Food Science Departmental Practices V18

Information and Safety





Table of Contents

1 Access	to labs – please find the one that applies to you	4
	1.1 Observing Personnel	4
	1.1.1 Food Science building	4
	1.1.2 CRIFS building	4
	1.2 Workers (short term visitors or volunteers) and researchers (visitors staying for more than 6 months, grad students, undergrad students being paid, Post Docs, Scholars)	4
2 Building	js access	5
	2.1 Access to the Food Science building, the attic, core facilities, loading dock, and pilot plant	5
	2.2 Access to the CRIFS building	5
3 Respon	sibility for Safety	5
	3.1 Role and responsibilities of the employer	6
	3.2 Role and responsibilities of the faculty/manager/supervisor	6
	3.3 Role and responsibilities of the employee	6
4 Safety II	nformation	6
	4.1 Resources	6
	4.2 Committees	7
	4.3 Training	7
	4.4 Cameras	7
5. Equipm	ent	7
	5.1.1 Equipment in Building 38	7
	5.1.2 Equipment in CRIFS	8
	5.2 Core Labs and Special Equipment	8
	5.2.1 Professor Responsibility when dealing with Special Equipment	8
	5.2.2 Personnel responsibility when dealing with special equipment	8
	5.2.3 List of equipment supported by the department	8
	5.2.4 Use of the Confocal Leica DM IRBE Microscope at CRIFS	10

3- Training requirements (it is assumed that the individual has already completed the DSO – Basic Safety, if not, this needs to be completed first) (1) online Laser training, (2) CRIFS orientation (3) Training on how

to operate the microscope, including the microscope SOP. (4) Before unsupervised use is allow new personnel must shadow an experienced user	
6 Housekeeping6	10
7 Standard Operating Procedures	10
8 Lab coats	10
8.1 Wet Chemical Labs in Food Science: White Lab coats	10
8.2 Food Grade labs (formulation lab and pilot plant 2): Light blue lab coats	11
8.3 Pilot Plant 1 and 3: Dark Blue lab coats	11
8.4 CRIFS: White lab coats	11
8.5 CRIFS: White lab coats with different collar color	11
9 Evacuation of Buildings	11
10 Medical Emergency	11
10.1 Life threatening emergencies	11
10.2 Non critical emergency	12
11 Laboratory Inspections	13
Appendix I Procedure to gain access to participate in research Error! Bookmark not de	efined.
Appendix II – Incident Report Form- Go here	14
Annendix III - Monthly check list for Food Science and CRIES Labs	15

The University and the Food Science Department are doing their best to keep all personnel safe by equipping everyone with the knowledge to anticipate, recognize and avoid undue risks. Make sure you understand the nature of the hazards in your work and what must be done to control them.

Food Science consist of the Food Science Building, the Pilot Plants and the building of CRIFS. Read what is appropriate for your case

1 Access to labs - please find the one that applies to you

1.1 Observing Personnel

1.1.1 Food Science building

Wear a lab coat and safety glasses.

The visitor must be accompanied by a supervisor ALL the time while inside a lab/pilot plant.

1.1.2 CRIFS building

CRIFS is a Restricted Access facility.

To enter the building as **an observe**r: the visitor must ring the bell to gain access It is mandatory to:

sign the visitor log: when entering and when leaving.

wear a lab coat and safety glasses.

be accompanied by a supervisor ALL the time while inside a lab.

1.2 Workers (short term visitors or volunteers) and researchers (visitors staying for more than 6 months, grad students, undergrad students being paid, Post Docs, Scholars)

Anyone under the category of a "Worker" must do the following

First:

Take the University of Guelph on-line mandatory safety courses.
To do this, you must first be registered for the appropriate course. Go here https://ehs.opened.uoguelph.ca/index.cfm? (Copy and paste) and registered using your UoG credentials

EHS WHMIS - 2023 ONLINE

EHS Worker Health and Safety Awareness ONLINE 2023

EHS LAB SAFETY- 2023 ONLINE

EHS Bio-safety (Investigative Staff) 2023 (only if doing research for which this is needed- Ask your Professor/Supervisor. For CRIFS users, this is mandatory)

Once you are approved to take the course, an icon with the course name will appear on your course link (https://courselink.uoguelph.ca/shared/login/login.html). Please save the created certificate at the end of the Quiz as you need to submit that to the correct person.

