



Avtale om kortvarig, faglig engasjement gjennom bioSPIRE, bioCEED - institutt for biovitenskap (BIO), Universitetet i Bergen (UiB).

1. ARBEIDSAVTALENS GRUNNLAG

1.1 Avtalens partner

Avtalen regulerer forholdet mellom følgende parter:

Oppdragsgiver

Oppdragstaker

Informasjon oppdragsgiver (bruk blokkbokstaver):

Navn	
Stilling	
Mobilnummer	
E-post	
Faggruppe	
Veileder/leder	

Informasjon oppdragstaker (bruk blokkbokstaver):

Navn	
Studentnummer	
Adresse	
Postnr./-sted	
Mobilnummer	
E-post	

1.2 Avtalens bakgrunn og formål

Avtalen erklærer frivillig arbeidsforhold mellom oppdragstaker og oppdragsgiver, med tilhørende ansvar og rettigheter. Avtalen skal sikre tilfredsstillende arbeidsforhold for oppdragstaker og god arrangementsavvikling for oppdragsgiver.

1.3 Virkeområde

Avtalen gjelder for bioSPIRE-prosjektnummer #.... (vedlagt kopi)

1.4 Vedlegg/ bakgrunnsdokumenter

Følgende informasjon skal være gitt av arrangør til medarbeider før arbeidsforholdet settes i kraft:

Kopi av bioSPIRE-prosjektbeskrivelse, SAFETY-pass, samt kontaktliste.



2. Oppdragsgivers ansvar og rettigheter

2.1 Oppdragsgivers ansvar

Oppdragsgiver plikter å besørge godt arbeidsmiljø, og overholde gjeldende regelverk og retningslinjer innen HMS. Oppdragsgiver plikter å tilby medarbeider arbeidsoppgaver som er meningsfylt og relevant for temaet innen fagfeltet, og skal sørge for at arbeidsperioden overstiger ikke 40 timer.

2.2 Oppdragsgivers rettigheter

Oppdragsgiver har rett til å avslutte arbeidsperioden om oppdragstakers oppførende erkjennes som upasselig eller ikke følger HMS rutiner.

3. Oppdragstakers ansvar og rettigheter

3.1 Oppdragstakers ansvar

Oppdragstaker skal ha fulgt HMS kurs i KJEM110. Kurset er obligatorisk for alle studenter ved BIO og hver student er pliktig til å ha gjennomgått nevnte kurs før undertegnelse av kontrakt. Oppdragstaker som kommer fra andre institusjoner skal kunne dokumentere for tilsvarende HMS kurs. Oppdragstaker plikter seg å følge HMS rutiner som er aktuelle for oppdraget/prosjektet. Oppdragstaker skal møte presis til arbeidsøktene etter avtale med oppdragsgiver. Oppdragstaker skal sørge selv for at hans/hennes engasjement i bioSPIRE-prosjektet overstiger ikke 40 timer. Oppdragstaker skal kunne dokumentere for arbeidstimene som er fullført i henholdt til bioSPIRE-prosjektet. Oppdragstaker skal tegne opp reiseforsikring om prosjektet inkluderer reise, tokt eller feltarbeid.

3.2 Oppdragstakers rettigheter

Oppdragstaker skal ha rett til å avslutte oppdrager hvis arbeidsoppgaver beskrives som ikke relevant eller meningsløs for fagfeltet. Oppdragstaker skal kunne nekte arbeidsoppgaver dersom HMS rutiner kan ikke følges.

3.3 Taushetsplikt

Oppdragstaker plikter å holde hemmelig det hun/han i forbindelse med arbeidsforholdet og arrangementet for øvrig får vite om noens personlige og/eller forretningsmessige forhold.

Undertegnede har lest og godtatt avtalen og betingelsene denne innehar.

Dato/sted

Dato/sted

Dato/sted

For oppdragsgiver

Oppdragstaker

For bioSPIRE



If you encounter any problem in the course of your bioSPIRE-project, take contact immediately with the bioSPIRE coordinators listed below. Should you need more info about other bioCEED projects, contact the bioCEED coordinator.

Queries about the courses and Bachelor/Master's programmes at BIO can be addressed to the Study Section.

If you have any concern about your health and safety, HSE routines and procedures in the frame of your project, you should take contact with the HSE coordinators and representatives for the area where your work place is located.

BIOSPIRE coordinator

Jonathan Soulé, Jonathan.Soule@uib.no 55584488

Study Section at BIO

Beate Ulrikke Rensvik, Beate.Rensvik@uib.no 55582241

Tone Stokka, Tone.Stokka@uib.no, 55583031

Ingvil Roosendaal Sahr, Ingvil.Sahr@uib.no 55584481

Linda Veka Hjørnevik, Linda.Hjornevik@uib.no 55584375

Security Centre at UiB: +47 55 58 80 81

Health Safety Environment coordinators and representatives

You may contact the following HSE coordinators and representatives if you have questions about your health and safety in connection with the tasks that you perform during your participation to the bioSPIRE projects

