	CRITICAL ISSUES				
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION	
			Are SDS available for all chemicals in the laboratory (must be hardcopy or pdf)? If not, are the lab's SDS stored in MSDSonline?	SDS must be available in hardcopy, a pdf document saved on a non-password protected computer in the lab, or stored in the MSDSonline database.	
			Does the lab have standard operating procedures (SOPs) in place for the use of corrosives, acutely toxic, carcinogenic, or reproductive toxins if these chemicals are used in the lab?	SOPs must be in place for the use of corrosives, acutely toxic, carcinogenic, reproductive toxins and particularly hazardous substances. Templates for the SOPs are available under the "Laboratory Safety" section of the EHSO website	
			Can lab employees readily locate the Lab Safety Plan?	Lab users must be familiar with the Lab Safety Plan and a hard copy must be kept in the laboratory.	
			Does the laboratory or the department as a whole have a Chemical Hygiene Officer (CHO) who lab workers can identify?	Every laboratory must appoint a CHO. The CHO may be the PI or an employee who has worked in the lab at least a year. As an alternative, the department may appoint a CHO who serves all the labs in the the department. The CHO must be identified by signing the first page of the Laboratory Safety Plan.	

	Biological Safety					
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION		
			Is the biosafety manual readily accessible?	A hardcopy or electronic version of the Biosafety Manual must always be available.		
			The classroom Bloodborne Pathogen Training is a one-time requirement for researchers who work with human blood, specimens, and/or cells.	Sign up for the next Bloodborne Pathogen Training here. The online training may be taken every subsequent year.		
			Has the laboratory established written policies and procedures describing the collection and storage of serum samples from at-risk personnel?	This is to avoid unecessary bloodborne pathogen contamination to the employee.		
			Are autoclave shutdown procedures readily available and posted near the autoclave?	Shutdown procedures must be available for emergency situations.		
			Are written policies for the safe handling of sharps such as needles, scalpels, pipettes, and broken glassware developed and implemented?	This is to avoid unecessary needle stick contamination to the employee.		

	Biological Safety				
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION	
			Are sharps and needles handled properly?	Sharps and needles must not be bent, sheared, broken, recapped, removed from disposable syringe, or otherwise manipulated by hand before disposal.	
			Are disposable needles and syringes discarded in conveniently located puncture- resistant containers? Are sharps containers filled below the indicator line or 3/4 capacity?	This is to avoid needlestick injuries. For further information, see the Biohazard Waste Quick Reference Guide.	
			Are uncontaminated pipettes disposed in a leak- proof puncture-resistant container?	If contaminated, use the sharps box. This is to avoid a puncture injury and for proper sanitation. See the Biohazard Waste Quick Reference Guide	
			Are all procedures involving the manipulation of infectious materials that may generate an aerosol conducted within a Biosafety Cabinet or other physical containment devices?	This is to avoid unecessary bloodborne pathogen contamination to the employee.	
			Are Biosafety Cabinets located away from doors, windows that can be opened, and heavily traveled laboratory areas?	Biosafety cabinets must be installed and located so that fluctuations of the room air supply and exhaust do not interfere with proper operations.	
			Have Biosafety Cabinets been re-certified within the last year?	Check for certification label. Biosafety Cabinets must be certified annually by a third party, Biosafety Cabinet Field Certifier.	
			Is the autoclave checked monthly with a KILZ spore test and is an autoclave indicator tape placed in the center of the bag before autoclaving?	This only applies to desktop autoclaves. Autoclave Quality Control must be checked monthly with the KILZ spore test. Also, autoclave indicator tape must be placed in bag center before autoclaving to ensure proper temperature is achieved.	
			Does a log of ultracentrifuge use exist and state when maintenance is required?	A log of ultracentrifuge use must be kept to ensure proper centrifuge maintenance to prevent explosion.	
			Is mouth pipetting prohibited in the laboratory?	Mechanical pipetting devices must be used.	
			Are appropriate bio-decontamination materials available?	Standard bio-decontamination disinfectants are 10% bleach solutions or 70% ethanol solutions.	
			Are materials to be decontaminated outside of the immediate laboratory placed in a durable, leak proof container and secured for transport?	This is to avoid spills.	
			Are absorbent pads changed daily or when soiled and disposed of as biohazardous waste?	This is to avoid unecessary bloodborne pathogen contamination to the employee.	

