

Personal Protective Equipment Assessment Form

Date of Assessment:	Conducted By:
Building/Room #:	Department:
Principal Investigator (PI):	

Instructions: This form must be completed by the PI, Lab Supervisor, or their designee to conduct a laboratory hazard assessment specific to activities in their laboratories. The laboratory hazard assessment identifies hazards to employees and specifies personal protective equipment (PPE) to protect employees during work activities. The person conducting the assessment must verify that it is complete and that all applicable training has been conducted. Store the completed PPE Assessment Form in the Lab Safety Binder once completed. Replace the form each time a new hazard is introduced or removed from the lab, or annually otherwise.

ltem #	Work Activity Using	activ perfor	e stated vities med in lab?	Potential Hazard	Applicable Engineering Controls	Applicable Administrative Controls	Applicable PPE
		Yes	No				
1.0 CHE	MICAL HAZARDS						
1.1	Small volumes (10mL – 4L) of corrosive liquids.			Eye or skin damage.	 Chemical fume hood 	 Completion of annual lab safety training Review Chemical Hygiene Plan (CHP) 	 Chemical splash goggles Light chemical- resistant gloves (Rubber Latex) Lab coat



ltem #	Work Activity Using	activ	e stated vities med in lab? No	Potential Hazard	Applicable Engineering Controls	Applicable Administrative Controls	Applicable PPE
1.2	Large volumes (>4L) of corrosive liquids, small to large volumes (< 10 mL- >4L) of acutely toxic corrosives, or work which creates a splash hazard.	<u>Yes</u>		Poisoning; increased potential for eye and skin damage.	Chemical fume hood	 Completion of annual lab safety training Review Chemical Hygiene Plan (CHP) 	 Chemical splash goggles, face shield Heavy chemical- resistant gloves (Butyl or Viton) Lab coat & chemical resistant apron
1.3	Small volumes (10mL – 4L) of organic solvents or flammable organic compounds.			Skin or eye damage, potential poisoning through skin contact.	Chemical fume hood	 Completion of annual lab safety training Review Chemical Hygiene Plan (CHP) 	 Chemical splash goggles Light chemical- resistant gloves (Rubber Latex). Lab coat
1.4	Large volumes (>4L) of organic solvents, small to large volumes of very dangerous solvents, or work which creates a splash hazard.			Large volumes (>4L) of organic solvents, small to large volumes of very dangerous solvents, or work which creates a splash hazard.	Chemical fume hood	 Completion of annual lab safety training Review Chemical Hygiene Plan (CHP) 	 Chemical splash goggles Heavy chemical- resistant gloves (Butyl or Viton). Flame-resistant lab coat (e.g. Nomex)
1.5	Toxic or hazardous chemicals (solid, liquid, or gas).			Skin or eye damage, potential poisoning through skin contact.	Chemical fume hood	 Completion of annual lab safety training Review Chemical Hygiene Plan (CHP) 	 Chemical splash goggles Light chemical- resistant gloves (Rubber Latex). Lab coat, Respiratory protection may be needed



ltem #	Work Activity Using	Are the stated activities performed in the lab?		Potential Hazard		Applicable Engineering Controls	Applicable Administrative Controls		Applicable PPE
1.6	Acutely toxic or hazardous chemicals (solid, liquid, or gas).	Yes	No	Increased potential for eye or skin damage increased potential poisoning through skin contact.	•	Chemical fume hood Inert atmospheric (glove box)	 Completion of annual lab safety training Review Chemical Hygiene Plan (CHP) Designated work 	•	Chemical splash goggles Heavy chemical resistant gloves (Butyl or Viton). Lab coat Respiratory
1.7	An apparatus with contents under pressure or vacuum.			Eye or skin damage.	•	Chemical fume hood	areas Prior approvals where applicable Completion of annual lab safety training	•	protection may be needed Safety glasses or goggles, face shield for high risk activities Chemical-resistant gloves (Latex, Nitrile, or Butyl) Lab coat, chemical-resistant
									apron for high risk activities