HSE Coordinators at BIO

Coordinator, Ann Kristin Frøyset, ann.froyset@uib.no 55584378

Representatives for Biologen A

David Rees, David.Rees@uib.no 55584469

Beate Ulrikke Rensvik, Beate.Rensvik@uib.no 55582241

Representatives for Biologen B

Heikki Savolainen, Heikki.Savolainen@uib.no 55584644

Birte Töpper, Birte.Topper@uib.no 55584644

Representatives for BIO-building HIB 1st, 3rd and 4th floor

Lindsey Moore, Lindsey.Moore@uib.no 55584609

Cindy Pinto Pedrosa, cindy.pedrosa@uib.no 55584418

Representatives for BIO-building HIB 5th floor


Björg Flatekvål, bjorg.flatekval@uib.no 55584553

Linda Hjørnevik, Linda.Hjernevik@uib.no 55584375

Representatives for Marine Station Espegrend

Mette Hordnes, Mette.Hordnes@uib.no 55583598/99205957

Knut Tomas Holden Sørli, Tomas.Sorlie@uib.no 55583945/99205956

	Health Safety Environment SAFETY PASS Department of Biological Sciences - UiB		Modified: 30/1-2025
Full Name			
Email address			
Supervisor			
Lab/Group			
Start date:		End date:	

Welcome to the Department of Biological Sciences - BIO

During the first weeks of your stay at the Department of Biological Sciences (BIO), you will encounter a lot of new faces, premises, instruments, procedures and regulations. While you get to know this novel environment, it is important that you feel safe at all times and that you get acquainted with safety rules and regulations. These rules have been defined by the HSE (Health-Safety-Environment) section and committees at the University of Bergen and the Department of Biological Sciences. They ensure that everyone knows what to do, where to go and who to contact in case of problem or danger. Remember that you are not only allowed to, but strongly advised to seek help whenever you feel unsecure or unsure about something. Employees and students will help you as much as they can. If not, they will indicate who can provide you with the necessary help.

Please read the present document carefully. Some of the sections are labeled "DEMO NEEDED". This means that someone in your research group (technician, colleague) or a fire/safety-delegate will have to teach you a few procedures. They will also have to sign the form on page 2 to confirm that you have received the necessary information. Ask your supervisor or lab manager to refer you to these persons. Once completed, the form (or a scanned copy) must be returned to the manager of the lab to which you are affiliated to for validation. Make sure that you have signed it (below and on page 5, 9, 13 and 17), and that each "DEMO-NEEDED" section in this form is approved.

Finally, remember that following HSE rules is mandatory. If you do not comply to these rules or if your behavior with regards to Health, Safety and Environment is inadequate, your authorization to access the teaching and research facilities will be revoked.

Have a nice and safe stay at BIO.

I hereby confirm that have read and understood the present HSE safety pass.		
	Date:	Sign:

Check list to be filled in by the technician/fire representative

Section 1.	SAFETY EQUIPMENT	DEMO NEEDED
I, BIO technician, hereby confirm that information about safety equipment has been given.		
Name:	Date:	Sign:
Lab/Group:		
Section 2.	FIRE – EVACUATION AND EQUIPMENTS	DEMO NEEDED
I, fire representative, hereby confirm that information about fire safety has been given.		
Name:	Date:	Sign:
Lab/Group:		
Section 3.	CHEMICALS	DEMO NEEDED
I, BIO technician, hereby confirm that info about hazards and safe use of chemicals has been given.		
Name:	Date:	Sign:
Lab/Group:		

Section 1.**SAFETY EQUIPMENT****DEMO NEEDED**

Whenever your work involves manipulation of chemicals, solutions, samples of known or unknown origin, it is advised to evaluate the risks in advance. Check for pictograms (see section 3), look at the safety datasheet (MSDS) for info regarding hazards and choose the equipment that will protect you best and at all times.



use gloves when needed.

Gloves: gloves will help protecting your hands and skin against various types of chemical hazard or protect your samples from contamination. Depending on their specification, they may protect against corrosive agents, staining solutions, acidic and alkaline solutions which may induce burns, and exposure to carcinogenic compounds. Remember to use the correct glove for a given task. See [HSE-gateway](#) and [BIO's HSE-handbook](#) for correct use of gloves. Only



Goggles: safety goggles protect your eyes and parts of your face against projections of liquids which properties might compromise your vision and damage your skin. They must be used when manipulating organic solvents, acidic/alkaline solutions, hot solutions, detergents and in situations where splashes and projections of particles are likely to occur.



Masks: masks protect your respiratory system against dust and particles. They are particularly useful when manipulating volatile powder, but not all types help against gas and fumes. When working with animals (rats, mice), they reduce occurrence of allergic reactions. Note that several mask/filter types exists; not all of them are equally efficient in all situations. Make sure that the type that you use is suitable with for the procedure that you are about to perform.



Ventilated cabinets: Ventilated cabinets (fume hoods) allow you to manipulate hazardous chemicals (liquid, fumes, powder) in a safe way. It is recommended to use them as much as possible, when technically possible. At BIO, the air flow in the ventilated cabinets is automatically modulated. Be aware that *the flow is reduced during weekends and outside of regular working hours.*



A special type of hoods called LAF-bench is designed to protect the content of the cabinet (cell culture, sterile preparations) from outside contamination, but not all LAF-benches do protect the user simultaneously. Do not hesitate to ask for help when unsure about hoods and safety.

In case of exposure to hazardous chemicals:

Learn to recognize and use the emergency showers and eyewash stations!

At BIO, the emergency showers are often combined with an eyewash station and may be found in corridors near the labs ("Biologen" - Thormøhlensgate 53A/B) or inside the labs (BIO-building/HiB - Thormøhlensgate 55). Both are critical to your health as they will help flushing spills of dangerous (corrosive, burning, carcinogenic) chemicals away from your body, head and eyes.