	Chemical Safety					
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION		
			If you are dispensing a flammable liquid from a metal container, is the container grounded?	When filling a metal container with flammable liquids or dispensing flammable liquids from a metal container, grounding must be used to avoid sparking and fire.		
			Are flammable liquids in excess of 10 gallons stored in a flammable safety cabinet?	Chicago Fire Code states that all flammables liquids in accumulation of 10 gallons or more must be stored in a fire safety cabinet.		
			Are highly flammable liquids stored in appropriate refrigerators or freezers that are labeled "Flammable Materials Storage" and certified for flammable materials?	A statement of certification should be listed on a brass or steel plate.		
			Are oxidizers and flammable chemicals stored in different cabinets with doors?	This is to prevent serious fires.		
			Are corrosives stored in a separate cabinet than flammables?	This is to prevent a violent reaction.		
			Are corrosives in excess of 10 gallons stored in a corrosive safety cabinet?	An acid/base cabinet is only required for quantities in excess of 10 gallons.		
			Are acids and bases stored in separate cabinets or in separate spill trays in a ventilated acid/base cabinet?	An acid/base cabinet is only required for quantities in excess of 10 gallons.		
			Is nitric acid (an oxidizer) stored away from corrosives?	Nitric acid is not compatible with other acids because it is an oxidizer. It must be stored separately.		
			Are oxidizers, toxics, dangerous when wet, and pyrophorics stored separately from other chemicals and is each hazard class on a separate shelf?	Store chemicals by hazard class not alphabetically to avoid adverse reactions. Most chemical manufacturers have color systems or pictograms to designate the hazard class of chemicals. Please refer to Chapter 12 of the UIC Lab Safety Plan.		
			Are hazard labels posted on shelves, cabinets, and appliances containing hazardous chemicals?	Post appropriate hazard labels on shelves, cabinets, and appliances containing potential hazards. Use signs that can be removed, not stickers. Templates are available on the EHSO website.		
			Are hazardous liquids that are in glass bottles stored below eye level?	This is to avoid spills and exposure or ignition of harmful vapors.		
			Are chemical containers closed when researchers are not actively pouring?	This is to avoid spills and exposure or ignition of harmful vapors.		
			Are all chemical bottle caps free of cracks?	This is to avoid spills.		
			Are empty chemical bottles defaced with their caps removed before disposing in a refuse container?	This is to ensure proper non-hazardous waste disposal and to eliminate confusion.		

	Chemical Safety					
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION		
			Are Class A peroxides dated and less than three months old?	Class A peroxides older than three months can form explosive crystals. The disposal cost for one container of an expired peroxide is approximately \$2000. For more information see the Chemical Safety Fact Sheets.		
			Are Class A and B peroxides stored away from sunlight and heat?	Sunlight and heat accelerate peroxide formation		
			Are all Class B peroxides dated and do you only have quantities of Class B peroxides which can be consumed within 6 months?	Class B Peroxide-forming substances must be dated and tested semi- annually for peroxides or used completely before six months. Class B peroxides older than six months can form explosive crystals. The disposal cost for one container of an expired peroxide is approximately \$2000. For more information see the Chemical Safety Fact Sheets.		
			If you have high pressure operations such as rotovaps, are glass vessels in high pressure operations taped or constructed of shatter proof glass and/ or do you have a blast shield?	Shield or tape glass vessels in operations involving high pressure or vacuum to avoid vessel shattering.		
			Is an appropriate secondary container available to move chemicals outside the laboratory?	Wire carts may not be used. Spill trays should be used in addition to the cart.		
			Are carcinogens stored in a secure, labeled area and are carcinogens stored in unbreakable secondary containers (i.e. plastic tubs)?	The Carcinogen Designated Area Sign & Log are available on the EHSO website.		
			Is an inventory kept for all carcinogens showing additions and withdrawals?	A running inventory record of carcinogens must be posted on storage area, showing additions, withdrawals, and usage. The Carcinogen Designated Area Sign & Log are available on the EHSO website.		

