Laboratory Hazard Assessment Tool

Activity Performed		Chemical Hazards			
Yes	No	Activity in Lab	Potential Hazard	Active Researcher PPE	Additional PPE or Comments
		Working with small volumes (<100mL) of corrosive liquids or solids (acids, caustics, etc) with little probability of a splash	Eye or skin damage. Low hazard for splash hazard	-Safety glasses -Chemical resistant gloves -Lab coat	
		Working with large volumes of corrosive liquids or solids (acids, caustics, etc) with the potential for a splash	Increased potential for eye and skin damage	-Safety goggles -Chemical-resistant gloves -Lab coat -chemical-resistant apron	
		Working with small volumes of acutely toxic liquid	Increased potential for eye and skin damage	-Safety goggles -Chemical-resistant gloves -Lab coat -chemical-resistant apron	
		Working with toxic or hazardous chemicals (solid, liquid or gas) including to and not limited to materials listed as a Health Hazard under GHS (GHS H301, H302, H311, H312, H331, H332)	Spills, splashes, ingestion, inhalation, absorption. Chemicals pose a high level of immediate health risk	-Safety glasses (Safety goggles for large amounts) -Chemical resistant gloves -Lab coat	
		Working with an apparatus with contents under pressure or vacuum	Eye or Skin damage	- safety glasses - chemical resistant gloves - Face Shield (high risk) activities) - Lab Coat	

Laboratory Hazard Assessment Tool

Activity Performed		Chemical Hazards			
Yes	No	Activity in Lab	Potential Hazard	Active Researcher PPE	Additional PPE or Comments
		Working with flammable solvents: when there is a risk of ignition or areas where flammable vapors or gas may be present and reasonable ignition sources are present	Fire. Skin or eye damage, potential poisoning through skin contact	-Safety glasses -Chemical resistant gloves - FR glove liners -Flame-Resistant Lab coat	
		Working with pyrophoric materials outside of a glovebox	Fire. Skin or eye damage.	-Safety glasses -Chemical resistant gloves - FR glove liners -Flame-Resistant Lab coat -Face Shield	
		Working with air or water reactive chemicals outside of a glove box	Increased potential for eye and skin damage, flying debris, detonation.	-Safety glasses -Chemical resistant gloves - FR glove liners -Flame-Resistant Lab coat -Face Shield	
		Working with potentially explosive materials	Increased potential for eye and skin damage, flying debris, detonation.	-Safety glasses -Chemical resistant gloves - FR glove liners -Flame-Resistant Lab coat -Face Shield and/or blast shield	

Laboratory Hazard Assessment Tool

Activity Performed		Chemical Hazards			
Yes	No	Activity in Lab	Potential Hazard	Active Researcher PPE	Additional PPE or Comments
		Major spill clean-up (any amount of acutely toxic chemical or other spills over 1 gallon)	Multiple Hazards	Call EHS for assistance	
		Working with known or suspected human carcinogens	Spills, splashes, ingestion, inhalation, absorption. High Hazard cancer-causing agents	-Safety glasses -Chemical resistant gloves -Lab coat	
		Working with known or suspected human carcinogens	Spills, splashes, ingestion, inhalation, absorption. Agents that affect reproductive capabilities cause mutation and adversely affect fetal development	-Safety glasses -Chemical resistant gloves -Lab coat	
		Working with engineered nanomaterials	Inhalation, exposure, dermal exposure, chemical exposure	-Safety glasses -Chemical resistant gloves - Lab coat	
		Minor Spill clean up	Skin, eye, or respiratory damage.	-Safety glasses -Chemical resistant gloves -Lab coat	

Laboratory Hazard Assessment Tool

Activity Performed		Physical Hazards			
Yes	No	Activity in Lab	Potential Hazard	Active Researcher PPE	Additional PPE or Comments
		Working with Cryogenic Liquids	Major skin, tissue or eye damage	-Safety glasses (goggles for large volumes) -Chemical resistant gloves -Lab coat -cryogenic protective gloves -Face shield	
		Removing freezer vials from Liquid Nitrogen	Increased potential for eye and skin damage	-Safety glasses -Chemical-resistant gloves -cryogenic protective gloves -Lab coat	
		Working with very cold equipment or dry ice	Increased potential for eye and skin damage	-Safety glasses (goggles for large volumes) -cryogenic protective gloves -Lab coat	
		Working with scalding liquids, hot equipment (autoclave, water, or oil bath)	Burns that could result in skin or eye damage	-Safety glasses (goggles for large volumes) -Thermal-protective gloves -Lab coat	
		Glassware washing		-Safety glasses -gloves -Lab coat	

Laboratory Hazard Assessment Tool

Activity Performed		Physical Hazards			
Yes	No	Activity in Lab	Potential Hazard	Active Researcher PPE	Additional PPE or Comments
		Working with loud equipment, noises, sounds, alarms, etc	Potential hearing loss or ear damage	-Ear plugs or muffs as needed	
		Working with a centrifuge	Imbalance rotor can lead to broken vials, cuts, exposure	-Safety glasses -Disposable gloves -Lab coat	
		Working with a sonicator	Potential hearing loss or ear damage	-Safety glasses -Disposable gloves -Lab coat -Ear plugs or muffs as needed	
		Working with sharps	Cuts, exposure	-Safety glasses -Lab coat	