Emergency showers

Pull the chain to open the flow of water. Remain under the shower for **5-20 minutes** depending on the properties of the chemical and the degree of exposure.



Eyewash stations

They are found on emergency showers, but also on/nearby water taps and sinks. Use them when dangerous liquid projections have reached the eyes. Open the tap and push/pull the button to open the flow of water. Flush for **5-20 minutes** depending on the properties of the chemical and the degree of exposure.

Different types of eyewash stations are available at BIO. Some are specific to the BIO-building (Thormøhlensgate 55), some are specific to "Biologen" (Thormøhlensgate 53A/B).

Please check which type is available in the lab that you will use, and learn how to use it properly.



In case of minor injuries

You will find first aid kits and cabinets near or in the laboratories. They usually contain first aid items such as bandages, tape, small, medium and large sterile gauze dressings, scissors, plasters, etc. These items will help in case of small injuries such as cuts, burns, bleeding, etc.

At “Biologen” (Thormøhlensgate 53A/B), the first aid kits are orange and white, and closed, as depicted below to the left. At the BIO-building at HiB (Thormøhlensgate 55), the First Aid kits are green and open, as depicted below to the right.



I hereby confirm that I have read and understood the content of this section.

	Date:	Sign:
The technician who has given information on safety equipment signs on Page2 – Section 1		

Section 2.**FIRE – EVACUATION AND EQUIPMENTS****DEMO NEEDED**

Get to know the surroundings! During the first weeks at BIO, use a bit of your time to find out where safety equipment is located. If your workplace (lab) is distant from your office/reading room, check the surroundings of both places.

The local Fire Representative will show you where to find extinguishers, blankets and hoses, and locate the closest exit as well as an alternative exit in case access to the closest exit is made impossible (smoke, fire, structural damage).

Fire hose**Fire extinguishers****Fire blankets**

In case of alarm: if you are at “Biologen” (Thormøhlensgate 53A/B), a message will be broadcasted in the corridors. This message may differ depending on the origin of the alarm.



LISTEN TO THE MESSAGE, it tells you what to do. You may thus be advised to “leave the building” or to “wait for further instructions”. If you are in the BIO-building at HiB (Thormøhlensgate 55), a bell will ring. Proceed to evacuating the building immediately.

In case of evacuation:

- Keep calm and leave your workplace; don't waste time trying to take personal belongings with you unless there are close to you.
- Evacuate the building by using the **nearest** emergency exit.
- Meet at the fire assembly point (propeller, next to VilVite).



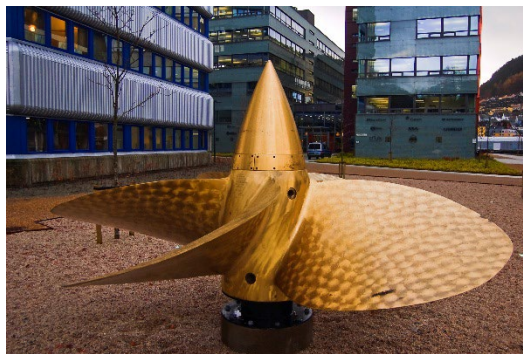
In case of fire:



- Keep calm, evaluate the situation and act fast.
- If the fire is **manageable**, use fire hose, blankets or extinguishers
- Trigger the fire alarm (red boxes)
- Close all doors and windows to contain fire and smoke
- Call 110 (Fire Department) and report:
 - o **Who** is calling, **What** has happened, **Where** the fire is
- Evacuate the building and meet at assembly point.
-

Evacuation procedures

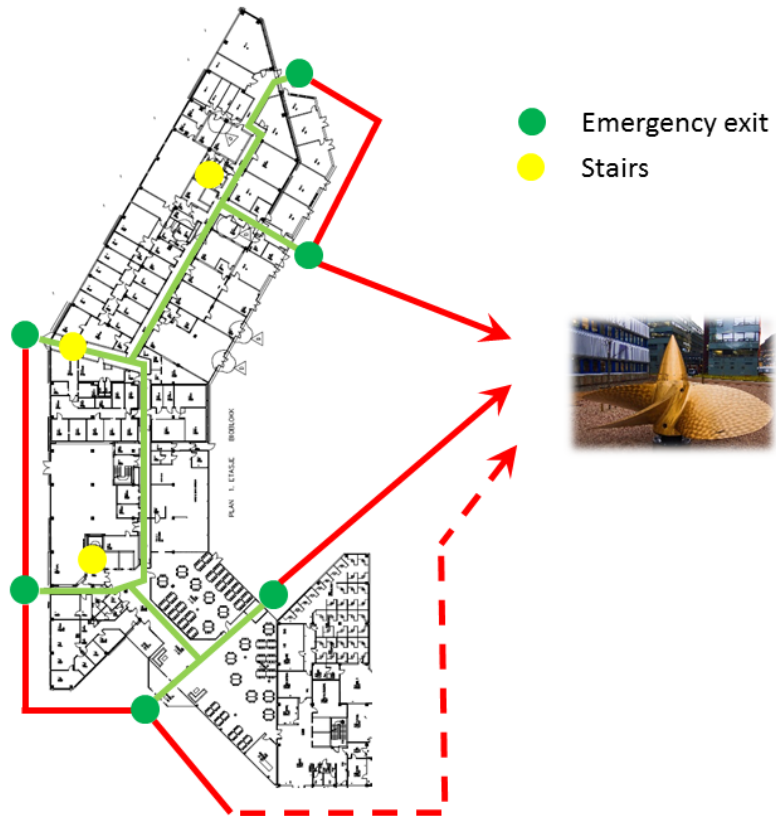
Whether your workplace is at “Biologen” (Thormøhlensgate 53A/B) or BIO-building/HiB (Thormøhlensgate 55), follow the evacuation procedure described below. The assembly point is located by the **propeller next to VilVite** as depicted below:



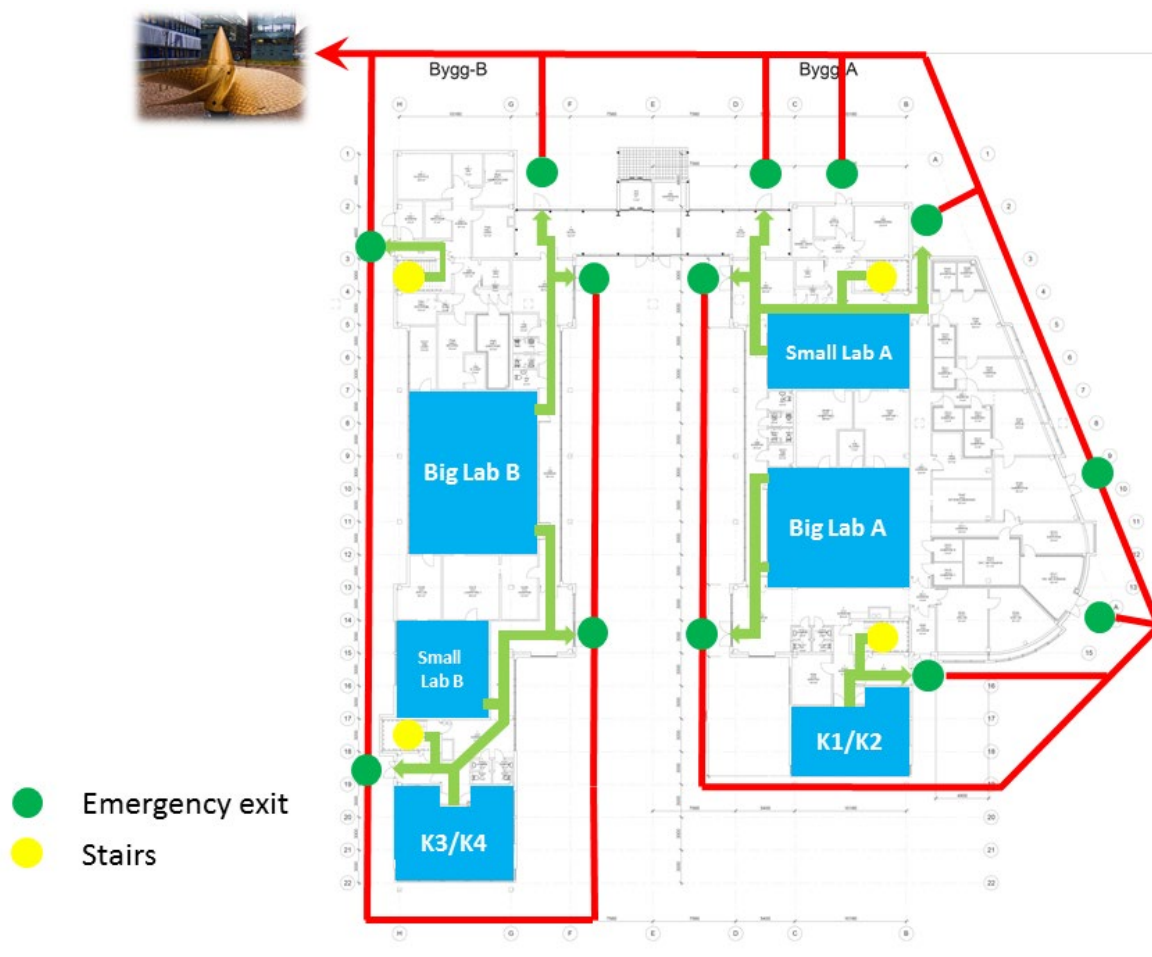
- Go to the ground floor by following the green “exit” signs.
- USE STAIRS - NEVER USE LIFTS.
- Once you have reached the ground floor, find the way to the nearest exit door and go to assembly point.
- NEVER turn back unless the recommended exit path is blocked.
- NEVER go back into the building unless the fire safety officer has given a clear signal that the situation is resolved.



General map for evacuation of HiB/BIO-building (Thormøhlensgate 55)



General map for evacuation of Biologen (Thormøhlensgate 53A/B)












I hereby confirm that I have read and understood the content of this section.

	Date:	Sign:
--	-------	-------

The Fire Representative who has given information on fire safety must sign on Page2 – Section 2

Section 3.**CHEMICALS****DEMO NEEDED**

There are plenty of chemicals in a laboratory that are harmless. There are also plenty of chemicals which are highly dangerous for your health. These chemicals are labelled with a **pictogram** which defines what type of hazard you may encounter. Learn to recognize the following pictograms.