	Fume Hoods					
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION		
			Are all fume hoods unobstructed (i.e. no equipment and bottles in the path of the exhaust)?	Fume hoods must be unobstructed to provide employees proper protection from overexposure. Equipment, bottles, etc must be removed from the path of the fume hood exhaust slit in the back.		
			Is all fume hood work performed deeper than six inches in the fume hood?	For optimum safety, work must not be performed within the first 6" of the fume hood. Work should be done in the center of the hood.		
			Have all fume hoods been tested within the last year?	All UIC chemical fume hoods have a color coded certification attached to them indicating the year they were tested and if they are functional. If the fume hood has not been tested within the calendar year, please email labsafety@uic.edu to notify EHSO.		
			Does fume hood appear to work properly?	A Kimwipe taped to the bottom of the sash will detect the direction of airflow. Notify EHSO by emailing labsafety@uic.edu immediately if chemical vapors are being generated that are not being contained by the chemical fume hood.		
			If your chemical fume hood has an alarm, is the alarm functional?	Submit a work order to FM to have fume hood repaired.		

	Unwanted Chemical Storage & Waste				
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION	
			Are all potentially hazardous chemicals disposed via EHSO?	All unwanted chemicals which may be hazardous must be disposed through EHSO Hazardous Waste Removal.	
			Are all unwanted chemical containers that are stored on the floor, lab bench or closet placed in secondary containment?	Unwanted chemical containers must be stored in secondary containers to avoid spills.	
			Are all unwanted chemical containers closed (i.e. no funnels in place?)	Unwanted chemical containers must remain closed to prevent vapors from escaping; remove funnels. A "working container" no greater than 2 gallons, may be kept open until the end of the shift.	
			Is the unwanted chemical area clearly marked with the EHSO approved sign?	Designate an "UNWANTED CHEMICAL AREA" with the EHSO approved sign. The template for the sign is available on the EHSO website.	
			Are all chemicals in good condition (i.e. not polymerized, unstable, or expired)?	Polymerized chemicals will have a visible crystal structure. They must be removed from the lab to avoid adverse reactions. Powders and metals can be safely kept for a long time.	
			Are all unwanted chemicals labeled with the "Unwanted Chemical Label" and is the label completed properly?	The appropriate hazard boxes must be checked and percentages listed for mixtures. The label can be found under Chemical Disposal on the EHSO website.	
			Are unwanted chemicals segregated from non-waste chemicals?	This is to avoid contamination.	
			Are unwanted chemicals properly segregated? (oxidizers separate from flammables, separate from corrosives, etc)	This is to avoid adverse and violent reactions	
			If you have any chemicals which are categorized as P-listed wastes, do you submit a waste request before storage exceeds 1 quart (0.95 liters)?	Containers that held a P-listed waste must be treated as hazardous waste. No more than one quart (0.95 liters) of P-listed waste may be kept in a laboratory. The P-listed wastes are: Aluminum Phosphide, Ammonium Picrate, Mercury Fulminate, Nitroglycerine, Tetranitromethane and Zinc Phosphate (>10%).	
			Is a brush, dustpan, tongs, or forceps available to handle broken glass and is there is a proper container for broken glass?	Broken glassware should be handled with tongs and disposed in a sturdy box labeled "BROKEN GLASS." Use a cardboard box marked "Broken Glass" to dispose of both broken glass and uncontaminated pipets. The box must be taped shut, sealed, and have a sturdy bottom. There can be no signs of liquid inside the box. An employee should be able to comfortably lift the box.	