Second:

- Contact the EHS representative in Food Science to make an appointment to carry out the Departmental Safety Orientation – Basic Safety (DSO-Basic Safety)
- Once the DSO is finished, submit the signed DSO and the 3 or 4 EHS certificates to Leona Varga

Third:

For the Food Science Building users: Arrange with your Professor or the Core Lab manager

- 1) the Lab Orientation
- 2) to be trained on desired equipment

Please, note that fellow students are not permitted to train you on the use of the Core Lab equipment. Talk to your Professor for his/her preference in the their her/his lab.

For the Pilot Plant users: Arrange with the Pilot Plant Manager (Robert Swan)

- 1) have a **Lab Orientation**
- 2) Be trained on desired equipment

For the CRIFS users

Arrange with the CRIFS safety representative (Nafiseh Jam)

- 1) Submit the 4 EHS Safety Certificates to the safety representative
- 2) Attend the CRIFS orientation
- 3) Participate in Common Lab Orientation in CRIFS
- 4) Provide the **Project description**.
- 5) Provide a signed copy of the **Biosafety Agreement**
- 6) Provide a Signed Check list

Arrange with the Professor

- 1) Lab Orientation
- 2) Training on specific equipment in the lab

2 Buildings access

2.1 Access to the Food Science building, the attic, core facilities, loading dock, and pilot plant.

Anyone can enter during regular working hours 8:30 am to 5:00 p.m. during weekdays. Swipe Card access may be granted, by the Secretary (room 106), to those requiring access to the building outside working hours. If a physical key is required for entrance to a lab, a deposit of \$20.00 must first be paid.

In all instances the signed DSO-Basic form is required. Personnel using the building outside of regular business hours will be held responsible for proper use: 1- Doors (internal and external) must <u>not</u> be propped open as this allows admission of unauthorized persons 2- windows must be closed and those on lower level floors secured against entry when leaving, 3- lab doors **are to be kept unlocked and closed at all times**. Access to the building will also grant graduate and researchers access to the Attic.

Access to specific labs will be granted, by the secretary, only when the DSO-Basic. A deposit will be required for each key issued.

Deposits will be reimbursed upon return of the key at the end of the stay.

Processing of the paperwork for these items takes place on Tuesday and Thursday afternoons only.

2.2 Access to the CRIFS building

CRIFS is a Restricted Access facility.

Permanent researchers wanted to work at CRIFS must complete all of the appropriate training as described in the "Procedures to gain access for research" - Appendix I

3 Responsibility for Safety

Everyone at the University of Guelph has a stake in maintaining a safe environment. At work, at school and at home, each one of us is accountable for our own actions. When we take on positions of authority, we assume some additional responsibility for the safety of those under our supervision as well.

This handbook covers the basics – if you need specific information on any aspect of the legislation, departmental procedures, or the controls necessary for the various physical, chemical, biological or radiological hazards, more detailed resources are available and are discussed in further detail below.

The University of Guelph operates under the Ontario Occupational Health & Safety Act (OHSA, RSO 1990, https://www.ontario.ca/laws/statute/90001) which is administered by the Ministry of Labour. A hard copy of the Safety Act can be found in room FS123.

All employees of the University of Guelph have 3 fundamental rights under the OHSA:

The right to **know** about hazards

The right to participate in health and safety

The right to **refuse** unsafe work

Additionally, workers who receive Basic Certification training and become Certified Workers have the right to stop unsafe work.

3.1 Role and responsibilities of the employer

- Provide a safe workplace.
- Ensure safety equipment is provided and used.
- Share information about hazards, train and supervise.
- Ensure there is a H&S committee or rep, as required.
- Appoint a competent person as supervisor.
- Take every precaution reasonable in the circumstances for the protection of the worker.

3.2 Role and responsibilities of the faculty/manager/supervisor

- Take every reasonable precaution in the circumstances to protect the health and safety of those under you (*i.e.*, exercise due diligence).
- Advise workers of the existence of any potential or actual danger to the health or safety of the worker.
- Ensure the worker follows safety procedures.

3.3 Role and responsibilities of the employee

- Work in compliance with the provisions of the Act and Regulations.
- Use safety equipment, protective devices or clothing as required by the employer.
- Report to employer or supervisor any hazard of which they know.