GHS01 Explosive 	GHS02 Flammable 	GHS03 Oxidising 
GHS04 Gas Under Pressure 	GHS05 Corrosive 	GHS06 Acute Toxic 
GHS07 Harmful / Irritant / Skin sensitiser 	GHS08 Carcinogen / Germ cell mutagen / Reproductive toxin 	GHS09 Hazardous to the aquatic environment 


It is crucial that you learn the meaning of these symbols as they tell you what the **risks** are, what to think of when working with the corresponding chemicals, which **safety equipment** to consider when manipulating them (gloves, safety goggles, ventilated hood, etc.).

Additionally, you will find safety statements and codes which define more precisely the danger encountered when manipulating specific chemicals. They are:

- **Hazard statements or H-statements** ("H" followed by a number, which describe the nature of the risks of a substance or mixture),
- **Precautionary statements or P-statements** ("P" followed by a number, which indicate how hazards may be prevented or reduced).

Check the following page for more info: [Chemical inventory, exposure register and safety labeling | The HSE-gateway | UiB](#)

In the following example, the hazardous substance is clearly labeled with pictograms, H- and P-statements (highlighted in red boxes).

2. HAZARDS IDENTIFICATION	
Classification of the substance or mixture According to Regulation (EC) No1272/2008 Flammable liquids (Category 2) Acute toxicity, Inhalation (Category 4) Acute toxicity, Dermal (Category 4) Acute toxicity, Oral (Category 4) Serious eye damage/eye irritation (Category 2) According to European Directive 67/548/EEC as amended. Highly flammable. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes.	
Label elements	
Pictogram	
Signal word	Danger
Hazard statement(s)	H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H312 Harmful in contact with skin. H319 Causes serious eye irritation. H332 Harmful if inhaled.
Precautionary statement(s)	P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Hazard symbol(s)	F Highly flammable Xn Harmful
R-phrase(s)	R11 Highly flammable. R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R36 Irritating to eyes.
S-phrase(s)	S16 Keep away from sources of ignition - No smoking. S36/37 Wear suitable protective clothing and gloves.

All chemicals are delivered with a **Safety Data Sheet (SDS or MSDS)**, which describes in details the substance or mixture, the risks and dangers, the actions to take in case of exposure, fire, waste and disposal. You must always read datasheets before starting a procedure which involves hazardous chemicals. [Use this link to get access to the chemical inventory](#) (stoffkartoteket), which gives access to all datasheets of all chemicals stored or in use at your workplace. Log in with Feide to get access to the chemical inventory system. If it appears to be difficult to find the SDS in English via the chemical inventory system or any other online source (manufacturer), contact either your lab-manager or the HSE coordinator.

Exposure register is a personal register where you can log or report single exposures as well as repeated exposures to mutagenic, carcinogenic substances or reproductively harmful chemicals (marked with the H-statements H340, H350, H350i and all H360 -statements). If you use, have used or plan to use such chemicals, you shall carry out the registration yourself. If you have any questions, contact your lab-manager or the HSE-coordinator. Detailed description on how to register a repeated exposure can be found in BIO HSE handbook [Work and safety in the laboratory at BIO | Department of Biological Sciences \(BIO\) | UiB](#).

Precautions when working with dry ice

Dry ice is CO₂ in solid form and sublimates, evaporates directly into CO₂ gas that displaces air and can cause suffocation. Dry ice has a temperature of -78 ° C and can cause severe frost damage upon skin contact. Wear protective gloves when handling dry ice.

At 15 °C, 1kg of dry ice will expand to 530L when it sublimates to gas form. CO₂ gas is 1.5 times heavier than air, is colorless and odorless. A single sublimation test showed that 25-30% of the dry ice sublimed at minus 20 degrees within 1 day. At room temperature 50 -60% of the dry ice sublimed within 1 day.

Symptoms of inhalation of CO₂-containing air

2-4%: Increased breathing activity and headache.

4-6%: Headache, feeling sick and vomiting. May cause unconsciousness if the affected person does not quickly get into fresh air.

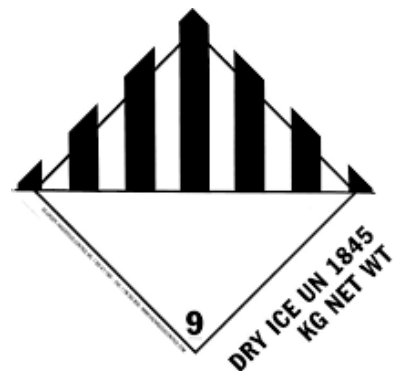
> 10%: Circulatory disturbances leading to coma and death.

Good ventilation is therefore important in handling and storing dry ice.

Storage of dry ice

The symbol to the right is found on containers or freezers used to store dry ice (full sign available [here](#)).

Minus 80 degrees freezers are best suited for storing dry ice. Dry ice will over time sublime in a BIO freezer as well, the volume will increase and cause increased pressure if the freezer is tightly closed. In freezers, CO₂ will lie in the bottom and be able to build up to dangerous concentration. Do not put your head down in a freezer that contains dry ice.



Dry ice can be stored for a shorter period in the Backup freezers in Room 2B07, 2nd floor A-block and room 526B1, 5th floor BIO-block, and room 432B2, 4th floor BIO-block. These freezers must be labeled properly.

If it is necessary to store larger amounts of dry ice, other ultra-freezers can be used after. The BIO Emergency Guard (453 92 771) must be informed, and the freezer marked. Larger amounts of dry ice should not be stored for a long time.

