vendor or repository (e.g. Jackson Labs) that can be housed at BL-1 containment
  - X

- **Purchasing an existing line** of GM rodents from a commercial vendor or repository (e.g. Jackson Labs) requiring BL-2 (or higher) containment
  - X

- The transfer of GM rodents (from one PI to another) that can be housed at BL-1 containment
  - X

- The transfer of GM rodents (from one PI to another) requiring BL-2 (or higher) containment
  - X

- Breeding rodents from one strain (propagation/colony maintenance) at BL-1 containment
  - X

- Breeding rodents from one strain (propagation/colony maintenance) requiring BL-2 (or higher) containment
  - X

- Breeding two GM rodents to create a new GM strain that can be housed at BL-1 containment (see Note A)
  - X

- Breeding of a GM rodent and a non-GM rodent to create a new GM strain that can be housed at BL-1 containment (see Note A)
  - X

- Breeding rodents from two different strains to create a new GM strain requiring BL-2 (or higher) containment
  - X

- Creation of new GM rodents as a fee for service (e.g. TIGM, Biocytogen, Cyagen, Taconic Biosciences, Applied StemCell, etc.) (see Note B)
  - X

### GM Animals (other than rodents, including insects)

- Purchase, transfer, breeding and creation of GM animals
  - X

### GM Plants

- Experiments involving nucleic acid molecule-modified whole plants
  - X

- Experiments involving recombinant or synthetic nucleic acid molecule-modified organisms associated with whole plants
  - X

- Creation of modified plants using biolistic bombardment
  - X

- GM plants created by Agrobacterium-mediated transformation
  - X

**Note A:** No IBC approval needed if:
1. Both parental rodents can be housed at BSL-1 containment and
2. Neither parental transgenic rodent contains the following genetic modifications:
   a. Incorporation of more than one-half of the genome of an exogenous eukaryotic virus from a single family of viruses
   b. Incorporation of a transgene that is under the control of a gammaretroviral long terminal repeat (LTR) and
   c. The transgenic 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

**Note B:** Either the company OR the researcher must have IBC approval, prior to the generation of the new rodent.