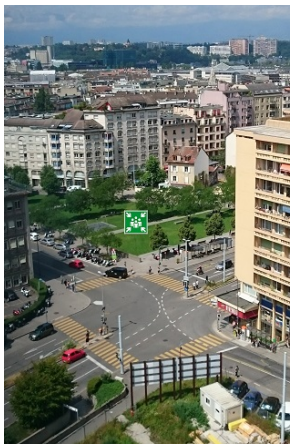
Safety Information
Department of Microbiology and Molecular Medicine

A) General Safety Information

Security information Day is mandatory. You will receive an invitation from the secretariat. At present they are organized once a year.

Evacuation (http://www.unige.ch/batiment/service-steps/prestations/urgences/)

- Calls for evacuation of the building have to be followed. If you cannot use the stairs, you need to inform your colleagues, **do not use the lift**.
- Go to the assembly place and wait for instructions (Parc des Chaumettes in front of the Hospital, see photo). Only go back when allowed.
- Inform co-workers, check in cold or warm room, or any other isolated space before leaving.
- Secure your work space as much as you can (extinguish gas supply, etc.), unless you are in immediate danger



In case of an urgency:

- Aggression: Police 117
- Fire: Fire brigade: 118
- Accident: Ambulance: 144
- Chemical accident: 1222 (internal call)

Check the attached safety sheet!

Accidents must be reported to the PI or the Head of the department. Biological accidents must be reported to the BSO or deputy BSO. This helps to avoid future accidents and is obligatory for reasons of insurance.

Working outside of working hours: In principle you should not work alone outside of working hours (at night, during the weekend). If you do so, take the necessary dispositions (e.g., inform other people).

No undeclared accompaniment – only declared people are insured! P2 labs can only be entered by authorized personal!

Potential illness or immune-deficiency: If you have any reason to suspect that your health status (allergy, immuno-deficiency, etc.) or pregnancy puts you at risk, you have to inform your PI or the Head of the Department.

B) Good Practices

If you are uncertain, do ask somebody experienced!

B1) Waste disposal

Normal waste: we perform selective sorting for paper, cardboard boxes, aluminium, PET, coffee capsules and glass. Normal office supplies that cannot be recycled should be disposed of using the black trash bags. All gloves should be disposed of in the P1 waste so there is no confusion by the custodial staff that changes the black trash bags.

Laboratory waste (see below under P1 and P2 Laboratory)

- **Black bags** (only in P1): plastic covers from lab consumables etc (**no gloves!**)
- **Yellow bags:** all lab related P1 waste. The laboratory is responsible for bringing the full bags, properly closed, to the storage room (Building D, first underground floor, room DS1.2048.a)
- **Red containers:** all P2 lab waste. P2 waste is collected by trained personnel and has to be autoclaved before being disposed of.
- Laboratory Glass waste (only P1) has to be disposed of with the chemical waste on the ground floor (opposite to the Loge).

Chemical waste
Chemical waste, properly labeled (orange labels available at the loge), should be transported to the ground floor (opposite Loge). Liquids in bottles should be carried in a container.
See: http://www.medecine.unige.ch/lafaculte/services/securite/dechets2.php

Radioactive waste
Radioactive waste, properly labeled with the isotope name (yellow labels available at the loge), should be transported to the ground floor (opposite Loge).

B2) Working environments

<u>Corridor</u>

- Do not wear gloves on BOTH hands and walk in the hallway. One hand must be free and clean.
- Check for adequate gloves (certain types of gloves may not be suitable for your work)
- Do not contaminate door handles etc.
- If you need to transport infectious or hazardous material (e.g. stained agarose gels) use appropriate closed and non-breakable transport devices
- Waste has to go to the trash or to designated places
- NO yellow bags/red containers in the corridor
- No cardboard boxes in the corridor