Be aware that the Ministry of Labour is an enforcement agency. Inspectors have the right of entry, power to issue orders, to ticket and to lay fines against individuals and the institution. It is also important to note that in 2004 the Criminal Code was amended to allow the crown to pursue criminal charges against corporations and individuals in cases where there is reckless disregard for safety resulting in injury or death.

4 Safety Information

safety programs.

4.1 Resources

It is good to ask questions when in doubt. The Department wants you to think critically and understand the hazards you are facing, and the precautions required to protect your health and well-being as well as everybody else's in the Department.

The best place to start when looking for safety resources is with your Professor/Supervisor or lab manager as well as the University produced Lab Safety Manual

(https://www.uoguelph.ca/hr/system/files/Laboratory%20Safety%20Manual%20-

%20AODA%20August%202020.pdf).

Issues that cannot be easily addressed can be raised to the department chair, departmental safety committees, the Environmental Health and Safety (EHS) department, or other resources across campus. The University's Environmental Health and Safety department (EHS) also has a useful website (www.uoguelph.ca/ehs), where you can access all University safety policies, register for safety training sessions, and review resources and guidance on many aspects of the University's environmental, health and

For further information on University security and emergency preparedness, check out the websites of the Campus Community Police (www.police.uoguelph.ca) and the Fire Prevention Office (www.fire.uoguelph.ca).

You are always welcome to discuss any safety or environmental issue with someone in the University of Guelph EHS Department.

4.2 Committees

Safety Committees are there to help. Feel free to contact one of the Food Science Departmental Safety Committee members or someone from EHS at the University for help and support regarding safety programs, to help in identifying hazards, to raise safety issues, and conducting workplace inspections. Grad students have a representative in the Food Science Departmental Committee who should provide safety updates after each meeting.

4.3 Training

Everyone must learn from someone, so do not be afraid to ask for help. Training is a critical component of any safety program – no one can reasonably expect you to do the right thing if you have not been given clear instructions and/or the expectations are not clear.

The training available to personnel can be divided into two categories: general or specific. General training is provided by the Food Science Department, the University EHS Department, and external 3rd parties, and includes courses like WHMIS, Laboratory Safety, Workers Awareness, Radiation Safety, First Aid/CPR, Biosafety training. These courses may be offered in class or on-line. Please refer to the following websites for more details:

www.uoguelph.ca/ehs/courses/ for courses offered by EHS; www.uoguelph.ca/research/humanParticipants/ for information on human testing.

Job-specific training is the responsibility of each lab or work group. This includes a tour of the lab and on-the-job demonstration of equipment, lab methods and experimental techniques. Shadowing someone is critical to understanding complicated equipment. Working in the pilot plant and in CRIFS requires specific training on the operation of certain pieces of equipment. If you are unsure about how to safely and properly complete a task, ask for assistance.

The University mandates the following training courses: WHMIS, Laboratory Safety training, Workers Awareness training for all new personnel. Supervisors need to take the Supervisor Due Diligence course and anybody working with Biohazards must take Biosafety training. Additional courses are available through EHS.

4.4 Cameras

Be aware that the Food Science Department and CRIFS has installed surveillance cameras in some teaching areas, corridors and labs.

5. Equipment

5.1.1 Equipment in Building 38

Department equipment and supplies are to be used only in connection with authorized work of personnel in the Department. Departmental supplies must not be removed from the building without approval of the Department Chair. Faculty are responsible for equipment in their own labs. Equipment can only be moved from one Food Science lab to another with the consent of both Faculty involved: the owner of the equipment and the faculty member to whose lab the equipment is being moved. After use, equipment must be properly cleaned and immediately returned,

Any breakage or malfunction of Departmental equipment must be reported to the core lab Facilitators. Any breakage or malfunction of equipment in a Faculty lab must be reported to that faculty member as well as their lab manager or delegate if they have one.

Equipment from Building 38 cannot be returned to Building 38 if it has been used in CRIFS.

5.1.2 Equipment in CRIFS

Faculty members located in CRIFS have their own labs containing equipment for which they are responsible. All other labs in CRIFS are considered departmental labs and are called *common labs* or common areas. No equipment can be moved from one lab to another in CRIFS without consulting with the FS Safety and Biosafety Representative in CRIFS.