ltem #	Work Activity Using	activ perfor the		Potential Hazard		Applicable Engineering Controls	Applicable Administrative Controls		Applicable PPE
1.8	Air or water reactive chemicals.	Yes	No	Severe skin and eye damage. Fire.	•	Inert atmosphere (glove box) Storage in areas free of water and/or moisture	 Inert atmospher (glove box) Storage in areas free of water and/or moisture 		 Work in inert atmosphere, when possible Chemical splash goggles Chemical-resistant gloves Lab coat, flame- resistant lab coat for high risk activities (e.g. Nomex) Chemical-resistant apron for high risk activities
1.9	Potentially explosive chemicals.			Splash, detonation, flying debris, skin and eye damage. Fire.	•	Chemical fume hood	 Completion of annual lab safet training Review Chemic Hygiene Plan (CHP) 	y il	 Chemical splash goggles, face shield, and blast shield Heavy gloves Flame-resistant lab coat (e.g. Nomex)
1.10	Temperatures below 0°C.			Burns, splashes, frostbite.	•	N/A	 Completion of annual lab safet training Review Chemic Hygiene Plan (CHP) 	y il	 Chemical splash goggles Thermal insulated gloves when needed Lab coat



ltem #	Work Activity Using	Are the stated activities performed in the lab? Yes No	Potential Hazard	Applicable Engineering Controls	Applicable Administrative Controls	Applicable PPE
1.11	Temperatures above 90°C.		Burns, splashes, fires.	• N/A	 Completion of annual lab safety training Review Chemical Hygiene Plan (CHP) 	 Chemical splash goggles Thermal insulated gloves when needed. Lab coat Fire retardant PPE
1.12	Minor chemical spill cleanup.		Skin or eye damage, respiratory damage.	• N/A	 Completion of annual lab safety training UNO Emergency Procedures 	 Chemical splash goggles Chemical resistant gloves (Nitrile). Lab coat Chemical-resistant apron and boot/shoe covers for high risk activities Respirator as needed Consider keeping Silver Shield gloves in the lab spill kit



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2.0 BIOL	OGICAL HAZARDS								
2.1	Human blood, body fluids, tissues, or bloodborne pathogens (BBP).			Exposure to infectious material.	•	Biosafety cabinet	 Completion of annual lab safety training Completion of annual BBP training Review of BBP- Exposure Control Plan Hepatitis B Vaccine 	•	Face shield or facemask with goggles (if splash risk) Latex or nitrile gloves Lab coat or gown
2.2	Preserved animal and/or human specimens.			Exposure to infectious material or preservatives.	•	Biosafety cabinet	 Completion of annual lab safety training Completion of annual BBP training Review of BBP- Exposure Control Plan Hepatitis B Vaccine 	•	Chemical splash goggles Protective gloves such as light latex or nitrile for unpreserved specimens (select protective glove for preserved specimens according to preservative used) Lab coat or gown



ltem #	Work Activity Using	activ perfor the	e stated vities med in lab?	Potential Hazard		Applicable Engineering Controls		Applicable Administrative Controls		Applicable PPE
2.3	Radioactive human blood, body fluids, or bloodborne pathogens (BBP).	Yes	No	Cell damage, potential spread of radioactive contaminants, or potential BBP exposure.	•	Biosafety cabinet	•	Completion of annual lab safety training Completion of annual BBP training Review of BBP- Exposure Control Plan Hepatitis B Vaccine	•	Safety glasses (goggles for splash or aerosol hazard) Light latex or nitrile gloves Lab coat or gown
2.4	Manipulation of cell lines, viruses, bacteria, recombinant / synthetic nucleic acid molecules (rDNA) or other organisms in a Biosafety Level (BSL) 1 facility.			Eye or skin irritation.	•	N/A	•	Completion of annual lab safety training Completion of annual BBP training (if human materials involved)	•	Safety glasses (goggles for protection from splash) or other eye hazard Light latex or nitrile gloves for broken skin or skin rash Lab coat or gown
2.5	Manipulation of cell lines, viruses, bacteria, recombinant / synthetic nucleic acid molecules (rDNA) or other organisms in a BSL-2 facility.			Exposure to infectious material, particularly through broken skin or mucous membranes.	•	Biosafety cabinet Autoclave	•	Completion of annual lab safety training Completion of annual BBP training (if human materials involved)	•	Chemical splash goggles for protection from splash or other eye hazard Light latex or nitrile gloves Lab coat or gown



