Institutional Biosafety Committee
Application for approval of activities involving recombinant DNA

Safety Precautions for Laboratories using recombinant DNA

Laboratory Access
Lab access is restricted when experiments are in progress. All entrances to the laboratory from the hallway should be marked with potential biohazards in use and the contact information for the faculty member(s) in charge for the use of emergency personnel.

Protective clothing:
Goggles or safety glasses should be worn in the laboratory by all personnel at all times.
Closed Toe Footwear should be worn in the laboratory by all personnel at all times. No sandals, flip-flops, etc.
Laboratory coats should be worn in the laboratory whenever recombinant DNA work is being done. Do not wear these coats into areas in which food or drink may be consumed. Isolate them in a plastic bag when taking them to the laundry.
Disposable gloves must be worn when handling microorganisms or nucleic acids. Change gloves immediately after obvious contamination or tears. Do not leave the laboratory and handle door-knobs, etc. while still wearing gloves. Wash your hands before leaving.
Goggles or safety glasses <u>with a UV-protective coating</u> are required whenever gels are observed on an ultraviolet transilluminator. Both goggles AND a face shield are required for longer exposures, such as cutting out bands. Eye damage and serious facial "sunburn" may result if these precautions are ignored.
Masks should be worn when weighing out or cleaning up dangerous powders such as ethidium bromide, acrylamide and SDS. Always read labels before handling chemicals.

Laboratory behavior
Food, drink, gum-chewing, smoking, and application of cosmetics are prohibited in the laboratory.
No food or drink may be stored in refrigerators or elsewhere in the laboratory.
Mouth pipetting is prohibited.

Work Surfaces and Spills
Bench surfaces and centrifuges must be decontaminated with a suitable disinfectant such as 70% ethanol, Lysol, or bleach after use and after any spill of viable material. An absorbent lab mat may be used on areas in which spills are possible; place any contaminated lab mat in the autoclave buckets.
Spills of microorganisms should be cleaned by absorption into paper towels followed by decontamination of the surface with a suitable disinfectant. Place all soiled paper towels and gloves used during spill clean-up into biohazard bags for autoclaving. If a spill is too large for simple clean-up, such as a broken culture flask, leave a warning sign and contact the laboratory supervisor.
Contaminated clothing should be removed and replaced. Use a trash bag from the to store clothing until it can be laundered/disposed of.

If material gets on skin, wash skin thoroughly with soap and water. If material gets in the eyes, rinse for fifteen minutes with saline solution or eye wash. Contact laboratory supervisor.

Waste disposal

Solid wastes contaminated by microorganisms or recombinant DNA, including used gloves, pipette tips, petri dishes, and paper products, must be placed in an autoclavable biohazard waste bag. These wastes should be autoclaved according to guidelines for biohazard waste. Autoclavable bags should be placed in a bucket or tray for autoclaving. After autoclaving, solid wastes should be transferred to a large, black garbage bag for subsequent disposal.

Liquid cultures greater than 50 ml should be decontaminated by autoclaving. Small quantities of liquid culture may be decontaminated by addition of one volume of bleach followed by soaking overnight. Decontaminated liquid waste may be washed down the drain.