No equipment is allowed to be moved from CRIFS into Building 38.

5.2 Core Labs and Special Equipment

Building 38 has one room designated as "Core Lab": room 102. Other departmental equipment are hosted in rooms 202, 014, the brew lab and in the basement of the GFIC side.

The CRIFS building has one room with a Leica microscope for general research and another room for the SHIME.

Departmental equipment can be used for a fee. Departmental personnel as well as personnel from other department or Universities can use the equipment but certain steps must be followed as stated in 5.2.1.

5.2.1 Professor Responsibility when dealing with Special Equipment

- 1- Discuss with student the purpose of the equipment to be used.
- 2- Faculty approves estimated chargeback cost for equipment calculated by student (based on number of samples/reps and using current core lab or common lab pricing list).
- 3- Discuss with the student the parameters that the student needs to control or change.
- 4- Provide all necessary materials to prepare the sample as well as provide space in their own lab to do so. If the core lab facility is needed for sample preparation, then it needs to be discussed with the Core Lab Facilitator. Slides to be used in the microscope at CRIFS must be fixed priory to entering the microscope room. For students in Building 38, this means that they must fix the slide in their own lab.

5.2.2 Personnel responsibility when dealing with special equipment

- 1- Make sure that you get a Lab orientation before attempting to use any equipment. The facilitator will also discuss your needs and any requirements around consumables that may be needed. The Facilitator might ask to show a paper that uses similar parameters to the ones you will need. The student must consider variables to be controlled and explored using the equipment.
- 2- The department encourages all new personnel to shadow another researcher before starting their own work, to familiarize themselves with use of the equipment.
- 3- For initial solo operation of the equipment: consult with the Facilitator before carrying out.
- 4- Personnel are responsible for washing all glassware or other lab utensils that were used during the experimental procedure. The equipment must be left ready to be used by others: clean and all parts put away. Utensils and dishes that are left to be air dried must be put away no later than the following day.

5.2.3 List of equipment supported by the department

Equipment	Room location	Representative to show equipment operation	Alternate representative
Mastersizer 3000 – for powders and liquids	102	Fernanda	
Shaker Water bath with temperature control. VWR	202	Fernanda	Shane
Centrifuge up to 5000 rpm -Heraeus Multifuge X1R	202	Fernanda	Shane
Rheometer – Anton Parr MCR 301 - no maintenance by Department	028 – only training, not maintenance	Fernanda	

Freeze Drier – Genesis 35EL (Shelf temp -55-65C, Lowest condenser temp -82C)	056	Shane	Fernanda
Scanning Electron Microscope FEI Quanta FEG 250 Cryo- PP3010T aQuilo - Quorum	Molecular and Cellular Image Facility	Fernanda	
Leco FP528 – Dumas method	102	Shane	Fernanda
Soxhlet	102	Shane	Fernanda
Light Microscope BX60 - Olympus	102	Fernanda	Shane
Karl Fischer Titrator T5- Mettler Toledo	102	Shane	Fernanda
Vapor Sorption Analyzer – AquaLab	102	Shane	Fernanda
Bostwick Consistometer	102	Shane	Fernanda
Chroma Meter CR-400 - Konica	102	Shane	Fernanda
Minolta			
UV-Vis Spectrophotometer – Thermo Fisher Evolution 60S	102	Shane	Fernanda
Ion Exchange chromatographer: Dionex ICS-3000	102	Shane	
Gas Chromatographer - Agilent 6890	102	Shane	
HPLC Agilent 1100	102	Shane	
HPLC Shimadzu 10, uv-vis detector	102	Shane	
UHPLC Ultimax 3000	102	Fernanda	
SuperSpeed Centrifuge LYNX 4000-	102	Shane	Fernanda
Rotor 1:Max Speed 12,000 rpm, Rotor	102	Silane	I Gilialiua
2: Max Speed 18,000rpm			
Drying Oven fisher scientific isotemp	102	Shane	Fernanda
Muffle Furnace fisher scientific	102	Shane	Fernanda
Vacuum Oven fisher isotemp model	102	Shane	Fernanda
281	102	Sharie	remanda
Viscometers LV & RV - Brookfield	102	Shane	Fernanda
Ultracentrifuge WX80 – Thermo	102	Shane	Fernanda
Scientific			
Rotor 1:Max Speed 37,000 rpm, Rotor			
2: Max Speed 50,000rpm			
Reliance 400 Dishwasher	014	Fernanda	Shane
Autoclave	014	Fernanda	Shane
Leica DM IRBE: microscope: BF, DIC, Epifluorescence and Confocal	CRIFS 220		
imaging			
Autoclave in CRIFS	CRIFS 105	Nafiseh	
Biosafety Cabinet	CRIFS 109B, 209, 222A, 230, 235, 118, 120,	Nafiseh	
Bench Centrifuge	CRIFS 222, 235	Nafiseh	
Beckman High Speed Floor centrifuge	CRIFS 110	Nafiseh	
Beckman ultracentrifuge	CRIFS 110	Nafiseh	
Anaerobic chamber	CRIFS 118	Nafiseh	
Environmental Chamber	CRIFS 107	Nafiseh	
Spectrophotometer	CRIFS 220	Nafiseh	
Dishwashers	CRIFS 105	Nafiseh	
Victor Multilevel Plate Reader	CRIFS 120	Nafiseh	
Compress gas		Nafiseh	
pH meter	CRIFS 112	Nafiseh	
T	,		