Laboratory Hazard Assessment Tool

Activity Performed		Biological Hazards			
Yes	No	Activity in Lab	Potential Hazard	Active Researcher PPE	Additional PPE or Comments
		Working with human blood, body fluids, cell lines (Primary or established), tissues, or bloodborne pathogens, or other potentially infectious material	Exposure to infectious material, sharps, injuries	-Safety glasses/goggles -Chemical resistant gloves -Barrier Lab coat	
		Work with animal and or human specimens preserved in a fixative (paraformaldehyde or formalin)	Increased potential for eye and skin damage	-Safety glasses/ goggles -Chemical resistant gloves -Lab coat	
		Working with microbial agents (bacteria, fungi, virus, parasites, yeast, recombinant DNA and or biological materials that may contain Risk group 1 agents or recombinant DNA (BSL-1)	Increased potential for eye and skin damage	-Safety glasses/goggles -Chemical-resistant gloves -Lab coat -chemical-resistant apron	
		Working with microbial agents (bacteria, fungi, virus, parasites, yeast, recombinant DNA and or biological materials that may contain Risk group 2 agents or recombinant DNA (BSL-2)	Exposure to infectious material, particularly through broken skin, mucous membranes, or sharps injuries.	-Safety glasses/goggles -Double layer of Chemical resistant gloves -Lab coat	
		Working with live animals alone or in conjunction with Risk group 1	Animal bites, allergies, eye irritation, sharps injury. Exposure to infectious materials to individuals who may have personal health issues that make them more susceptible to infection	-Safety glasses/goggles -Disposable gloves -Lab coat	

Laboratory Hazard Assessment Tool

Activity Performed		Radiological Hazards			
Yes	No	Activity in Lab	Potential Hazard	Active Researcher PPE	Additional PPE or Comments
		Working with solid radioactive material or solid radioactive waste	Cell damage, potential spread of radioactive contamination	-Safety glasses -appropriate gloves for radioactive work -Lab coat	
		Working with liquid radioactive material or liquid radioactive waste	Cell damage, potential spread of radioactive contamination along with hazards produced by the specific chemical	-Safety glasses -Chemical-resistant gloves that are compatible with rad work -Lab coat	

Laboratory Hazard Assessment Tool

Activity Performed		Non-Ionizing Radiation Hazards			
Yes	No	Activity in Lab	Potential Hazard	Active Researcher PPE	Additional PPE or Comments
		Working with ultraviolet radiation	Corneal damage, Conjunctivitis, skin burns	-UV face shield or goggles -opaque gloves if potential hand exposure -Lab coat - other PPE: specify:	
		Working with infrared emitting equipment (glass-blowing)	Cataracts, burns to cornea, skin burns	-Appropriate filter safety glasses -FR Lab coat	

Laboratory Hazard Assessment Tool

Activity Performed		Laser Hazards			
Yes	No	Activity in Lab	Potential Hazard	Active Researcher PPE	Additional PPE or Comments
		Open Beam- 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	- Appropriate laser safety goggles/glasses with optical density based on individual beam parameters	
		Open beam- viewing a Class 3R laser beam with magnifying optics	Eye damage	- Appropriate laser safety goggles/glasses with optical density based on individual beam parameters	
		Open beam- Working with Class 3B laser open beam system with potential for producing direct or specular reflections	Eye damage	- Appropriate laser safety goggles/glasses with optical density based on individual beam parameters	
		Open beam- Working with Class 3B laser open beam system with potential for producing direct or specular reflections	Eye Damage, skin damage	- Appropriate laser safety goggles/glasses with optical density based on individual beam parameters Appropriate skin protection	
		Non-beam- Handling of dye laser materials such as powdered dyes, chemicals, and solvents	Cancer, explosion, fire	- Safety glasses -Chemical-resistant gloves -Lab coat	

Laboratory Hazard Assessment Tool

Activity Performed		Laser Hazards			
Yes	No	Activity in Lab	Potential Hazard	Active Researcher PPE	Additional PPE or Comments
		Non-beam- Maintaining and repairing power sources for large class 3B and class 4 laser systems	Electrocution, explosion, fire	-Electrical isolation mat -Flame resistant NEC 70E APC rated coveralls or lab coat	

Notes: Please read any SDS related to the materials that you will be using.

The PPE in this assessment is the minimum PPE required for a certain task. You may add more PPE as the lab wishes (including sleeve protectors, aprons, _____

Regarding biological hazards, please follow any additional requirements as request by the IBC and IUAUC and note them in this Hazard assessment

Regarding laser hazards, please follow any requirements as requested by the Laser safety committee and note them in this Hazard assessment.

Laboratory Hazard Assessment Tool

Activity Performed		Lab Specific Activities If your lab conducts any additional activities that is not listed above, identify the hazards and appropriate PPE, then add them to the table below. Add pages as needed			
Yes	No	Activity in Lab	Potential Hazard	Active Researcher PPE	Additional PPE or Comments

Laboratory Hazard Assessment Tool

Please certify that you have conducted this hazard assessment by filling out and signing this page. Maintain a copy of the signed hazard assessment with your CHP.

Name and Title of person conducting assessment

Principal Investigator's name (Print name)_____

Building and Lab rooms:_____

Signature of PI:_____

Date assessment completed: _____

Laboratory Hazard Assessment Tool

The following employees have reviewed this Laboratory Hazard Assessment Tool specific to this laboratory and have received the following training:

1. When PPE is necessary
2. What PPE is required
3. How to properly don, doff, adjust and wear PPE
4. The limitations of PPE
5. The proper care, maintenance, useful life and PPE disposal
6. General PPE best practices (not wearing PPE outside, in the bathroom, eating areas, etc)

Date	Trainer	Name of Trainee	Worker Signature

Laboratory Hazard Assessment Tool

The following employees have reviewed this Laboratory Hazard Assessment Tool specific to this laboratory and have received the following training:

1. When PPE is necessary
2. What PPE is required
3. How to properly don, doff, adjust and wear PPE
4. The limitations of PPE
5. The proper care, maintenance, useful life and PPE disposal
6. General PPE best practices (not wearing PPE outside, in the bathroom, eating areas, etc)

Date	Trainer	Name of Trainee	Worker Signature