	Training Requirements					
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION		
			Has the Principal Investigator attended the "Principal Investigator's Responsibilities for Lab Safety" training?	Information regarding upcoming trainings can be found under "Training" on the EHSO website.		
			Has the lab completed the UIC Chemicals of Concern form and is a copy of the form kept inside the lab?	The Chemicals of Concern form tracks high risk and highly regulated chemicals. The form must be completed for a new lab or whenever a chemical from the list is added or deleted from a lab's chemical inventory.		
			Are all employees in the laboratory up-to-date with Lab Safety training?	Lab employees must complete one live training seminar and subsequently on-line training must be completed every year thereafter. Register for training under the "Training" section of the EHSO website		
			If any employee in the laboratory signs for (i.e. receives) hazardous materials, biological agents, or infectious substances, have they completed the online training "Introduction to Hazardous Materials Receiving"?	This online training must be completed for everyone who receives hazardous chemicals biological agents, or infectious substances by air or ground. Register for online training under the "Training" section of the EHSO website.		
			If any employee in the laboratory ships hazardous chemicals, biological agents, and/or infectious substances, have they completed the classroom "Shipping Hazardous Materials" training?	This classroom course must be completed every two years for individuals who ship the above-mentioned substances. Register for training under the "Training" section of the EHSO website.		

	Entry Way				
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION	
			Is an updated Lab ID Data Card posted at the doorway?	Use the FIM website to create your lab ID card: If you do not have access to the lab ID card application, e-mail fim@uic.edu	
			Are adjacent corridors free from lab storage and furniture?	Adjacent corridors must be free from lab storage and furniture to allow egress in an emergency.	
			Is the outer door to the laboratory closed at all times?	For the ventilation to work effectively, all laboratories must be closed at the entrance way when conducting laboratory work.	
			Are appropriate hazard signs posted at the doorway? Verify what the sign says reflects the hazards actually in the laboratory.	Appropriate hazard signs must be posted at the doorway to guide emergency responders. To create a lab ID card and hazard placard visit the FIM website. If you do not have access to the lab ID card application, e-mail fim@uic.edu	
			Are laboratories with radioactive materials locked when unattended?	Labs with radioactive materials must be locked when unattended to avoid theft.	

	Electrical Safety					
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION		
			Are power strips only used for computers, and do they appear to be in good condition?	Laboratory equipment, refrigerators and freezers cannot be plugged into power strips. Install additional outlets for laboratory equipment, refrigerators, and freezers.		
			Are all power cords in good condition (i.e. no wiring exposed and no duct tape)?	Power cords with exposed wiring must be replaced; wrapping with electrical tape is insufficient. The RRC can repair power cords.		
			Are there no extension cords in use? (Note: there are exceptions when it is appropriate to use extension cords temporarily.)	Extension cords must not be used; rearrange appliances or install additional power outlets. Submit a work order to install an additional outlet.		
			Are all electric outlets and junction boxes secure?	Electric outlets and junction boxes must be secured and covered. Submit a work order for outlet or junction box repair.		
			Is there a separate shut-off for high voltage/high amperage equipment?	A separate shut-off must exist for high voltage/high amperage equipment so it can be readily shut off in an emergency. Submit work order to install an emergency shut off.		
			Are all circuits in electrical panels identified?	Circuits in electric panel must be identified. Submit a work order to get electric panels labeled.		
			Can all electrical panels be easily accessed in an emergency?	Electric panels must be unobstructed so the electricity can be readily disconnected in an emergency.		

F	Personal Protective Equipment (PPE) & Exposure Control				
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION	
			Has the lab completed the UIC Lab Hazard Assessment and has the PI signed off on the assessment to ensure that all employees been trained on appropriate PPE? Does a hard copy of the Lab Hazard Assessment exist in the lab safety binder?	This document identifies proper PPE for lab workers. All lab workers should be trained on the document and sign off. A copy of the PPE/Hazard Assessment should be retained in the lab safety binder.	
			Are lab employees wearing the PPE the hazard assessment indicates is appropriate?	All laboratory employees shall wear a laboratory coat and safety glasses, in addition to other indicated PPE, while inside the laboratory.	
			If any employee wears a respirator, have they been trained and fit tested? Does documentation exist of training and fit-testing?	Employees must receive an annual medical evaluation, respirator training, and fit testing if they wear a respirator. Please contact labsafety@uic.edu for more information on how to fulfill these requirements.	
			Is all work that generates hazardous dust or vaper conducted in a fume hood?	Move operations that generate hazardous dust or vapor into the fume hood to avoid overexposure.	

