



SOUTHERN ILLINOIS UNIVERSITY CARBONDALE

Institutional Biosafety Committee

IBC Policy #	240
Policy Title	Responsibilities of the Principal Investigator
Date Approved	February 19, 2026
Date Reviewed	
Scope	This policy applies to research under the oversight of the Southern Illinois University Institutional Biosafety Committee.

Policy Purpose

This policy describes the responsibilities of the Principal Investigator (PI) in relation to research conducted with recombinant or synthetic nucleic acid molecules, and human, animal, or plant pathogens.

Policy Definitions

BMBL refers to the current edition of the *Biosafety in Microbiological and Biomedical Laboratories*, published by the CDC. The BMBL provides recommended guidance and best practices for the safe handling of biological hazards in laboratory settings.

MUA refers to a Memorandum of Understanding and Agreement, which is a document submitted to the IBC for review and approval of work with r/sNAs or pathogenic microorganisms.

NIH Guidelines means the *NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules*; the set of regulations detailing safety practices and containment procedures for research involving recombinant or synthetic nucleic acid molecules, including the creation and use of organisms and viruses containing recombinant or synthetic nucleic acid molecules.

Principal Investigator refers to the tenured/track faculty member, research faculty member, project/program director, associate director, or senior scientist with a 50% or greater appointment who will be the primary supervisor of work with r/sNAs.

r/sNA refers to recombinant or synthetic nucleic acid molecules. These molecules are subject to the federal *NIH Guidelines* cited above.

Policy Statement

All investigators must adhere to the regulations listed in the NIH Guidelines, the best practices listed in the BMBL, all applicable federal regulations, and relevant institutional policies. The Principal Investigator (PI) is also charged with the responsibility of ensuring compliance of the laboratory personnel working on their projects.

General Procedures

The PI is responsible for ensuring any research they conduct is in full compliance with the NIH Guidelines, the BMBL, Federal and State law, and approved Institutional Biosafety Committee (IBC)

protocols and policies. PI responsibilities include:

- The PI will not initiate or modify any work which requires IBC oversight prior to approval by the IBC.
- The PI will determine whether their experiments are subject to the NIH Guidelines, Section III E, which describe experiments that are subject to IBC oversight. The PI must engage the IBC Chair and/or the BSO if they have questions or doubt on whether their project requires IBC oversight.
- The PI will be the primary author of the Memorandum or Memoranda of Understanding and Agreement (MUA). That document will describe the proposed activities with r/sNAs or pathogens and include other information as specified in Policy 300.
- The PI will submit the MUA to the IBC for review and approval as described in Policy 300.
- The PI will be adequately trained in good microbiological techniques as described in Policy 350 and ensure that laboratory personnel are adequately trained prior to allowing them to work with r/sNAs or pathogens.
- The PI will ensure that IBC guidelines regarding emergency unintentional release or personnel contamination are followed in the laboratory, and that personnel are adequately trained and informed of these guidelines.
- The PI will consult with the appropriate institutional offices, which may include CEHS, ORC, and/or Export Control, regarding requirements for shipping r/sNAs or pathogens, to ensure compliance with Appendix H of the NIH Guidelines.
- The PI will obtain IBC approval prior to initiating a petition to NIH for proposing exemptions from the NIH Guidelines.
- The PI will obtain IBC approval prior to initiating a petition to NIH for approval to conduct experiments specified in Sections III-A-1 (Major Actions under the NIH Guidelines) or Section III-B (Experiments that Require NIH OSP and Institutional Biosafety Committee Approval Before Initiation).
- The PI will obtain IBC approval prior to initiating a petition to NIH for determination of containment for experiments requiring a case-by-case review.
- The PI will obtain IBC approval prior to petitioning NIH for determination of containment for experiments not covered by the NIH Guidelines.
- The PI will make the approved MUA available to laboratory staff to inform them of the potential biohazards and necessary precautions. The PI will instruct and train the laboratory staff in the practices and techniques to ensure safety, and in the procedures for dealing with accidents. If applicable, the PI will inform the laboratory staff of the reasons and provisions for any precautionary medical practices advised or requested, such as vaccines or serum banking.
- The PI will investigate and report any significant problems in writing to the BSO and the IBC pertaining to the operations and implementation of containment practices and procedures. The PI must also inform the applicable facility director of any significant problems occurring

in the greenhouses, animal facilities, or other such facilities.

- The PI will monitor the integrity of the physical containment, such as biosafety cabinets, and the biological containment, such as the purity and genotypic and phenotypic characteristics. Biosafety cabinets will be recertified annually in keeping with best practices.

References

Centers for Disease Control & National Institutes of Health. (2020). Biosafety in microbiological and biomedical laboratories (6th ed). https://www.cdc.gov/labs/pdf/SF_19_308133-A_BMBL6_00-BOOK-WEB-final-3.pdf

National Institutes of Health. (2024). *NIH guidelines for research involving recombinant or synthetic nucleic acid molecules*. https://osp.od.nih.gov/wp-content/uploads/NIH_Guidelines.pdf