UC RIVERSIDE | Environmental Health & Safety

Biosafety Laboratory Checklist

Date of Inspection:			
Biosafety Officer:			
BUA #:		☐ New BUA ☐ BUA Renewal ☐ BUA Amendment	☐ BSL-1 ☐ BSL-2 ☐ BSL-3
Principal Investigator (PI):		PI Office Location:	
☐ Routine Inspection	☐ Follow-Up Inspection	☐ BUA Approval Process	

I. BIOSAFETY RESOURCES AND DOCUMENTATION	Yes	No	N/A
• Biological Use Authorization is been submitted and reviewed by the BSO			
• Biosafety application is current and amendments have been approved by IBC			
• Biosafety Manual is reviewed and readily available			
• Biological Spill Procedures are available and personnel are familiar with procedures			
• Biosafety/Lab specific training is documented, available and current for all personnel			
• Campuswide Exposure Control Plan reviewed annually			
• Standard Operating Procedures are in place and followed by staff			
• Medical Surveillance is documented			

II. STANDARD MICROBIOLOGICAL PRACTICES			
• Principal Investigator (PI)/Lab supervisor controls access to the laboratory			
• Biohazard signage is posted at the lab entrance when biological agents are present			
• Persons wash their hands after working with samples and before leaving the lab			
• Eating, drinking, and storing food for consumption are not permitted in lab areas			
• Mechanical pipetting devices are always used (Mouth pipetting is prohibited)			
• Used needles, syringes, and other sharps placed in a puncture-resistant container			
• Plastic-ware is substituted for glass whenever possible			
• All procedures are performed to minimize the creation of splashes and/or aerosols of infectious materials and waste			
• Work surfaces are decontaminated after completion of work or after any spill Disinfectant used:			
• Biological waste (e.g. cultures, stocks) are properly decontaminated before disposal			
• Biological materials are placed in durable, leak proof container during collection, handling, processing, storage, or transport			
• Aspiration flask is in secondary container			
• A labeled heavy box for non-contaminated broken glass is present			
• Autoclave is used to sterilize biohazardous material			
• Biological waste is placed in a red biohazard bag with the international biohazard symbol, which is placed in a leak-proof secondary container with a closeable lid			
• No Bunsen burner observed in the BSC			

III. SAFETY EQUIPMENT – PRIMARY BARRIERS & PPE			
• Protective clothing (i.e. lab coat) is worn to prevent contamination of personal clothing			
○ Protective clothing is removed prior to leaving lab areas			
• Protective eyewear and face protection is used when for work outside biosafety cabinet that may generate splashes or sprays			
• Gloves are worn to protect hands from exposure to hazardous materials			
○ Gloves are removed and disposed of as biohazardous waste prior to leaving lab			
• Biosafety Cabinet is in good working condition			
• House vacuum line is protected with HEPA filter			
• All equipment that comes in contact with biohazard material (including storage and transport containers) has biohazard warning labels			
• All aerosol generating procedures are conducted in a Biosafety Cabinet or other appropriate physical containment devices			

IV. LABORATORY FACILITIES			
• Laboratory has a sink for hand washing			
• Eyewash station is readily available			
• Lab is designed so that it can be easily cleaned (i.e. no carpet, cloth furniture, etc.)			
• Bench tops are impervious to water and resistant to heat and other chemicals			
• Lab windows that open to the exterior are fitted with screens			
• Housekeeping is appropriate and lab is maintained in a clean/sanitary condition			
• Large equipment is seismically anchored			
• No issues with insect or rodent control			

V. SPECIAL PRACTICES	Yes	No	N/A
• Lab supervisor ensures lab personnel demonstrate proficiency before BSL-2 work			
• In a case of a spill, lab staff are properly trained and equipped to work with infectious material			
• Vacuum lines are protected with HEPA filters, or their equivalent			
• BSCs are located away from doors, heavily traveled areas, and other airflow disruptions			
• BSCs have been certified within the last year (annual certification required) Certification Date:			

VI. BLOODBORNE PATHOGENS (i.e. HUMAN BLOOD, BODY FLUIDS, CELL LINES, UNFIXED TISSUES)			
• Exposure Control Plan is reviewed annually and accessible			
• All personnel have completed annual Bloodborne Pathogens (BBP) training			
• All personnel have been offered Hepatitis B vaccination or signed declination form			
• Personnel are familiar with post-exposure evaluation and follow-up			

VII. EMERGENCY PREPAREDNESS	Yes	No	N/A
• First aid supplies clearly labeled and current with respect to shelf life			
• Emergency contact telephone numbers (life, etc.) posted on or near the telephone			
• Eyewash and shower facilities available and unobstructed			
• Emergency warning procedures and evacuation routes known by all employees			
• UCR Emergency Flip Chart is reviewed by all lab staff and accessible			
• Lab staff know how to report an incident			

VIII. GREENHOUSE FACILITIES	Yes	No	N/A
• The plant containment avoids the unintentional transmission of a recombinant DNA-containing plant genome, including nuclear or organelle hereditary material or release of recombinant DNA-derived organisms associated with plants			
• Containment practices, including the use of plant tissue culture rooms, growth chambers within laboratory facilities, or experiments performed on open benches, are followed			
• Greenhouse facility walls and roof are constructed of transparent or translucent material to allow passage of sunlight for plant growth			
• Doors are self-closing and lockable			
• Screens are available to exclude small flying animals including arthopods and birds			
• Floors are composed of an impervious material (concrete is recommended, however, gravel or other porous materials under benches are acceptable unless propagules or experimental organism are readily disseminated through soil)			
• When intake fans are used, appropriate measures are taken to minimize the access of arthropods			
• Louvers or fans are constructed so that they can only be opened when the fan is in operation			
• Signage is installed on entry doors within the containment zone indicating containment level, contact information and entry requirements			
• Insect traps are provided in the anteroom of the containment zone			
• Emergency exits are provided, where required, and only open from the inside, is alarmed and displays “Emergency Exit Only” signage to deter unauthorized access			
• Bench tops are non-absorptive, impervious to water, and resistant to acids, alkalis, organic solvents and moderate heat			
• Backsplashes are installed tight to the wall and sealed at wall-bench junction			

IX. ARTHROPOD CONTAINMENT	Yes	No	N/A
• Furniture and incubators containing arthropods are located in such a way that accidental contact and release is minimized			
• The insectary is via a double-door vestibule that prevents flying and crawling arthropod escape			
• The area is maintained to allow detection of escaped arthropods			
• Accidental sources of arthropods from within the insectary are eliminated			
• Cages and other culture containers are appropriately cleaned to prevent arthropod survival and escape			
• Cages used to hold arthropods effectively prevent escape of all stages			
• All wastes from the insectary are transported from the insectary in leak-proof, sealed containers for appropriate disposal			

• Arthropods are identified adequately (species, strain/origin, date of collection, responsible investigator, etc)			
• Personnel take appropriate precautions to prevent transport or dissemination of arthropods from the insectary on their persons or via the sewer			
• A program to prevent the entrance of wild arthropods and rodents effectively precludes predation, contamination, and possible inadvertent infection			
• Investigators assess whether escapes are occurring			
• Harborage and breeding areas are reduced as appropriate			
• Arthropods feed on host animals are prevented from accidental transfer to host cages			
• The insectary director is notified promptly of accidental release of vectors			

X. LIST OF PERSONNEL	**TRAINING RECORDS DOCUMENTED**		
	Yes	**No**	**N/A**

COMMENTS:

PI Signature

Date