Appalachian State University Research Protections and Institutional Biosafety Council
Standard Operating Procedures

SOP #3
Revision # 0

TITLE: Training Requirements

Date Effective: Revision Date:

Approved By: IBC Chair
Signature: Jennifer P. Cecile
Date: 9/12/16

Approved By: RP Director
Signature: [Signature]
Date: 9/12/16

PURPOSE
To describe the training requirements for any person using recombinant nucleic acids at Appalachian State University for teaching, research and demonstration.

GENERAL DESCRIPTION
All personnel involved with the use of recombinant nucleic acids must be adequately educated, trained, and/or qualified in basic principles of laboratory science to help ensure high-quality science and wellbeing. Appalachian requires and provides levels of training to support research.

RESPONSIBILITY
Unless otherwise excepted by the provisions hereof, this procedure shall apply all persons who perform research involving recombinant DNA molecules, as well as those whose job duties involve interactions with such persons in the course of their research that is conducted on behalf of the University or by an agent of the University. It is applicable to activities that occur in University facilities as well as other locations whenever projects involve University funding, faculty scholarship or staff/student/agent effort as part of University activities. The provisions of this document shall be interpreted and applied in conformity with Federal, State, and UNC System Policies and Procedures.

All users not listed as Principal Investigator (PI), instructor, personnel or research student, etc. on the application will received training by the PI or instructor. PIs are provided support and guidelines for training.

PROCEDURES
All personnel listed on the Application must complete the required online training by the Collaborative Institutional Training Initiative (CITI) and applicable AsULearn quizzes. The mandatory module dependent on the type of application and the biosafety level of the work. Training instructions are maintained on the IBC website.

<table>
<thead>
<tr>
<th>Category</th>
<th>Required CITI Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration with IBC (III)</td>
<td>• Training for Investigators/NIH Recombinant DNA Guidelines or Training for Investigators, Staff and Students Handling Biohazards, AND NIH Recombinant DNA Guidelines</td>
</tr>
<tr>
<td>Exempt, no transgenic plants or animals</td>
<td>• Training for Investigators/NIH Recombinant DNA Guidelines or Training for Investigators, Staff and Students Handling Biohazards, AND NIH Recombinant DNA Guidelines</td>
</tr>
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</tr>
<tr>
<td>Non-exempt, BL1, no transgenic organism</td>
<td>• Training for Investigators/NIH Recombinant DNA Guidelines or Training for Investigators, Staff and Students Handling Biohazards, AND NIH Recombinant DNA Guidelines</td>
</tr>
<tr>
<td>Non-exempt, BL1, with transgenic organism</td>
<td>• Training for Investigators/NIH Recombinant DNA Guidelines or Training for Investigators, Staff and Students Handling Biohazards, AND NIH Recombinant DNA Guidelines</td>
</tr>
<tr>
<td>BL2 Personnel</td>
<td>• Combined AppState IBC training CITI course or Training for Investigators, Staff and Students Handling Biohazards, AND NIH Recombinant DNA Guidelines</td>
</tr>
<tr>
<td>BL2 Ancillary</td>
<td>• AsULearn Biosafety Training Quiz completion</td>
</tr>
</tbody>
</table>
The use of Personal Protective Equipment training is provided by the PI.

Environmental Health, Safety, and Emergency Management may require specific safety training; such as blood borne pathogens, OSHA training, etc.

The IBC maintains an internal site on AsULearn that provides updates and links to new information.

The IBC has the authority and responsibility to require any additional or repeat training for any investigator, student or personnel handling recombinant nucleic acids.

**MONITORING EFFECTIVENESS OF TRAINING**
The IBC is responsible for monitoring the effectiveness of training programs. This primarily done by observation:
- The Administrator will observe online training completion.
- PI's or instructors observe procedures done by students or inexperienced personnel.

**SUPPORTING PROCEDURES AND PROCESSES**
Appalachian Policy #212, *Use of Recombinant DNA in Research and Teaching Laboratories*
SOP 1, Protocol Review
SOP 2, Continuing Review

**RESOURCES**

- Biosafety Guidance
- NIH Guidelines for Research Involving Recombinant DNA Molecules (NIH Guidelines)
- CDC and HHS Select Agents and Toxins List
- The CDC Publication: Biosafety in Microbiological and Biomedical Laboratories (BMBL) 5th edition
- Guidelines for Biosafety Laboratory Competency