Smoker	CRIFS 109	
OHORCI		

5.2.4 Use of the Confocal Leica DM IRBE Microscope at CRIFS

- 1- Obtain approval from your Faculty advisor to use this equipment. Charge backs will be billed once a month.
- 2- Contact the individual in charge of the Microscope.
- 3- Training requirements (it is assumed that the individual has already completed the DSO Basic Safety, if not, this needs to be completed first) (1) online Laser training, (2) CRIFS orientation (3) Training on how to operate the microscope, including the microscope SOP. (4) Before unsupervised use is allowed new personnel must shadow an experienced user.

6 Housekeeping

It is very important that all areas and labs are maintained at a high level of sanitation and cleanliness. Both Food Science and CRIFS buildings should always be ready for unexpected "inspections" by University or ministry representatives. As per University regulations, eating or drinking is prohibited inside laboratories and there is absolutely no smoking permitted anywhere.

Two kitchen areas are provided in the FS building (first floor and attic) and one kitchen in the CRIFS building. Gloves and lab coats are not permitted outside of labs unless being used as PPE for transporting hazardous materials.

7 Standard Operating Procedures

Standard Operating Procedures (SOPs). These are documents that lay out specific directions on what to do in certain emergency situations, or instruction on the use of common lab equipment. As mentioned earlier, the Department takes care of common labs in CRIFS and core facilities or teaching labs. Each Lab has their own requirements and procedures. Ask Professors/Supervisors or Lab Managers to provide the necessary SOPs.

8 Lab coats

Personnel entering any lab must put on a lab coat as soon as they enter the lab and wear it for the duration of their time inside the lab. This is a University requirement. Activities such as sitting to work on a computer should be done outside of the lab setting. The department has many available spaces for working at computers. Check with or Professor or administrative personnel if in doubt.

8.1 Wet Chemical Labs in Food Science: White Lab coats

Lab coats are the most common personal protective equipment (PPE) and are used to protect you from chemical hazards and contamination of your clothes. Lab coats must be worn in the lab all the time and may only be worn outside of labs if they are needed as PPE, for example when transporting hazardous samples from one lab to another one. It is **NOT** acceptable to access public areas in the department including: halls, washrooms, offices, kitchen or meeting spaces, while wearing a lab coat.

Each lab has a rack, by the entrance door, where lab coats are kept. You will be instructed if you are to use a personalized lab coat or a VISITOR one.

Grad students and researchers with a stay longer than 6 months in one lab, will be provided with 2 personalized white lab coats. One lab coat is considered a souvenir and can be kept by the personnel when the term of the stay ends. The second one must be returned clean to the Department. Two personalized lab coats are provided to always have a clean one for use. Keep the clean one away from the lab until it is time to use it.

Dirty lab coats can be placed for laundering in the canvas bag in the small room in front of the elevator in the basement. Clean lab coats can be picked up from the same room. Canadian Linen does the laundry.

8.2 Food Grade labs (formulation lab and pilot plant 2): Light blue lab coats

Some of these lab coats are available with no names, other have faculties and/or the word VISITORS. They are washed in house. Talk to the pilot plant Representative (Tim Dubois) for washing procedure. These spaces also require that users wear a hair and beard hair net.

