

LABORATORY PERSONAL PROTECTIVE EQUIPMENT (PPE) HAZARD ASSESSMENT

Purpose and Description

The Laboratory Personal Protective Equipment (PPE) Hazard Assessment Guide identifies hazards to which laboratory workers may be exposed and specifies PPE to protect against these hazards during work operations. When completed, the document and its associated training will satisfy the Department of Labor and Industries requirements for PPE as required in Washington Administrative Code (WAC) 296-800-160.

This document must be completed by the Principal Investigator (PI), Lab Manager or their designee. This person must conduct a laboratory hazard assessment that is specific to operations in their laboratory space(s). EH&S personnel are available to assist with the hazard assessment and can review the form. EH&S may be consulted by calling 206.543.7388. The PI/Lab Manager is responsible for ensuring PPE requirements are followed.

This hazard assessment guide consists of the following:

Section 1: Instructions and Guidance on PPE Selection, pages 2 and 3

Section 2: Laboratory PPE Hazard Assessment, pages 4 to 17

Section 3: Certify the Hazard Assessment, page 18

Section 4: PPE Training Documentation, pages 19 and 20

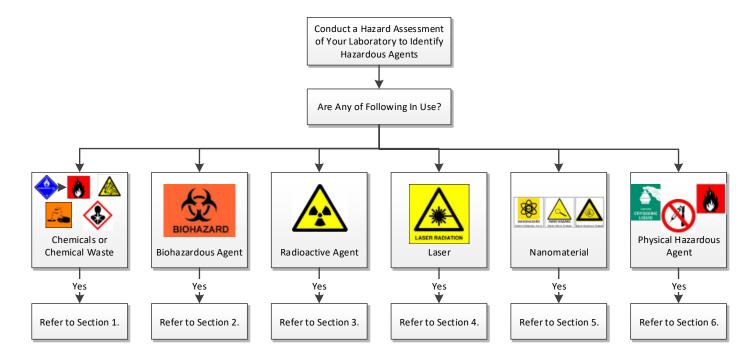
Revised: January 2018 Page 1 of 20



Section 1: Instructions and Guidance on PPE Selection

The Principal Investigator, Lab Manager or their designee will conduct and certify the hazard assessment.

- 1. Conduct a hazard assessment of the laboratory operations using the Laboratory PPE Hazard Assessment.
 - Complete each section for the potentially hazardous agent(s) used in your laboratory: (1) chemical, (2) biohazard, (3) radioactive, (4) laser, (5) nanomaterial and/or (6) physical.
 - This guide will assist in identifying work tasks that require the use of PPE to protect lab staff from exposures to hazards. For each work task listed, check the "Yes" box if the work is performed in your laboratory. If not, check the "No" box. As needed, add tasks to the list to customize it for your laboratory.
 - Note the designated PPE for each task performed. Check additional boxes as appropriate or check "Other PPE: Specify" and describe in the space provided the lab specific PPE designated for the work task.