ltem #	Work Activity Using	activ perfor the	e stated vities med in lab?	Potential Hazard		Applicable Engineering Controls		Applicable Administrative Controls		Applicable PPE
2.6	Work with live animals housed in an Animal Biosafety Level (ABSL) 1 facility.	Yes	No	Animal bites, allergies.	•	Biosafety cabinet	•	Completion of annual lab safety training Completion of applicable animal safety training Completion of CITI training Review IACUC specific procedures	•	Safety glasses (goggles for protection from splash) Latex, nitrile or vinyl gloves for broken skin or skin rash Lab coat or gown Consider need for wire mesh glove
2.7	Work with live animals housed in an ABSL-2 facility.			Animal bites, exposure to infectious material, allergies.	•	Biosafety cabinet (N/A to larger animals such as non-human primates)	•	Completion of annual lab safety training Completion of applicable animal safety training Completion of CITI training Review IACUC specific procedures	•	Chemical splash goggles for protection from splash or other eye hazard Face shield Latex, nitrile and/or bite resistant gloves Solid front gown Head cover Shoe covers Surgical mask Consider need for wire mesh glove
	IOLOGICAL HAZARD	DS	1							
3.1	Solid radioactive materials or waste.			Cell damage, potential spread of radioactive materials.	•	Chemical fume hood	•	Completion of annual lab safety training	•	Safety glasses Latex or nitrile gloves Lab coat



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3.2	Radioactive materials in hazardous chemicals (corrosives, flammables, liquids, powders, etc.).	Yes	No	Cell damage or spread of contamination plus hazards for the specific chemical.	•	Chemical fume hood	·	Completion of annual lab safety training	•	Chemical splash goggles Light chemical- resistant gloves Lab coat Note: Select glove for the applicable chemical hazards
3.3	Ultraviolet radiation			Conjunctivitis, corneal damage, skin redness.	•	UV shield	•	Completion of annual lab safety training Review of Chemical Hygiene Plan (CHP)	•	UV face shield and goggles Lab coat
3.4	Infrared emitting equipment (e.g. glass blowing)			Cataracts, burns to cornea.	•	N/A	•	Completion of annual lab safety training	•	Appropriate shaded goggles Lab coat
	ER HAZARDS									
Open Be		r	1	1	-					
4.1	Performing alignment, troubleshooting or maintenance that requires working with an open beam and/or defeating the interlock(s) on any Class 3 or Class 4 laser system.			Eye damage.	•	N/A	•	Completion of annual lab safety training Completion of laser safety training	•	Appropriately shaded goggles/glasses with appropriate optical density at the appropriate electromagnetic wavelength; based on individual beam parameters



ltem #	Work Activity Using	Are the activ perforr the I Yes	ities ned in	Potential Hazard		Applicable Engineering Controls	Applicable Administrative Controls		Applicable PPE
4.2	Viewing a Class 3R laser beam with magnifying optics (including eyeglasses).			Eye damage.	•	N/A	 Completion of annual lab safety training Completion of laser safety training 	•	Appropriately shaded goggles/glasses with optical density based on individual beam parameters
4.3	A Class 3B laser open beam system with the potential for producing direct or specular reflections.			Eye damage, skin damage.	•	Beam enclosures Beam attenuators Beam blocks, or Laser rated curtains	 Completion of annual lab safety training Completion of laser safety training 	•	Appropriately shaded goggles/glasses with optical density based on individual beam parameters Appropriate skin protection
4.4	A Class 3B laser open beam system with the potential for producing direct or specular reflections.			Eye damage, skin damage.	•	Beam enclosures Beam attenuators Beam blocks, or Laser rated curtains	 Completion of annual lab safety training Completion of laser safety training 	•	Appropriately shaded goggles/glasses with optical density based on individual beam parameters Appropriate skin protection