Precautions when working liquid nitrogen

Liquid nitrogen is extremely cold (-196 °) and can cause severe burns to exposed skin. When nitrogen evaporates in tight spaces (elevators, rooms with minimal ventilation) lack of oxygen can occur and increase the risk of suffocation.

Liquid nitrogen should always be handled according to BIO's work instruction available in the HSE handbook, [Work and safety in the laboratory at BIO | Department of Biological Sciences \(BIO\) | UiB](#).

SAFETY PASS

For snap-freezing of samples make sure you only use suitable cryo-tubes. If not, the tube can explode and cause severe damage to your eyes. Always use protective glasses when snap-freezing of samples.

Liquid nitrogen should always be transported alone in the elevator, and the tank should be labeled with a sign, I'm travelling alone.

Please, do not enter the elevator if a transport tank of liquid nitrogen travels alone. Respect the sign for your own safety.

I hereby confirm that I have read and understood the content of this section.		
	Date:	Sign:
The technician who has given information chemicals must sign on Page2 – Section 3		

Section 4.**HAZARDOUS WASTE**

Laboratory waste MUST always be handled/treated with care. Hazardous materials and solutions must be disposed of using specific procedures; sharp items must be kept in a secured container. Several types of containers are available for disposing of dangerous products. Depending of the danger linked to handling of the waste, you will have to choose between:



Small, yellow containers: these are used to confine small, sharp/pointed objects made of metal or glass (cannulas, scalpel, razor blades, broken glass, and glass objects of limited size, such as coverslips and slides) as well as waste from infusion/injection like syringes, needles, etc.



Large, yellow containers (problematic waste) these are made for biological waste, gels (agarose or acrylamide-gels), gloves, paper, empty chemical boxes and flasks. These containers may also be used to dispose of larger glass items or pieces (broken glass, Pasteur pipettes, empty bottles and glass vials that used to contains chemicals).



Large, red containers: these are used for disposing of chemical waste such as corrosive acids and bases, heavy metals, organic solvents with and without halogen, etc. Such containers are taken care of by lab managers and technicians. Solutions stored in flasks which may also be placed in these red containers.



Blue/white containers: these are used to store waste solutions. Blue containers are for solutions with halogens, while white containers are for solutions without halogens. Note that these containers should not be filled more than 3/4 full. Contact your lab manager or technician for help.

Yellow containers are collected by Bir for incineration. Other containers are also collected by Bir which takes care of special waste treatment (neutralization, etc.)

Contact persons

Three technicians at BIO are responsible for waste disposal:

- Hilde Stabell for T53A/B – Hilde.Stabell@uib.no)
- Lindsey Moore and Erwan Lagadec (T55 - T55Avfallsansvarlig@uib.no).

Contact them if you have doubts or need information/help.

Section 5.	Genetically Modified Organisms	
-------------------	---------------------------------------	--

Working with genetically modified microorganisms (GMM) and organisms (GMO) requires specific facilities and procedures to ensure that both you, your coworkers, and the environment are safe.

Facilities

The labs at BIO are approved for work with GMM/GMO which requires **containment level 1 and 2**.

Most of the laboratories at BIO are classified as containment level 1, and only a few laboratories are classified as containment level 2. Labs classified as containment level 2 are marked with biohazard sign.

The zebrafish facility is approved for the contained use of genetically modified animals.

As for the other labs at BIO, it is forbidden to eat, drink or store food in the GMO/GMM areas. Lab coats, gloves and appropriate safety equipment must be used in areas where this is specified.

All laboratories where GMOs are used at **containment level 2** (cell culture labs) and the Zebrafish facility have restricted access. Doors must be closed at all times and may be opened using the UiB card. Access to the lab is granted by the lab responsible person for the facility; contact this person to get informed about the rules and procedures that apply, and to have your UiB card activated.

Work protocols

Work with GMM/GMO and biological risk factors must be carried out in accordance with good microbiological practices. This means that you must prevent infection between the source of infection and the person by maintaining good hygiene. Equipment's used should be cleaned "on site" before it's removed from the laboratory. Good hygiene is important in the laboratory, this means that you should not bring outerwear, bags/purses, mobile phone etc. into the lab that are not cleaned before taken out of a classified lab.

Before a new work routine on GMM/GMO work is implemented, a risk assessment must be produced and documented. Research group leaders are responsible for keeping written work protocols. Protocols are produced to ensure that lab work is done without risk for health and safety, and without damaging the environment. Each user is responsible for adhering to the protocols.

Waste management

1) Waste related to genetically modified microorganisms (GMM)

In most cases, waste is autoclaved before discarding. Any dry, infected waste may be placed directly in yellow special waste containers (problematic waste) (see section 4 –hazardous waste).

- a) Solid waste such as agar plates must be handled as problematic waste and should be placed into a yellow waste container.
- b) Small quantities of liquid waste such as falcon tubes, Eppendorf tubes should be handled as problematic waste and collected in yellow waste containers.
- c) Liquid waste containing GMMs above 1L must first be autoclaved before pouring into a leak proof container (e.g empty ethanol bottles). And then handled as problematic waste (yellow waste container). Nothing should be poured into the sink.