Gas Cylinder Safety YES NO N/A QUESTIONS REASONING & CORRECTIVE ACTION Are caps on all compressed gas cylinders valves Replace caps on compressed gas cylinder valves that are not in use when not in use with a regulator? (regulator is not attached). Do you perform the "soap test" to detect leaks to When attaching the regulator to a cylinder, check the connection with a check the regulators? soap solution to detect any leaks. Is there only one spare gas cylinder for each gas This is to avoid storage issues and physical hazards with high pressure type (i.e. oxygen, hydrogen, nitrogen)? cylinders. The regulator should be tight and not mangled, the regulator is meant Is the regulator in good working condition? for the cylinder (i.e. not jammed on), and the gauges are free of cracks. Are gas cylinders marked with the name of the gas This is needed for both emergency response and disposal purposes. and a DOT (United States Department of Transportation) label? Do the gas lines for the regulator have a PSI This is to avoid explosions, gas release, and line ruptures. compatibility for the gas contained? Are compressed gas cylinders secured (including This is to ensure that the gas cylinder is properly secured and there is lecture bottles) and are there two or less cylinders no threat of the cylinder falling and consequently releasing high energy per fastener? Is the lab free of lecture bottles? Lecture bottles are discouraged due to high disposal costs. The cost for disposal of a single lecture bottle can be as high as \$4000. If lecture bottles must be used, use suppliers who will accept empty lecture bottles. Does the toxic gas storage unit have a leak This is to avoid a toxic gas leak. detection system? (Hint: Look for an alarm system.) Are all toxic and corrosive gases stored in a gas See "Toxic Gases" under Compressed Gas Safety in the Lab Safety safety cabinet vented to the fume hood exhaust Plan Do Bunsen burners have the proper flame retardant Flame retardant tubing is often orange or black with an argyle pattern. tubing and are the connectors of the tubing free of The connective rubber tubes must also be free of cracks to prevent cracks? fugitive gas emissions. Are flammable gas cylinders and oxygen cylinders Flammable gas cylinders and oxygen cylinders must be separated to separated by 20 feet or a 5 foot fire wall? avoid explosion.

Emergency Preparedness REASONING & CORRECTIVE ACTION YES NO N/A QUESTIONS Is the "Lab Specific Emergency Response Plan" The "Lab Specific Emergency Response Plan" must be completed or found in the Lab Safety Plan completed and posted updated annually and posted in your laboratory. This sheet contains the fire exit location, spill kit location, and eyewash/safety shower locations in the lab? for your laboratory. Each researcher should become familiar with the document. Do all sprinklers have 18" clearance? Remove storage within 18" height of sprinklers for efficient spray in a Does the laboratory have an eyewash that is within University Administration has decided that it is the responsibility of the 10 seconds travel time of the area where hazardous individual Principal Investigator to pay for the installation of an eye chemicals are used? wash in their lab. Please contact Vy Milunas, UIC Director of Project Management, at vmilunas@uic.edu to arrange an estimate for eye wash installation. Are eyewashes flushed weekly by the laboratory and This is to prevent rust build up, bacterial build up, and to check the is there a log of these eyewash flushes posted near quality of the water (color is clear and temperature is normal). the eyewash? Eyewashes must be flushed weekly by laboratory staff but also tested Have all eyewashes been tested within the last year by EHSO? annually by EHSO to ensure they will function properly in an emergency If your eyewash has not been checked within one year, contact Leo Njongmeta at biosafety@uic.edu University Administration has decided that it is the responsibility of the Is a safety shower present within within 10 seconds travel time of areas where hazardous chemicals individual Principal Investigator to pay for the installation of a safety shower in their lab.Please contact Vy Milunas, UIC Director of Project are used? Management, at vmilunas@uic.edu to arrange an estimate for a safety shower installation. Is the safety shower unobstructed and does it have Safety showers must be unobstructed so they can readily be used in an an intact handle? emergency. A safety shower should have three feet of clearance. A handle must be present and intact. Have all safety showers been tested within the last Safety showers must be tested annually by EHSO. If your safety year by EHSO? shower has not been checked within one year, contact Leo Njongmeta at biosafety@uic.edu Have all fire extinguishers been tested within the last Please email labsafety@uic.edu to notify EHSO that your fire year? If not, has the fire extinguisher been reported extinguisher is past its inspection date. to EHSO? Do all fire extinguishers have unbroken seals? If Please email labsafety@uic.edu to notify EHSO that your fire not, has the fire extinguisher been reported to extinguisher has a broken seal. EHSO?