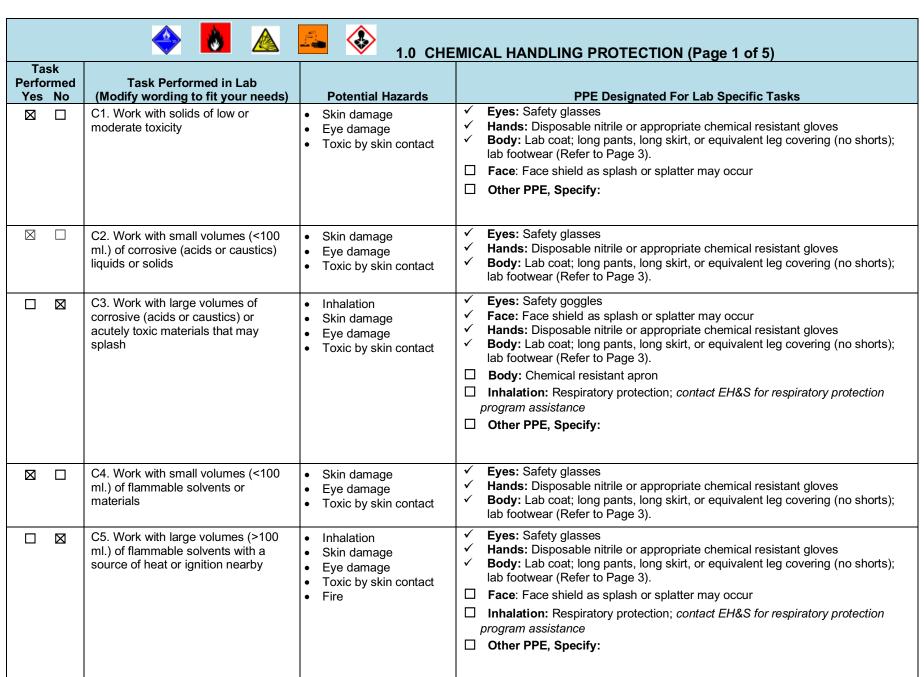




GENERAL GUIDANCE ON PERSONAL PROTECTIVE EQUIPMENT (PPE) SELECTION

- 1. **Minimum Laboratory PPE.** In general, the minimum PPE that should be worn while performing laboratory work is the following:
 - Safety glasses
 - Disposable nitrile or other appropriate chemical resistant gloves
 - Lab coat (full length) and long pants, long skirt or equivalent leg covering (no shorts)
 - Laboratory footwear (as described below)
- Chemical-Resistant Gloves. Chemical-resistant gloves must be selected based on the specific chemical(s) used and
 manufacturer's glove permeation and compatibility charts. Guidance is available at
 www.ehs.washington.edu/resource/laboratory-safety-manual-510.
- 3. **Laboratory Footwear.** Laboratory footwear should fully cover the feet to protect against chemical spills. Avoid sandals, flip flops, flats, canvas/breathable fabric tops and shoes constructed of mesh (such as athletic shoes) unless impervious chemical-resistant booties that protect the entire foot are worn over them.
- 4. Airborne/Inhalation Hazard: Engineering Controls and Respiratory Protection.
 - Chemical Fume Hood. When materials have a potential for becoming airborne, use a chemical fume hood or other
 engineering control whenever possible. Activities that generate airborne contaminants or odors that are not conducted
 inside of a chemical fume hood or using some other engineering control (such as a local exhaust at the workbench)
 should be evaluated to determine if the activity presents an inhalation hazard.
 - Biosafety Cabinet Use. Use a biosafety cabinet to minimize exposure. Activities that cannot be conducted inside of a
 biosafety cabinet should be separately evaluated by the EH&S Biosafety Office. For BSL-3 or ABL-3 activities, the PPE
 requirements will be addressed by the BSL-3 facility.
 - Respiratory Protection. If respiratory protection is identified as a necessary control during the hazard assessment, users must be enrolled in the UW Respiratory Protection Program. This includes EH&S performing a respirator-specific hazard assessment, as well as having all users undergo a medical evaluation to wear a respirator, respirator training and respirator fit testing. Contact EH&S at 206.221.7770 or www.ehs.washington.edu/workplace/respiratory-protection.