2) Waste related to genetically modified zebrafish (GMO)

Dead zebrafish, larvae and embryos are collected in petri dishes and placed in the freezer. These are later to be incinerated. In case of spillage of embryos, clean up with paper wipes which are subsequently discarded in the yellow special waste containers. All waste water from the zebrafish facility is pumped through a shared water treatment facility (the Pyramid) for disinfection.

3) For GMO fruit flies, follow the internal waste guidelines that apply in the fly lab.

Protocols in the event of spillage and/or accidental release

Spillage containing genetically modified organisms must be cleaned up at once by use of absorbent paper, which is then discarded in yellow special waste containers. The compromised area must be disinfected. Protective gloves must be worn when cleaning up spills. If the compromised area cannot be immediately disinfected, you should:

- mark the area
- consider closing off the area in order to prevent health risks to others
- consider calling for help
- make a note of which biological factor has been spilled / released,
- notify your group leader
- report the incident as an internal HSE-anomaly (see section 9 - report an HSE-problem)

The Norwegian Directorate of Health must be alerted in all cases where spillage leads to the release of GMO.

Section 6.**SAFETY RULES FOR WORK IN THE LAB**

When working in the lab, safety and hygiene rules always apply.

Please follow the guidelines:

- It is prohibited to eat or drink in the laboratory. Freezers and refrigerators in the laboratories must not be used for the storage of food items. The same applies to the use of laboratory equipment – for example, beakers – for food and drink, even if the equipment is new and has not been used for chemicals.
- Generally speaking, it is recommended to wear protective glasses at all time when working with dangerous chemicals. However, goggles **MUST** be worn whenever handling concentrated acidic or alkaline solutions, and whenever there is a risk for splashes.
- The wearing of contact lenses should be avoided where possible. If it cannot be avoided, it is particularly important to wear protective goggles. In case of splashes in the eyes, hazardous solutions may be trapped under the lens, thus reducing dramatically the efficiency of the emergency eye shower and increasing chances for damages.
- Use laboratory coats made of cotton. Synthetic fiber materials can produce sparks from static electricity and, in the case of undesirable events, can lead to burns as synthetic fibers may melt directly on your skin.
- Protective gloves must be worn when using corrosive, toxic, irritating or allergenic compounds, as well as for chemicals that are hazardous on contact with skin (see SDS).
- Laboratories must always be kept clean and tidy.
- Never taste chemicals or solutions even if you think you are sure that they are harmless.

SAFETY PASS

- Never use your mouth for pipetting. Use a rubber balloon, burette, pipette pump, electric pipetting device or other equipment.
- Spillages on workbenches and floors must be wiped up immediately, irrespective of whether they are from chemicals or water. Use gloves and other safety items when cleaning up spills.
- No hazardous chemicals or environmentally harmful substances should be flushed into the sink. All chemical waste MUST be collected and declared as described here: [Hazardous waste | The HSE-gateway | UiB](#)
- Wash hands thoroughly after contact with chemicals. Wash your hands even if you have been wearing gloves. Use soap and water, not organic solvents. Working with certain kinds of chemicals requires exposure registration in the chemical inventory system ([Stoffkartoteket](#)) (see section 3. Chemicals). Ask your lab manager for guidance and advice.
- If your work or project involves risk factors such as exposure to fur-bearing animals, hazardous biological factors, specific hazardous chemicals (lead/lead compounds), ionizing radiations over an annual dose of 6 mSv, sustained exposure to noise, among others, it is strongly recommended to take contact with the University's health services for a health check prior to starting work activities. See [Health checks | The HSE-gateway | UiB](#) Contact the HSE section ([About the Occupational Health Service | The HSE-gateway | UiB](#)) for more information or to book an appointment with the doctor (email: bht@uib.no).
- There should never be any **unlabeled chemicals or samples** in the laboratory, in storage rooms, cold- or freezer rooms. The original packaging must always be marked in accordance with the Labelling Regulations (labels can be printed out from the Chemical Inventory).
- If you are **pregnant** or trying to get pregnant, you should not expose yourself to chemicals or work conditions that may compromise your health or fetal development. Your supervisor or immediate superior must be informed as early as possible, and a risk assessment must be performed to ensure that you have a safe working environment. Tasks that involve harmful chemicals or procedures must be given to a collaborator.

I hereby confirm that I have read and understood the content of this section.		
	Date:	Sign:

Section 7.	Working in freezer room	
-------------------	--------------------------------	--

When working in freezer rooms, it's important to be aware of the panic alarm button. The design of the panic button varies from freezer room to freezer room and between Bio-blokken and A/B-blokken.

If you plan to spend an extended period in the freezer room, inform one of your colleagues beforehand. Remember to notify them once you have finished your work.

If you get locked in, activate the panic alarm. This will trigger an acoustic alarm in the corridor, alerting your colleagues who can assist you in getting out of the freezer room. Additionally, the alarm is sent directly to Biovakten, who will respond immediately to provide assistance.

Make sure that the panic alarm button is always accessible and not obstructed by items stored in the freezer room.

When storing items in the freezer room, ensure to store the items in the designated area clearly labeled with your name, content and the date. Follow the guidelines provided by the technician responsible for the freezer room.

The same guidelines also apply for the cold rooms.

Section 8.	ROOM DATASHEETS	
-------------------	------------------------	--

The room datasheet is placed next to the entrance door of each and every lab or facility at BIO. It contains most of the necessary information regarding what happens in the lab, the risks and dangers, the methods often employed there. It also mentions the names and contact details of the persons who are in charge of the room and/or who have responsibilities in terms of HSE or fire safety. Contact these persons whenever you need help or feel unsure about something.