spreadable)?

spill supplies?

If the laboratory has HF (hydrofluoric acid), is there a

non-expired calcium gluconate antidote readily

Are spill kits present and stocked with appropriate

available and in good condition (i.e. soft and

The HF antidote must be stored in all areas where HF is used in the

Spill kits must include materials in quanitities appropriate to chemicals

laboratory. Note the antidote only has one year shelf life. See the

HF Chemical Safety Fact Sheets for more information.

recommended spill kit contents.

uses or stored in the laboratory. See the Lab Safety Plan for

	General Lab Safety					
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION		
			Does the lab have three feet of unobstructed aisle space?	Three feet of unobstructed aisle space must be maintained throughout lab so employees can exit in an emergency. Rearrange equipment to clear aisle space.		
			Is laboratory furniture capable of supporting anticipated loads?	This is to ensure laboratory equipment does not casue a lab bench, table, etc to collapse.		
			Are lab benches as well as areas behind freezers and refrigerators free of clutter and accessible for cleaning?	There must be no clutter behind refrigerators and freezers, this is a major fire hazard.		
			Is there no eating, drinking, smoking, handling contact lenses, or applying cosmetics in the laboratory?	These activities put employees at risk of chemical and biological overexposure.		
			Is there no food for human consumption stored in laboratory areas?	Food must be stored outside the laboratory area in cabinets or refrigerators designated only for food to avoid employee poisoning.		
			Are all moving parts on machinery guarded (i.e. belts, pumps)?	Refrain from using mechanical equipment or pumps until moving parts are properly guarded. Moving parts must be covered to avoid amputations and other serious injuries.		
			Is the floor clear of spill and trip hazards (i.e. cords)?	This is to avoid any slip and fall incidences.		
			Is the ceiling intact (i.e. no missing ceiling tiles or holes)?	Missing ceiling tiles must be replaced and holes in the ceiling repaired. Submit a work order to FM.		
			Are corridor walls free of holes?	Holes in walls to must be sealed with "Fire Stop" or the equivalent. Submit a work order to FM.		
			If there are lasers in the laboratory, is every laser registered with EHSO?	Lasers must be registered with the Laser Safety Officer. Contact the UIC Laser Safety Officer at laser@uic.edu.		

	Cold Room					
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION		
			Are all flammable liquids not in use removed from the cold room?	Storing flammable liquids in a cold room is a fire hazard.		
			Is there no food or drink for human consumption in the cold room?	Storing food in the same location as chemicals puts employees at risk of poisoning.		
			Are Ground Fault Interrupt Circuitry (GFIC) outlets installed in the cold room?	GFIC outlets usually have red and black restart buttons. Submit a work order to FM.		

	Closets				
YES	NO	N/A	QUESTIONS	REASONING & CORRECTIVE ACTION	
			Is a heat detector present in all closets?	Install a heat detector linked to the building fire alarm system in storage closets. Submit a work order to FM.	
			Is a current Lab ID Card posted on the closet door?	A Lab ID Card must be posted and current on closet doors to provide vital emergency response information in an emergency. Visit the FIM website to update the lab ID card.	

Thank you for taking the time to fill out this self-inspection checklist. If you need any assistance from EHSO, please email us LabSafety@uic.edu or call us at 312-996-7411 and we will assist you. If you need assistance from Facilities Management (FM), please email them at servdesk@uic.edu or call 312-996-7511.