

**Washington University in St. Louis**  
**Institutional Biological & Chemical Safety Committee (IBC)**

**Principal Investigator Responsibilities**

Principal Investigators (PIs) are responsible for full compliance with the NIH Guidelines during the conduct of research involving recombinant or synthetic nucleic acid molecules, potentially infectious materials, or hazardous chemicals. As part of this general responsibility, the PI must:

- Be adequately trained in current, safe microbiological and chemical laboratory techniques
- Provide laboratory workers with protocols describing potential hazards and necessary precautions
- Instruct and train laboratory workers in:
  - the practices and techniques required to ensure safety, and
  - the procedures for dealing with accidents and exposures
- Complete, and ensure that all laboratory workers complete, annual EH&S laboratory safety training and lab-specific safety training
- Inform the laboratory staff and any other potentially exposed individuals (e.g. animal caretakers) of the reasons and provisions for any precautionary medical practices advised or requested (e.g., vaccinations or serum collection).
- Supervise laboratory staff to ensure that the required safety practices and techniques are employed.
- Correct work errors and conditions that may result in the release of recombinant or synthetic nucleic acids, potentially infectious materials, or hazardous chemicals
- Ensure adequate function and certification of physical containment equipment (e.g., biological safety cabinets, chemical fume hoods)
- Ensure the integrity of biological containment mechanisms (e.g., host-vector systems that preclude survival of the agent outside the laboratory, replication defects in viral vector systems)
- Comply with permit and shipping requirements for recombinant or synthetic nucleic acid molecules, potentially infectious materials, or hazardous chemicals
- Adhere to IBC-approved emergency plans for handling accidental spills and personnel contamination
- Report all potential exposures to Occupational Health
- Report all accidents and potential exposures to Environmental Health & Safety
- Notify animal care staff of any potential hazards present (toxic metabolites, infectious agents, etc.) and of the appropriate measures to minimize potential exposures (personal protective equipment, vaccines, etc.)

Before initiating research subject to the NIH Guidelines, the PI must:

- Determine whether the research is subject to Section III-A, III-B, III-C, III-D, or III-E of the NIH Guidelines
- Propose physical and biological containment levels in accordance with the NIH Guidelines when registering research with the IBC
- Propose appropriate laboratory practices and laboratory techniques to be used for the research
- Submit a research protocol to the IBC for review and approval – amend and renew as necessary
- Obtain IBC approval before initiating research subject to the NIH Guidelines

Failure to comply with these responsibilities may lead to notifications of non-compliance to WU compliance offices (Human Research Protection Office, Animal Studies Committee, University Compliance Office, etc.), local, federal, or state regulatory agencies, or NIH or other granting agencies; suspension of approval to work with items described in the IBC protocol; delays in grant certification statements; or other consequences as determined by the specific circumstances.

Adapted from NIH Office of Biotechnology [“Investigator Responsibilities under the NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules”](#)

Adopted September 10, 2014