- Keep the space in front of the stairs free at all times in case of emergencies

In all laboratories

- Do not eat or drink in the laboratory
- No mouth-pipetting
- Long hair needs to be tied-up
- Keep workspaces clean and tidy
- Be aware of fire extinguisher location and fire blanket, eye wash, safety shower
- Be aware of exit routes in the event of fire or chemical spill.
- Never store dry ice or liquid nitrogen in enclosed spaces (ie., cold room) to avoid danger of asphyxiation.
- Respect rules of chemical stockage

P1 laboratory

- wear personal protection equipment (lab coat (mandatory), gloves and goggles when appropriate)
- No GMO in normal waste containers (black trash bag)
- Cutting or puncturing waste must go into designed plastic bins
- No P2-type organism in P1 laboratories
- All gloves must be disposed of in the yellow bag (No gloves in the black bag even if they are clean)
- RINSE glassware thoroughly before transfer to the laverie bac

P2 laboratory

- Restricted access ONLY for the people indicated on the door under a given authorization number
- Every person working in a P2 laboratory is required to follow the yearly instruction seminar
- P2 waste (red containers) needs to be closed in the P2 lab. The container should carry a biohazard sign, the name of the group and a description of contents (solid, semi-solid or liquid). The exterior of the container should be cleaned (e.g. with 70% ethanol). The containers are autoclaved in the laverie, before transport from the building by specialized carriers to be incinerated.
- Non-contaminated waste can be eliminated through the “filière jaune” (yellow bags).
- NO black trash bags in a P2 lab
- A dedicated lab coat and gloves are mandatory in the P2. This lab coat cannot be worn outside of the P2. Goggles and masks/face shields are optional.
- Workers should remove gloves and wash hands before leaving the P2 space.
- All liquid waste has to be decontaminated before going into the sink using appropriate chemical or physical measures.

- In the case of a large spill with infectious material (>100ml) outside the class 2 biosafety cabinet: Inform your co-workers, clear the room for 30min to let aerosols settle. Re-enter wearing the appropriate Personal Protective Equipment (PPE: lab coat, goggles, gloves and eye protection). Clean the spill by covering it with dry paper towels first and overlay these with disinfectant soaked paper towels (NOTE: P2 labs must assure a reserve of at least 6 rolls of absorbent paper at all times). Incubate for the appropriate time and clean paper from the outside to the inside (always towards the spill). Clean area a second time with disinfectant soaked paper towels. Do not spray ethanol directly into the spill! Inform the BSO.
- P2 labs require a weekly cleaning of floors by trained personal
- P2 work spaces need to be cleaned after work is finished.
- Be aware of disinfectants and those that do not corrode instruments.

P3 laboratory

Special conditions apply for work under P3 safety level conditions. All people wishing to work in the P3 must undergo a training program.

Radioactivity

There is a special P2/C laboratory room on the 9th floor building C (C09.1929.a)

- Is there an official training? If so how to apply, phone number etc?
- How much radioactivity is allowed in labs?

B3) Laboratory notebook

- The use of a laboratory notebook (not individual pages) is mandatory
- An electronic version of a laboratory notebook is recommended
- The laboratory notebook is the property of the University

Check for further information on the MIMOL security page:
https://www.unige.ch/medecine/mimo/en/security/

If you notice breaches of this protocol, you should inform your PI or the Head of the Department.

The undersigned has read and understood the above.

Date: _____ Name:

Signature: _____

Appendices to be consulted before you need it!

ACCIDENT-MEDICAL EMERGENCY

1. ***Get help, dial*** **144**

Give the following information:

Who? Caller's name, phone number

What? Events, circumstances leading to emergency, nature of problem

Where? Exact location (full address, useful information about access)

When? How long is it since the event?

How Many? Number of casualties, nature of injuries

Other Info? Symptoms observed, help given, etc.

2. *While waiting for help*

- **Observe** and assess the situation
- **Think** and ensure your personal safety
- **Act:** evaluate injured person's condition and provide **first aid** according to your skills. Ask **witnesses** to remain at scene of emergency.