	♦ ▶	1.0 CHE	MICAL HANDLING PROTECTION (Page 2 of 5)
Task Performed Yes No	Task Performed in Lab (Modify wording to fit your needs)	Potential Hazards	PPE For Lab Specific Tasks
	C6. Work with chemicals of high acute toxicity (e.g. hydrogen fluoride, hydrogen cyanide)	 Inhalation Skin damage Eye damage Toxic by skin contact 	 ✓ Eyes: Safety glasses ✓ Hands: Disposable nitrile or appropriate chemical resistant gloves ✓ Body: Lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3). □ Eyes: Safety goggles □ Face: Face shield as splash or splatter may occur □ Inhalation: Respiratory protection; contact EH&S for respiratory protection program assistance □ Other PPE, Specify:
	C7. Work with particularly hazardous agent such as: Human carcinogen Mutagen Antineoplastic Reproductive toxin	Inhalation Skin damage Eye damage Toxic by skin contact	 ✓ Eyes: Safety glasses ✓ Hands: For Carcinogens, Mutagens, and Chemotherapy/Other Hazardous Drugs: Chemo exam gloves that are tested to meet ASTM D6978-05; Double glove ✓ Body: Lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) □ Eyes: Safety goggles □ Face: Face shield as splash or splatter may occur □ Inhalation: Respiratory protection; contact EH&S for respiratory protection program assistance □ Other PPE, Specify:
	C8. Work with an apparatus with contents under pressure or vacuum (mm of Hg, psi, or torr)	Skin damage Eye damage	 ✓ Eyes: Safety glasses ✓ Hands: Disposable nitrile or appropriate chemical resistant gloves ✓ Body: Lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) ☐ Face: Face shield ☐ Eyes and/or Face: For high risk activities - Safety goggles and face shield ☐ Body: For chemical use, chemical-resistant apron ☐ Other PPE, Specify:



	♦ ▶ △	1.0 CHE	MICAL HANDLING PROTECTION (Page 3 of 5)
Task Performed Yes No	Task Performed in Lab (Modify wording to fit your needs)	Potential Hazards	PPE For Lab Specific Tasks
	C9. Work with air or water reactive chemicals	 Exposure to toxic gases, heat, and/or energy Inhalation Skin damage Eye damage Fire 	 ✓ Eyes: Safety goggles ✓ Hands: Disposable nitrile or appropriate chemical resistant gloves ✓ Body: Lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) ☐ Face: Face shield as splash or splatter may occur ☐ Hands: Heat resistant or chemical resistant gloves; please specify: ☐ Body: Flame-resistant lab coat if fire hazard is present ☐ Other PPE, Specify:
	C10. Work with pyrophoric materials	 Fire Severe burns Inhalation Skin damage Eye damage 	 ✓ Eyes: Safety goggles ✓ Hands: Inner disposable nitrile or appropriate chemical resistant gloves ✓ Hands: Outer heat-resistant gloves ✓ Body: Flame resistant lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) ✓ Body: Synthetic clothing must not be worn when working with pyrophoric materials □ Face: Face shield as splash or splatter may occur □ Other PPE, Specify:
	C11. Work with potentially explosive chemicals	 Detonation Flying debris Skin damage Eye damage Fire 	 ✓ Eyes: Safety goggles ✓ Hands: Inner disposable nitrile or appropriate chemical resistant gloves ✓ Hands: Outer heat-resistant gloves ✓ Body: Flame resistant lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) ✓ Body: Synthetic clothing must not be worn when working with explosive materials □ Face: Face shield as splash or splatter may occur □ Eyes, Face, or Body: Blast shield for high risk activities □ Other PPE, Specify:



	♦ ▶ ▲	1.0 CHE	MICAL HANDLING PROTECTION (Page 4 of 5)
Task Performed Yes No	Task Performed in Lab (Modify wording to fit your needs)	Potential Hazards	PPE For Lab Specific Tasks
	C12. Work with high temperature equipment or objects	Burns Fire	 ✓ Eyes: Safety goggles ✓ Hands: Inner disposable nitrile or appropriate chemical resistant gloves ✓ Hands: High temperature thermal insulated gloves ✓ Body: Flame resistant lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) ✓ Body: Synthetic clothing must not be worn when working with high temperature equipment or objects □ Face: Face shield as splash or splatter may occur □ Other PPE, Specify:
	C13. Work with cryogenic material	BurnsFrostbiteEye damage	 ✓ Eyes: Safety glasses ✓ Eyes: Safety goggles for large volumes ✓ Face: Face shield as splash or splatter may occur ✓ Hands: Inner gloves - disposable nitrile or appropriate chemical resistant gloves ✓ Hands: Outer gloves - cryogenic low temperature insulated gloves ✓ Body: Lab coat; long pants, skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) □ Other PPE, Specify:
	C14. List any other particularly hazardous lab task involving chemicals	Conduct risk assessment: Hazard depends on task and chemical properties Inhalation Skin damage Eye damage	 ✓ Eyes: Safety glasses ✓ Hands: Disposable nitrile or other appropriate chemical resistant gloves ✓ Body: Lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) □ Face: Face shield as splash or splatter may occur □ Body: Chemical resistant apron □ Inhalation: Respiratory protection; contact EH&S for respiratory protection program assistance. □ Other PPE, Specify:



	♦ ▶ △	1.0 CHE	MICAL HANDLING PROTECTION (Page 5 of 5)
Task Performed Yes No	Task Performed in Lab (Modify wording to fit your needs)	Potential Hazards	PPE For Lab Specific Tasks
	C15. Minor (or small) spill cleanup; spill can be cleaned up with standard spill kit	Inhalation Skin damage Eye damage	 Eyes: Safety goggles Face: Face shield as splash or splatter may occur Hands: Chemical resistant gloves for spill cleanup Body: Lab coat; long pants, skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) As needed, contact EH&S for assistance Foot: Shoe covers Other PPE, Specify:
	C16. Large spill cleanup; spill is too large or complex to clean up with standard spill kit	InhalationSkin damageEye damage	 ✓ Mandatory: Follow required procedures If possible, stop or contain the release Evacuate and secure the area Assist injured or contaminated persons Call 911 for assistance; report injuries, fires, or request cleanup assistance Call EH&S for assistance



	BIOHAZARD	2.0 BIOHAZARDOUS AGENT	PROTECTION GENERAL
Task Performed Yes No	Task Performed in Lab (Modify wording to fit your needs)	Potential Hazards	PPE For Lab Specific Tasks
	B1. Work with human blood, body fluids, cell lines (primary or established), tissues or bloodborne pathogens (BBP).	Exposure to infectious material	 ✓ Hand: Latex or nitrile gloves ✓ Body: Lab coat □ Eye: Safety glasses □ Face: Splatter shield on tabletop □ Face: Face shield □ Face: Safety glasses and a mask □ Body: Disposable gown (optional) □ Other PPE, Specify:
	B2. Work with animal and/or human specimens preserved in fixative (such as formalin or paraformaldehyde solution) Preserve animal and/or human specimens with fixative (such as formalin or paraformaldehyde solution)	Exposure to fixative used to preserve specimen If tissue is fixed, there is no longer an exposure to infectious material.	 ✓ Eye: Safety glasses ✓ Hand: Impermeable glove for preserved specimens that is chemical resistant to fixative used ✓ Body: Lab coat ☐ Body: Disposable gown ☐ Other PPE, Specify:
	B3. Work with radioactive human blood, body fluids or bloodborne pathogens (BBP).	Exposure to infectious material Cell damage Potential spread of radioactive contaminants	 ✓ Hand: Latex or nitrile gloves ✓ Eye: Safety glasses or safety goggles for splash hazard ✓ Face: Face shield as splash or splatter may occur ✓ Body: Lab coat ☐ Body: Disposable gown ☐ Other PPE, Specify:



	BIOHAZARD 2.1	BIOHAZARDOUS AGENT PRO	OTECTION – RISK GROUP 1, 2, 3
Task Performed Yes No	Task Description (Modify wording to fit your needs)	Potential Hazards	PPE For Lab Specific Tasks
	B4. Work with agents or recombinant DNA classified as Risk Group 1 and requiring Biosafety Level 1 (BSL-1) containment	Biological agents that typically pose a minimal potential for infection by injection, skin exposure, ingestion or inhalation	 ✓ Hand: Latex or nitrile gloves □ Eye: Safety glasses for splash or other eye hazard □ Eye: Safety goggles for splash or other eye hazard □ Body: Lab coat □ Body: Disposable gown □ Other PPE, Specify:
	B5. Manipulation of recombinant DNA, cell lines, viruses, bacteria or other organisms classified as Risk Group 2 and requiring Biosafety Level 2 (BSL-2) containment Perform aerosol generating procedure: Vortex, sonicate, pipette, tissue harvest	Biological agents that pose a moderate potential for infection by injection, skin exposure, ingestion or inhalation	 ✓ Eye: Safety glasses if not working in a biosafety cabinet ✓ Hand: Latex or nitrile gloves ✓ Body: Lab coat ☐ Eye: Safety goggles if not working in a biosafety cabinet ☐ Body: Surgical gown ☐ Other PPE, Specify:
	B6. Manipulation of infectious materials classified as Risk Group 3 but manipulated in a BSL 2 facility with BSL-3 containment practices (BSL 2+).	Biological agents that pose a moderate or serious potential for infection by injection, skin exposure, ingestion or inhalation	 ✓ Eye: Safety glasses for splash or other eye hazard ✓ Hands: Nitrile gloves (double) ✓ Body: Disposable gown (preferred) that ties in back ✓ Inhalation: Respiratory protection as determined by risk assessment; contact EH&S for respiratory protection program assistance □ Eye: Safety goggles for splash or other eye hazard □ Body: Lab coat □ Other PPE, Specify:
	B7. Manipulation of infectious materials classified as Risk Group 3 and requiring Biosafety Level 3 (BLS-3) containment	Biological agents that pose a serious or lethal potential for infection by injection, skin exposure, ingestion or inhalation	 ✓ Eye: Safety glasses for splash or other eye hazard ✓ Hands: Nitrile gloves (double) ✓ Body: Full disposable coverall suit (preferred) ✓ Foot: Shoe cover or dedicated shoe ✓ Inhalation: Respiratory protection as determined by risk assessment; contact EH&S for respiratory protection program assistance □ Eye: Safety goggles for splash or other eye hazard □ Other PPE, Specify:



	2.2 BIOHAZARDOUS AGENT PROTECTION – BIOSAFETY LEVEL 1, 2, 3				
Task Performed Yes No	Task Description (Modify wording to fit your needs)	Potential Hazards	PPE For Lab Specific Tasks Follow Appropriate BSL Practices		
	B8. Work with live animals: General safety concerns	Animal bitesExposure to animal allergens	 ☐ Animal bites: Restraints or bite-resistant gloves ☐ Animal allergen: Voluntary use of N95 respirator or PAPR. For allergens, ontact EH&S for respiratory protection program assistance. ☐ Specific Pathogen Free (SPF) Area: Hair bonnet, gown, shoe covers, gloves ☐ Other PPE, Specify: 		
	B9. Work with live animals: Animal Biosafety Level 1 (ABSL-1)	Exposure to infectious material	 ✓ Hands: Nitrile or vinyl gloves for broken skin □ Eye: Safety glasses for splash or other eye hazard □ Eye: Safety goggles for splash or other eye hazard □ Body: Lab coat □ Body: Gown □ Other PPE, Specify: 		
	B10. Work with live animals: Animal Biosafety Level 2 (ABSL-2)	Exposure to infectious material	 ✓ Eye: Safety goggles for splash or other eye hazard ✓ Hands: Nitrile or vinyl gloves ✓ Body: Disposable gown □ Foot: Shoe covers □ Other PPE, Specify: 		
	B11. Work with live animals: Animal Biosafety Level 2+ (ABSL-2+)	Exposure to infectious material	 ✓ Eye: Safety glasses for splash or other eye hazard ☐ Eye: Safety goggles for splash or other eye hazard ✓ Hands: Nitrile or vinyl gloves ✓ Body: Disposable gown (tie in the back) ✓ Foot: Shoe covers ☐ Other PPE, Specify: 		



	2.2 BIOHAZARDOUS AGENT PROTECTION – BIOSAFETY LEVEL 1, 2, 3					
Task Performed Yes No	Task Description (Modify wording to fit your needs)	Potential Hazards	PPE For Lab Specific Tasks Follow Appropriate BSL Practices			
	B12. Work with live animals: Animal Biosafety Level 3, (ABSL-3).	Exposure to infectious material Exposure to infectious agent by airborne transmission	 ✓ Eye: Safety glasses for splash or other eye hazard ☐ Eye: Safety goggles for splash or other eye hazard ✓ Hands: Nitrile or vinyl gloves ☐ Body: Disposable gown ✓ Foot: Shoe covers ✓ Inhalation: Mandatory use of N95 respirator or PAPR, as determined by risk assessment. For mandatory use, contact EH&S for respiratory protection program assistance. ✓ Additional PPE, Specify: A full body disposable coversuit is appropriate in an animal facility. 			



