OHSU Policy on Protocol Revisions in Recombinant DNA, Synthetic Nucleic Acid Molecule, Infectious Agent, and Toxin Research

As stated in the NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules Section IV-B-7-a-(1), the Institutional Biosafety Committee (IBC) must review all modifications to recombinant DNA (rDNA) or synthetic nucleic acid molecule research prior to initiation of those revised experiments.

The IBC considers certain changes (Level 1 - see table below) to previously registered and approved projects to be “pre-approved.” Such changes need only be reported with the next submission to the IBC under that registration (e.g., next annual renewal).

Other changes require IBC approval in advance. If an investigator fails to seek IBC approval for a change to a project registration that requires advance approval, this is considered a protocol deviation and will be reviewed as such under that policy. Note that any change to a select agent project or human gene transfer project needs prior approval.

All investigators with approved IBC projects must use the Project Modification form to submit proposed changes for review and approval. The table below outlines the types of revisions that are pre-approved (Level 1), those that require advanced approval but can be approved administratively (Level 2), and those that require review by the full committee (Level 3). All administrative approvals will be reported to the committee at the next meeting. The IBC Chair(s) may send any change that normally qualifies as an administrative change to the committee for review if determined necessary. If you have a proposed revision and are not sure which category it falls under, please contact the IBC for assistance.

<table>
<thead>
<tr>
<th>Proposed Change</th>
<th>Level 1 Pre-approved</th>
<th>Level 2 Administrative Review</th>
<th>Level 3 Committee Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>Addition or removal of personnel on the protocol</td>
<td>• Change in PI, if new PI is listed as personnel on the existing IBC protocol</td>
<td>Change in PI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Adding another PI to a protocol</td>
<td></td>
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<tr>
<td>Grants</td>
<td>Addition or removal of grants on the protocol</td>
<td>A grant can be added administratively without submitting a project modification form. PI to email grant title, PPQ#, &amp; IBC# to <a href="mailto:ibc@ohsu.edu">ibc@ohsu.edu</a></td>
<td></td>
</tr>
<tr>
<td>Containment area</td>
<td>Change in containment area if biosafety level maintained (eg new or additional lab space)</td>
<td>Investigator proposed decrease in containment level or work practice</td>
<td></td>
</tr>
<tr>
<td>New gene insert or DNA source</td>
<td>• Gene of same category (eg RFP instead of GFP)</td>
<td>• Gene of different category</td>
<td>• New gene insert from a risk group IV agent or Select Agent</td>
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<tr>
<td></td>
<td>• New DNA source (eg rat DNA instead of mouse DNA as source of gene to be expressed)</td>
<td></td>
<td>• New gene insert that may be toxic, oncogenic, increases virulence or pathogenicity, or alters immunogenicity</td>
</tr>
</tbody>
</table>
### Non-recombinant infectious agent

New non-recombinant risk group II agent

New non-recombinant risk group III agent

### Toxins

New biologically derived toxin with an LD50 <100ng/kg in vertebrates

- Use of toxin in an amount that requires Select Agent registration
- New rDNA or synthetic nucleic acid molecule expressing a toxin with an LD50 <100 ng/kg in vertebrates in cells, organisms or viruses

### Recombinant vector or agent

New BSL-1 plasmid vector

- Modification to previously approved vector system or recombinant infectious agent that does not increase risk
- New BSL-1 viral vector system

- New BSL-2 or higher recombinant agent or viral vector system
- New recombinant Select Agent
- Modification to previously approved vector system or recombinant infectious agent that may increase risk

### Synthetic nucleic acid molecule

- Addition of a synthetic nucleic acid molecule equivalent to an rDNA molecule on the protocol
- Modification to existing synthetic nucleic acid molecule that does not increase risk

- New synthetic nucleic acid molecule that would require BSL-2 or higher containment and work practices
- Synthetic nucleic acid molecule that may increase risk

### Human Gene Transfer

Modifications to existing studies that do not increase biohazard risk and/or are unrelated to the gene transfer component

- New human gene transfer studies
- Modifications that may increase risk

### Changes in *in vivo* work

New transgenic strains when previously approved for work with the species (eg zebrafish or transgenic flies)*

- Creation of a new transgenic rodent at the OHSU Transgenic Core
- Change in route of administration

- New *in vivo* use where previously only approved for *in vitro* work
- New host species outside mice or rats
- Change in route of administration or dosing that may increase risk

### Host cells

New host cells that are not known to contain a human pathogen

New host cells that are known to contain a risk group II agent (eg cells known to be infected with hepatitis C)

New host cells that are known to contain a risk group III agent, (eg cells known to be infected with HIV)

*Most transgenic rodents do not require IBC registration. Please refer to the [OHSU IBC Transgenic Animal Policy](#) for addition information and exceptions.*