

# Environmental Health & Safety

## Standard Operating Procedure

### Biological Safety

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| Date:<br>01/10/14 | Annual<br>Review | Yes: X | No: _____ | Date of Review: 01/10/14<br>Reviewer: Thomas Schultz |
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Affected Department: Environmental Health and Safety

Description: This standard operating procedure is designed to outline the basic program requirements for biological safety in CMU laboratories. In particular, it outlines a program that complies with the Biosafety in Microbiological and Biomedical Laboratories (BMBL) and the NIH Guidelines for Research Involving Recombinant DNA Molecules (NIH Guidelines). Though these documents are advisory in nature, governing agencies commonly mandate compliance to the standards. Facilities that conduct research with NIH funding are required to abide by the NIH guidelines. Because CMU has research laboratories supported by NIH funding, all laboratories using pathogenic, biohazardous, or genetically altered organisms must comply with these Guidelines.

Procedure:

1. New research proposals at CMU must be submitted to the Office of Research and Sponsored Programs (ORSP). ORSP will notify the appropriate committees for project review prior to initiation of the proposed research. The Institutional Biosafety Committee (IBC) is charged with review and approval of any research that involves recombinant DNA or work with potentially biohazardous agents.
2. A comprehensive risk assessment will be completed by the Biological Safety Officer (BSO) for all new projects submitted to the IBC. Lab facilities, personnel, operating procedures and the biological agent hazards will be carefully evaluated, the risk assessed, and the findings presented to the IBC for consideration.
3. Researchers must notify the BSO of any significant protocol changes to previously approved research. The BSO will determine if the changes require reevaluation by the IBC.
4. Laboratory inspections are conducted periodically for any laboratories requiring Biological Safety Level II (BSLII) or higher. Results of the inspections are discussed with the principal investigator for corrective action as needed. Deficiencies are reported to the IBC for reevaluation of the research project. If the IBC decides to suspend the research, ORSP will be notified of the IBC findings and will determine the fate of the project.
5. Risk assessment of BSLII laboratories or higher may warrant the use of Biological Safety Cabinets for certain operations. Qualified service technicians inspect the Biological Safety Cabinets annually and certify the units are performing to manufacturer's specifications.
6. Principal investigators that work with BSLII agents or higher must attend a Biological Safety Training Program. As the lab supervisor, they must have a walk through orientation of their lab space with any lab personnel and complete the safety training form with their staff and student assistants.