	3.0 RADIOACTIVE AGENT PROTECTION: IONIZING, ULTRAVIOLET, INFRARED				
Task Performed Yes No	Task Performed in Lab (Modify wording to fit your needs)	Potential Hazards	PPE For Lab Specific Tasks		
	R1. Work with solid radioactive material or solid radioactive waste	Cell damage Potential spread of radioactive contamination	 ✓ Eyes: Safety glasses ✓ Hands: Disposable nitrile or other appropriate radioactive material impermeable gloves ✓ Body: Lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) ✓ Work on Sealed Source: Minimum PPE is unnecessary when working with sealed radiation sources 		
	R2. Work with liquid radioactive material (in corrosives, flammables, and aqueous liquids, including liquid radioactive waste) or radioactive powders	Cell damage Potential spread of radioactive contamination Hazards presented by the specific chemical	 ✓ Eyes: Safety glasses ✓ Hands: Disposable nitrile or appropriate chemical resistant gloves compatible with work with radioactive materials ✓ Body: Lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) 		
	R3. Work with ultraviolet radiation	ConjunctivitisCorneal damageSkin burns	 ✓ Eye: UV face shield and/or goggles ✓ Hand: Nitrile gloves if hand exposure is possible ✓ Body: Lab coat 		
	R4. Work with infrared-emitting equipment (e.g. glass blowing)	Cataracts Burns to cornea	 ✓ Eye: Appropriate polycarbonate infrared filter glasses ✓ Body: Flame resistant lab coat 		



	4.0 LASER PROTECTION				
Perfo	Task Performed Task Performed in Lab Yes No (Modify wording to fit your needs) Potential Hazards PPE For Lab Specific Tasks			PPE For Lab Specific Tasks	
			OPEN BEA	M	
		L1. Perform beam alignment or laser experiment; repair or maintenance that requires working with an open laser beam, and/or defeating the interlock(s) on any Class 3b or Class 4 laser system	Eye damage	✓ Eye: Appropriate laser safety goggles/glasses with optical density based on individual beam parameters; contact EH&S to determine appropriate optical density.	
		L2. View a Class 3R laser beam with magnifying optics (including eyeglasses)	Eye damage	✓ Eye: Appropriate laser safety goggles/glasses with optical density based on individual beam parameters; contact EH&S to determine appropriate optical density.	
		L3. Work with a Class 3b open beam laser system with the potential for producing direct or specular (mirror-like) reflections	Eye damage	✓ Eye: Appropriate laser safety goggles/glasses with optical density based on individual beam parameters; contact EH&S to determine appropriate optical density.	
	⊠	L4. Work with infrared-emitting equipment (e.g. glass blowing)	Cataracts Burns to cornea	Eye: Appropriate laser safety goggles/glasses with optical density based on individual beam parameters; contact EH&S to determine appropriate optical density. ✓ Hands: Nitrile gloves ✓ Body: Long sleeved shirt (tightly wound fabric) ✓ Body: Lab coat Long sleeves, lab coat, gloves, etc. are required only in the NHZ (Nominal Hazard Zone)	
	⊠	L5. Handle dye laser materials, such as powdered dyes, chemicals and solvents	CancerFireExplosion	 ✓ Eyes: Safety glasses ✓ Hands: Chemical resistant gloves ✓ Body: Flame resistant lab coat or coveralls 	
	⊠	L6. Maintain and repair power sources for Class 3B and Class 4 laser systems	ElectrocutionFireExplosion	 ✓ Eye: Safety glasses ✓ Hands: Insulated gloves ✓ Body: Flame resistant lab coat ✓ Body Coveralls 	