Here is an example:

Room number

Other rooms which can be accessed from this room

Contact details of the lab/room manager

Dangers and risks encountered when working in this room

Safety equipment which is necessary to work in this room

List of those who are allowed to work in this room

Methods and procedure in use in this room

HSE-representatives

Fire safety officer

HSE coordinator


Romnummer	Navn på lab	Fører videre til romnummer	Thormøhlensgate
333C1	MDB lab	334-337 C1	55
Forskergruppe	Marine Developmental Biology (MDB)		
Romansvarlig, Navn og telefonnr.	Rita Karlsen Tlf: 555 84625 Mobil: 97756995		
Spesielle helsefarlige forhold.	<ul style="list-style-type: none"> • <u>Helseskadelige kjemikalier</u> bl.a. akutt giftige kjemikalier og kjemikalier som kan gi varige helseskader • Brannfarlige kjemikalier • UV-lys 		
Vereutstyr	Labfrakk Hansker Verebriller	LAF benk Avtrekkskap Munnbind	
Brukere av rommet som er godkjent av romansvarlig:	Alle som har gjennomgått og skrevet under "Introduction to the Marine Developmental Biology laboratory". Romansvarlig har oppdatert liste. Kopi av listen finnes også i MDBs Lab-håndbok. Dessuten de som har fått tillatelse fra romansvarlig til å bruke utstyri laboratoriet i arbeidstiden.		
Beskrivelse av aktiviteten på labben.	PCR/qPCR RNA/DNA isolering cDNA syntese In situ hybridisering Immunohistokjemi	Kloning Mikroskopering Histologi Proteinanalyse Ioneanalyse	
Type lab	Molekylær lab		
Gass under trykk			
Vereombud/vara	Roger Lille-Langøy / Rita Karlsen		
Plassansvarlig brann	Teresa Cieplinska / Nina Ellingsen		
HMS-koordinator	Evy Foss Skjoldal (88179/99617402)		

Section 9.**HSE HANDBOOK – FIRE HANDBOOK**

At the Department of Biological Sciences, the HSE-handbook is available online. Follow the link:

[HSE-handbook for Department of Biological Sciences | Department of Biological Sciences \(BIO\) | UiB](#)

The HSE handbook is available in both English and Norwegian.



UNIVERSITY OF BERGEN

Education Research Innovation Library For students For employees About UiB Norsk

Department of Biological Sciences (BIO)

Education Research Resources About the Department Contact us

UIB > MATNAT > Department of Biological Sciences (BIO) > About the Department >

HSE

HSE-handbook for Department of Biological Sciences

Psykososialt Arbeidsmiljø
Forebygging Tiltak Beredskap
Verneustyr HMS Risikovurdering
Sikkerhet Kartlegging HMS-avvik
Planlegging Spesialavfall

Photo: UiB

You may also find useful information and advice on the HSE-gateway: [The HSE-gateway | University of Bergen \(uib.no\)](#)

The fire safety handbook for the department can be found on [FIRE SAFETY HANDBOOK FOR DEPARTMENT OF BIOLOGICAL SCIENCES | Department of Biological Sciences \(BIO\) | UiB](#)

Section 10.**REPORT AN HSE-PROBLEM**

The University of Bergen has implemented an electronic tool which gives employees and students the possibility to report HSE non-conformities.

What are HSE non-conformities?

HSE non-conformities are all adverse events and/or matters that have resulted or may result in harm to people, the environment and property, such as:

- fires and explosions
- break-in, theft, robbery and unauthorized access to buildings and areas
- damage to property and structural conditions in buildings
- personal injuries
- harmful emissions to the environment
- incorrect handling of chemicals, gas, biological agents and sources of radiation
- third party violence and threats (third party means persons who are not UiB employees). Students should report such matters in the Speak up! system, [Speak up! | University of Bergen \(uib.no\)](https://speakup.uib.no)
- breaches of the health and safety legislation, guidelines and routines.

How do I report HSE non-conformities?

Go to uibhjelp.no [Login \(uib.no\)](https://uibhjelp.no). Log on using your UiB username and password. Select the form “register breach” describe the problem that you want to report and submit the form online. More information is available on the HSE-gateway, [Report HSE non-conformities | The HSE-gateway | UiB](#)

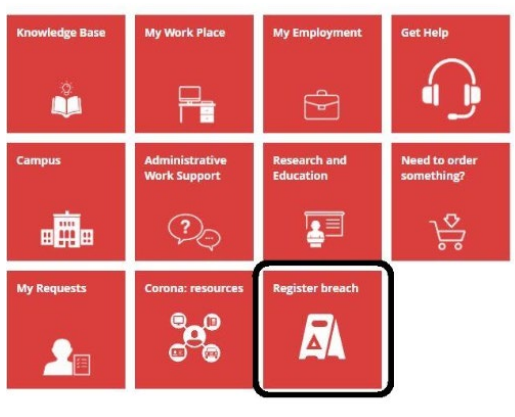


Photo:UiB

As a visitor, you might not get direct access to this system, possibly because you do not have a personal UiB account with sufficient credentials. If so, simply contact any student or employee with a valid UiB account and ask this person to open an issue on your behalf. Your HSE-case will be processed with the same degree of priority as if you had submitted it by yourself.