8.3 Pilot Plant 1 and 3: Dark Blue lab coats

Every one entering these two pilot plants is required to wear a dark blue lab coat with the logo GFIC and a hair net. Dark blue lab coats are available with no names on them. When the lab coat is dirty, place it in the bag for laundry in pilot plant 1. Canadian Linen does the laundry on a rental base.

8.4 CRIFS: White lab coats

White lab coats are available for all labs located in the first floor of the building. Clean lab coats can be found in the first floor, by the women changing room. Each student should pick up a clean lab coat on Monday and return it for washing on Friday. The bag to collect dirty lab coats is located by the stairs on the first floor. In the case of a spill, lab coats must be autoclaved immediately and placed in the dirty bag. At that time, a clean lab coat is to be picked up.

8.5 CRIFS: White lab coats with different collar color

Lab coats with a color collar are to be used ONLY in the PCR rooms. Talked to Nafiseh Jam for instructions.

Canadian Linen does the laundry on a rental base.

9 Evacuation of Buildings

All personnel must be familiar with the exits for each working area. An evacuation plan is posted on the door of the lab/room that you are in. it is good practice to check this evacuation plan.

When the fire alarm sounds, immediately:

- Extinguish any open flames and close any open gas valves.
- Close the sash on fume hoods and biosafety cabinets (BSCs).
- Exit the lab, and close the door.
- Move quickly and calmly to the nearest safe exit or stairwell. Do not attempt to use the elevator.
- Once outside, move well away from the building.
- Go to the meeting place:
 - FS go to the marshalling area on Gordon St.
 - CRIFS go to the emergency blue pole on McGilvray st
- Pass any relevant information on to fire wardens.
- Re-entry to the building may proceed once the alarm bells have stopped ringing unless instructed otherwise by emergency response personnel.
- Anyone requiring assisted evacuation must be moved to the landing of the nearest safe stairwell. Ensure a fire warden or colleague notifies the emergency authorities of the person's location.

10 Medical Emergency

10.1 Life threatening emergencies

Dial 2000 (or 5200) and request emergency assistance or directly dial 519-840-5000.

Use the "Emergency Contacts" feature in the Safe Gryphon app. Chose "Campus Safety Office" first.

A critical injury is one that:

Is potentially life threatening.

Causes loss of sight in an eye. A burn to major portions of the body.

Produces unconsciousness.

Causes substantial loss of blood.

Causes fracture of arm or leg, or amputation of arm, hand, leg or foo In a life threatening emergency, do not attempt to transport the casualty to the hospital yourself. Dial 2000 and request an ambulance.

Critical injuries require **immediate** notification of EHS. If an injury meets the regulated definition of critical, the Ministry of Labour must be notified and the scene diseases preserved.

10.2 Non critical emergency

These kind of emergency must be reported immediately to the supervisor and subsequently to the lab manager.

Non critical emergencies requiring only first aid assistance can contact the departmental first aiders. A list is posted in every lab, it is printed in the DSO form as well as the board by the main office in FS and the front desk in CRIFS

In addition, the University's first aid stations are:

Student Health Services, JT Powell Building

Occupational Health and Wellness (OHW), Alexander Hall

Campus Police/Fire Prevention, mobile service

Students may obtain further medical treatment from Student Health Services. Employees can seek medical treatment or advice through Occupational Health and Wellness.

The University of Guelph requires that the ILLNESS or INJURY INCIDENT REPORT is filled up within 24 hours from the time of the incident/accident. The forms specifies that the supervisor and the Chair of the Department must sign. Incident Report Forms are available through the EHS website at: http://www.uoguelph.ca/ehs/forms.

Specific Incidents:

Cuts – if someone suffers a severe cut, place pressure on the wound, and if possible elevate the wound above the heart.

Punctures – if the object is still lodged in the person's body, do not remove it. Call 2000 immediately and request medical assistance.

Fainting – if someone is about to faint, have them sit or lie down. If they have fainted in a seated position, steady them and put their head between their knees. If they have fallen to the ground, roll them to their back and elevate the legs 20-30 cm. If someone sustained an injury during the fall, begins convulsing, or does not recover within two minutes, dial 2000 and request emergency medical assistance.