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N 5		Yes No							
Non-Bear 4.5	n Handling dye laser materials, such as powdered dyes, chemicals, and solvents.			Cancer, explosion, fire.	•	Chemical fume hood	 Completion of annual lab safety training Completion of laser safety training Review of Chemical Hygiene Plan (CHP) 	•	Gloves Chemical splash goggles Flame-resistant lab coat or coveralls
4.6	Maintaining and repairing power sources for large Class 3B and Class 4 laser systems.			Electrocution, explosion, fire.	•	N/A	 Completion of annual lab safety training Completion of laser safety training Completion of electrical safety training Maintenance and repairs should be completed by vendor 	•	Electrical isolation mat Flame-resistant lab coat or coveralls
5.0 PHY	SICAL HAZARDS								
5.1	Cryogenic liquids.			Major skin, tissue, or eye damage.	•	N/A	 Completion of annual lab safety training Review of Chemical Hygiene Plan (CHP) 	•	Goggles for large volumes Impermeable insulated gloves (Cryogenic - Waterproof). Lab coat



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5.2	Removing freezer vials from liquid nitrogen.	Yes	No	Vials may explode upon rapid warming. Cuts to face/neck and frostbite to hands.	•	N/A	•	Completion of annual lab safety training Review of Chemical Hygiene Plan (CHP)	•	Completion of annual lab safety training	
5.3	Very cold equipment or dry ice.			Frostbite, hypothermia.	•	N/A	•	Completion of annual lab safety training Review of Chemical Hygiene Plan (CHP)	•	Safety glasses Insulated gloves (Cryogenic) (possibly warm clothing) Lab coat	
5.4	Hot liquids, equipment, open flames (i.e., autoclave, Bunsen burner, water bath, oil bath).			Burns resulting in skin or eye damage.	•	N/A	•	Completion of annual lab safety training Review of Chemical Hygiene Plan (CHP)	•	Safety glasses or goggles for large volumes Insulated gloves (impermeable insulated gloves for liquids, steam) Lab coat	
5.5	Glassware washing.			Lacerations; burns.	•	N/A	•	Completion of annual lab safety training	•	Chemical splash goggles Heavy rubber gloves Lab coat Leather closed toed shoes	
5.6	Working with loud equipment, noises, sounds, alarms, etc.			Potential ear damage and hearing loss.	•	N/A	•	Completion of annual lab safety training	•	Earplugs or ear muffs as determined by noise monitoring	



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5.7	A centrifuge.		Imbalanced rotor can lead to broken vials, cuts, exposure, and spills.	• N/A	 Completion of annual lab safety training 	 Chemical splash goggles Latex, vinyl, or nitrile gloves Lab coat 	
5.8	A sonicator.		Ear damage, exposure.	• N/A	 Completion of annual lab safety training Noise monitoring if applicable Audiometric testing if applicable 	 Safety glasses or goggles Latex, vinyl, or nitrile gloves Lab coat Earplugs or ear muffs as determined by noise monitoring 	
5.9	Sharps (including broken glass).		Cuts, exposure.	• N/A	 Completion of annual lab safety training Review of BBP- Exposure Control Plan 	 Safety glasses or goggles Latex, vinyl, or nitrile gloves Lab coat Leather closed toed shoes 	
5.10	Moving compressed gas cylinders.		Crushed foot/ toes, punctured valve causing torpedo.	• N/A	Should be done only by vendor	Steel toe guards or steel toed boots	
6.0 NAN 6.1	OMATERIAL HAZAR Unbound engineered solid nanomaterials.	RD	Inhalation, exposure, dermal exposure.	• N/A	Completion of annual lab safety training	 Goggles Gloves (change frequently) Arm sleeves (gantlets) Lab coat 	
						Respiratory protection may be needed	



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		Yes	No					
6.2	Unbound engineered liquid nanomaterials, where aspiration possible.			Inhalation, exposure, dermal exposure.	• N/A	 Completion of annual lab safety training 	 Goggles Gloves Lab coat Respiratory protection may be needed 	

Note: By signing below, you are confirming that you have read and understand the requirements stated in this document.

Date(s)	Name(s)	Signature(s):