WARNING: do not to try to remove a foreign body from your eye or someone else's eye. Rather, consult an ophthalmologist.

3. *Meet the emergency services and lead them to the scene*

4. *Dial 1222*

EXPOSURE TO CHEMICALS

Intoxication

Medical Emergencies, Dial **144**

For information concerning toxic substances and antidotes, call 145
(Swiss toxicological information center)

Spills/physical contact

In eye

1. Rinse eye thoroughly with running water or with eye wash
2. Dial **144**
3. Dial **1222**

WARNING: do not to try to remove a foreign body from your eye or someone else's eye. Rather, consult an ophthalmologist.

On skin or clothing

1. Remove soiled clothing
2. Rinse exposed body part thoroughly
3. Dial **144**
4. Dial **1222**

Emergency actions

FIRE	118
SERIOUS ACCIDENT	144
INTOXICATION	144
SECURITY EMERGENCY	117
CHEMICAL INCIDENT	1222

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SANTÉ AU TRAVAIL, ENVIRONNEMENT PRÉVENTION, SÉCURITÉ

Laboratoires P1

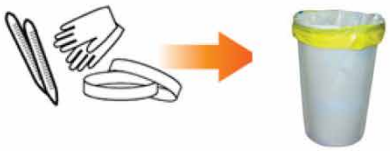
Elimination des déchets d'organismes P1 et autres OGM

Consigne générale

Les déchets P1 contaminés par des OGM doivent être séparés des autres déchets pour être **éliminés par la «filière jaune».**

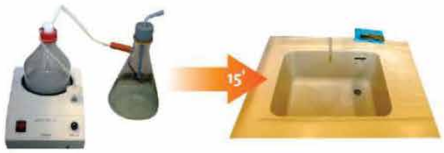
Déchets solides

- Les déchets solides **ayant été en contact avec du matériel biologique P1 et/ou des OGM** doivent être collectés dans une poubelle munie d'un **sac de couleur jaune approprié.**
- Les sacs doivent être déposés, fermés, dans les bennes de la filière jaune au sous-sol du CMU (bâtiment A)



Déchets liquides

- Les déchets liquides doivent être collectés dans des récipients contenant de l'eau de javel (fiole à vide).
- Respecter un temps de contact minimum de 15 minutes.
- Eliminer le contenu dans l'évier



Déchets tranchants ou piquants

- Les déchets coupants ou piquants doivent être inactivés par immersion dans l'eau de Javel immédiatement après leur utilisation.
- Ces déchets doivent être placés dans des boîtes jaunes «sharps».
- Les boîtes jaunes, fermées et munies d'une étiquette «déchets spéciaux», sont déposées dans le local des déchets spéciaux.

Déchets valorisables non contaminés

- L'aluminium, le papier, le carton, le PP et le sagex doivent être recyclés.
- Ces déchets doivent être éliminés suivant les filières à disposition dans le bâtiment.

Contact: dechets-speciaux@unige.ch

Centre Médical Universitaire

FILIÈRES DES DÉCHETS À RISQUES BIOLOGIQUES

Déchets solides P2/P3

FILIÈRE ROUGE

Les déchets solides de culture et les objets contaminés par des organismes P2/P3 doivent être collectés dans des bacs pour autoclaves de couleur rouge
Ces déchets doivent être inactivés par autoclavage

Les bacs rouges sont autoclavés par le service facultaire.

FILIÈRE JAUNE

Les bacs rouges autoclavés sont ensuite placés dans des sacs jaunes

Les sacs jaunes, fermés, sont déposés par le personnel des laveries dans les containers de la filière jaune

Déchets solides de culture P1, OGM et autres déchets de laboratoire potentiellement contaminés.

FILIÈRE JAUNE

Les déchets solides de culture P1 et autres OGM, les déchets de laboratoires sujets à contaminations chimiques ou biologiques ainsi que les prélèvements d'organismes potentiellement infectieux doivent être collectés dans des sacs jaunes.