Needle sticks – Rinse the wound for 15 minutes. Determine whether it is a 'clean' or potentially 'dirty' needle. If the needle was potentially contaminated with an infectious substance, advise the victim to immediately contact Occupational Health and Wellness (x52647) or Student Health Services (x52131) and seek medical treatment. Outside of regular hours, advise the victim to seek immediate medical treatment (*i.e.*, Emergency Room). Prophylaxis for hepatitis and HIV must be started as soon as possible following exposure.

Seizures – help the person to the floor and clear away nearby objects. Try to prevent the person from striking objects in the area and harming themselves during the seizure. Do not attempt to restrain the victim or force

anything into their mouth. Placing any object in the mouth of a seizure victim only increases the likelihood of choking. Dial 2000 immediately and request medical assistance; be sure to inform them if the victim is having trouble breathing or any other relevant details.

11 Laboratory Inspections

The food Science Department requires Labs to be inspected weekly, monthly, and annually in accordance with University Policy.

Weekly checks and monthly checks are under the Professor/Supervisor (PI) responsibility. PI can do it themself or assign a dedicated person for these tasks.

Weekly checks are required for the eye wash station. A record of the checks must be displayed in the lab close to the eye wash station.

A *monthly check* is shown in Appendix III. Professors are to print this out for use. Monthly checks should be kept in a binder either in office of the PI or the lab and be readily accessible for the annual inspection.

Annual Inspection is carried out by one or more members of the Food Science Safety Committee. In the past, a date was chosen between the inspectors and the PI. It was decided in 2019 that there is no longer a need to convey a date, as the labs should be ready for inspection at any time. A form can be requested from the Food Science Safety Committee to implement a self-check if desired.

Each lab must have a hard copy of the University Safety Manual on hand or personnel must have access to a digital copy on a computer that has no password.

Appendix I – Incident Report Form- Go here https://www.uoguelph.ca/hr/system/files/Incident%20Report%20Form%202020%20-%20Fillable.pdf

Appendix II - Monthly check list for Food Science and CRIFS Labs

Description	Passed? Notes
Door signage includes biohazard symbol, containment level, PI and emergency contact details, entry/exit requirements are posted.	
Self-closing doors to access the lab are closed	
Benches are not cluttered	
Dedicated hand-washing sink has soap and paper towels	
Lab coats are not shared: they either have a name or they hang from labelled pegs.	
Safety glasses are personalized	
A minimum of 3 safety googles are available in the lab	
Cardboard boxes are not stored in the lab	
Food and drinks are stored and consumed outside of the lab , e.g. Kitchen or the student area	
Cell phones are used while inside a plastic bag. The plastic is disposed of when personnel leave the lab	
Check that benchtops have no cracks or chips	
Eyewash checked weekly and record of this is affixed close to the station.	
Ensure the access to the emergency eyewash/shower is not obstructed.	
Sinks labelled with EHS warning sign regarding "non hazardous waste can be disposed of in sink"	
Spill kit: is labelled, readily available and stocked. Make sure that it contains all the required materials (see Lab safety manual).	
First aid kit is stocked and readily available. Dressings are waterproof for biohazard labs or regular for other labs.	
Biosafety Cabinet is clean and clutter free; No storage on top of the cabinet and/or inside; Air grilles not obstructed	
Waste containers for larger broken glass items / sharp materials are readily available, labelled, and leak-proof	
Gloves are discarded in the biohazardous waste container as appropriate	
Check the fire extinguisher – it should be easy to access (<i>i.e.</i> , unobstructed), and the pressure indicator should be in the green area of the gauge.	
Visually inspect chemical storage areas to ensure there is no leakage and incompatibles are separated each month.	
Look for issues with unsecured gas cylinders, poor housekeeping, electrical hazards, and access to exits.	
Chemicals are entered in the inventory or removed from it.	

and deceed to exite.	1
Chemicals are entered in the inventory or removed from it.	
Name of person doing the checking: Date:	

Document Date Prepared	Building that applies	Approved by
April 2020	FS	Fernanda Svaikauskas
	CRIFS	Nafiseh Jam
July 2020		Fernanda Svaikauskas
October 2021		Fernanda Svaikauskas
September 2022		Fernanda Svaikauskas
January 2023		Fernanda Svaikauskas