	5.0 NANOMATERIAL PROTECTION				
Task Performed Yes No	Task Performed in Lab (Modify wording to fit your needs)	Potential Hazards	PPE For Lab Specific Tasks		
	N1. Work with bound or wet nanomaterials	InhalationSkin damageEye damageChemical exposure	 ✓ Eyes: Safety glasses ✓ Face: Face shield as splash or splatter may occur ✓ Hands: Disposable nitrile or other appropriate chemical resistant gloves ✓ Hands: Routinely replace gloves to minimize exposure and hand contamination ✓ Body: Lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) □ Other PPE, Specify: 		
	N2. Work with unbound or dry engineered nanomaterials	 Inhalation Skin damage Eye damage Chemical exposure 	For unbound or dry material: ✓ Eyes: Safety glasses ✓ Face: Face shield as splash or splatter may occur ✓ Hands: Disposable nitrile or other appropriate chemical resistant gloves ✓ Hands: Routinely replace gloves to minimize exposure and hand contamination ✓ Body: Lab coat made of non-woven fabric and elastic at the wrists; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) ✓ Inhalation: Half face respirator with P100 cartridge if working with aerosolizing nanomaterials outside of a vented work enclosure; contact EH&S for respiratory protection program assistance. ✓ Removal of PPE: Give special attention to technique used to remove and dispose of contaminated PPE to avoid skin contact □ Other PPE, Specify:		









	CRYOGENIC	6.0 PHYSIC	CAL HAZARD PROTECTION (Page 1 of 2)
Task Performed Yes No	Task Performed in Lab (Modify wording to fit your needs)	Potential Hazards	PPE For Lab Specific Tasks
	P1. Work with cryogenic liquids	Skin damageEye damage	 ✓ Eyes: Safety glasses ✓ Face: Face shield ✓ Hands: Cryogenic, low temperature insulated gloves ✓ Body: Lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) □ Body: Cryogenic apron
	P2. Remove freezer cryo vials from liquid nitrogen	Vials may explode upon rapid warming Cuts to face/neck and frostbite to hands	 ✓ Eyes: Safety glasses ✓ Face: Face shield ✓ Hands: Cryogenic, temperature thermal insulated gloves ✓ Body: Lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) □ Body: Cryogenic apron
	P3. Work with very cold equipment or dry ice	FrostbiteHypothermia	 ✓ Eyes: Safety glasses ✓ Body: Lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3 ✓ Hands: Cryogenic low temperature insulated gloves
	P4. Work with hot liquids, heating equipment and/or open flames (autoclave, Bunsen burner, water bath, oil bath)	Burns resulting in skin or eye damage	 Eyes: Safety glasses Hands: Inner disposable nitrile or appropriate chemical resistant gloves Hands: Outer thermal insulated gloves Body: Lab coat; long pants, long skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) Eyes: Safety goggles for work with hot liquids Face: Face shield as splash or splatter may occur Hands: Autoclave gloves, impermeable insulated gloves for liquids amd steam
	P5. Wash glassware	 Lacerations if glass breaks Splash from cleaning agents 	 ✓ Eyes: Safety glasses ✓ Hands: Nitrile or appropriate chemical resistant gloves ✓ Body: Lab coat; long pants, skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) □ Face: Face shield □ Hands: Cut resistant gloves if glass breaks









6.0 PHYSICAL HAZARD PROTECTION (Page 2 of 2)							
Task Performed Yes No	Task Performed in Lab (Modify wording to fit your needs)	Potential Hazards	PPE For Lab Specific Tasks				
	P6. Work with loud equipment, noises, sounds, alarms, etc.	Potential ear damage and hearing loss	 Hearing: Earplugs or ear muffs, as necessary; contact EH&S for noise exposure assessment. 				
	P7. Work with an apparatus with contents under pressure or vacuum (mm of Hg, psi, or torr)	Skin damage Eye damage	 ✓ Eyes: Safety glasses ✓ Hands: If chemicals used, nitrile or other appropriate chemical-resistant glove ✓ Body: Lab coat; Long pants, skirt, or equivalent leg covering (no shorts); lab footwear (Refer to Page 3) □ Face: Face shield □ Eyes and/or Face: For high risk activities - Safety goggles and face shield □ Body: If chemicals used, chemical-resistant apron □ Other PPE, Specify 				
	P8. Work with sharps or broken glass	• Cuts	 ✓ For Cuts: Use tongs for broken glass and designated sharps container for contaminated wastes ✓ For Cuts: Cut resistant outer glove (Kevlar) with nitrile inner gloves 				
	P9. Work with sharps and/or empty a syringe used with chemicals	Exposure to aerosols from syringe	✓ For Aerosols: Safety glasses and mask. □ Other PPE, Specify:				
	P10. Work with compressed gases inside environmental chambers	Asphyxiation Toxic gas exposure	✓ Employee is not allowed to enter and work inside of an oxygen deficient or hazardous chamber.				
	P11. Maintain and repair electrically powered equipment	Electrocution	 ✓ Eyes: Safety glasses ✓ Hands: Insulated gloves ✓ Body: Coveralls 				



Section 3: Certify the Hazard Assessment

Please certify that the hazard assessment for the laboratory has been completed by filling out and signing this page.

CERTIFICATION OF THE LABORATORY HAZARD ASSESSMENT AND PPE SELECTION **

Principal Investigator's (PI) Name (Print Name): Lauren Buckley	Department/Unit: Biology	·		
Building(s): Life Science Building	Room(s): 412, 421, 428, 429, 430	430		
Lab Manager's Name:	Lab Manager's Phone:			
Completed by (Print Name): Lauren Buckley	Signature: La Br	Date 03/02/20		
Signature of PI:		Date 03/02/20		



Section 4: PPE Training Documentation

Laboratory safety training must be conducted by the Principal Investigator, Lab Manager or their designee. Training will identify and discuss potentially hazardous tasks performed in the lab and selection and use of lab specific PPE to protect the laboratory worker or researcher. The training content, instructor and student attendees must be documented. To provide adequate training, the PI, Lab Manager or their designee will provide the following:

- 1. Identify all applicable safety training courses needed for each staff member and assure that each staff member has these courses.
- 2. The PI, lab manager, or their designee will review the completed Lab PPE Hazard Assessment Guide with the employee. It describes the operations in the lab where employees need PPE for protection against exposure to hazards. In this step, the hazard assessment is used as a training tool. While discussing lab operations and the associated hazards with lab staff, the manager will address the following:
 - How the lab obtains PPE
 - What types of PPE are used in the lab and for which tasks
 - Where and how the PPE is stored and maintained
 - How to inspect and what to look for to confirm PPE is in good condition before putting it on. If not, place the PPE.
 - How to put on, wear, adjust for proper fit, and remove PPE
 - How to properly use the PPE
 - How to properly decontaminate and clean reusable PPE, and how to properly dispose of single-use PPE
 - Discuss any limitations of the PPE
 - General PPE safety practices, including not wearing PPE outside of lab hazard areas (e.g. hallways and eating areas).
- 3. Each trained lab staff member will sign the training documentation to acknowledge that they have reviewed and been trained on the Laboratory PPE Assessment Guide.
- 4. Conduct refresher training whenever the hazard assessment and/or PPE selected for use is updated.



Laboratory PPE Hazard Assessment Guide Training Acknowledgement:

Principal Ir	nvestigator: Buckley	Department/Unit: Biology				
Building: _	LSB	Room:412, 421,	Room:412, 421, 428, 429, 430			
Trainer:	ainer: Buckley Trainer Job Title: PI					
I have read	d, asked questions, and unders	tand the PPE requirements for the	activity/materials described t	for my work.		
Date	Name of Person Trained	Job Title	Employee or Student ID Number	Signature		