Les sacs jaunes, fermés, sont déposés par le personnel des laboratoires dans les containers de la filière jaune

Déchets coupants/piquants

FILIÈRE COUPANTS PIQUANTS

Les déchets coupants piquants doivent être inactivés par immersion dans de l'eau de javel immédiatement après leur utilisation.
Ces déchets doivent être placés dans des boîtes jaunes «sharps»

Les boîtes jaunes, fermées définitivement, sont déposées par le personnel des laboratoires dans les containers de la filière jaune

CONTAINERS DE LA FILIÈRE JAUNE

Local: 1er sous-sol/ bâtiment D

N° de porte: DS1.2048.a

L'ensemble de ce matériel de conditionnement (sacs rouges, jaunes et boites «sharps») est à votre libre disposition dans le local de la filière jaune 1er s/sol bâtiment D

Ne pas trop remplir les sacs et ne jamais mettre de seringues ni d'objets piquants/tranchants dans les sacs

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ÉLIMINATION DES DÉCHETS SPÉCIAUX
DISPOSAL OF SPECIAL WASTE

IDENTIFICATION DES DÉCHETS
WASTE IDENTIFICATION

Remplir l'étiquette orange
Fill the orange label

Ne jamais amener de déchets sans connaître le contenu
Never give in waste without knowing the contents

Bien fermer les récipients
Containers must be closed

FILIÈRE JAUNE
DÉCHETS DE LABORATOIRES
YELLOW LINE
LABORATORY WASTE

Exemple / *Example:*
Déchets potentiellement contaminés, gants, pipettes, OGM, culture, déchets solides autoclavés, emballages en plastiques souillés, etc.
Potentially contaminated waste, gloves, tips, OMO, culture, autoclaved solid waste, contaminated plastic packaging, etc.

Exemple / *Example:*
Objets tranchants, objets piquants, etc.
Sharp objects, pointy objects, etc.

VERRES SOUILLÉS
SOILED GLASSES

Exemple / *Example:*
Bouteilles et flacons vides rincés, pipettes, etc.
Rinsed empty bottles and flasks, pipets, etc.

Pas de verre alimentaire (bière, champagne, etc.)
No food glass (beer, champagne, etc.)

FERS BLANCS SOUILLÉS
SOILED TIN PLATES

Exemple / *Example:*
Boîtes et flacons vides rincés, etc.
Tins, cans and empty flasks rinsed, etc.

SOLVANTS ORGANIQUES
ORGANIC SOLVENTS

NE PAS MÉLANGER
DO NOT MIX

Non-halogénés	Halogénés
No halogenated	*Halogenated*
Acétone | Méthanol	Chloroforme
Ethanol | THF, etc.	Dichlorométhane, etc.
Acetone / Methanol	*Chloroform*
Ethanol | THF, etc.	*Dichloromethane, etc.*

LIQUIDES AQUEUX ACIDES
pH < 6
ACID AQUEOUS LIQUIDS
pH < 6

Exemple / *Example:*
Acide chlorhydrique, acide sulfurique, métaux lourds, etc.
Hydrochloric acid, sulfuric acid, heavy metals, etc.

LIQUIDES AQUEUX NEUTRES
pH 6 – 8
NEUTRAL AQUEOUS LIQUIDS
pH 6 – 8

Exemple / *Example:*
Formol, eaux de lavages, métaux lourds, etc.
Formol, wash water, heavy metals, etc.

LIQUIDES AQUEUX BASIQUES
pH > 8
BASIC AQUEOUS LIQUIDS
pH > 8

Exemple / *Example:*
Eau de javel, soude, ammoniaque, etc.
Bleach, caustic soda, ammoniac, etc.

PRODUITS CHIMIQUES SOLIDES
SOLID CHEMICALS

En flacons	En vrac
In bottles	*In bulk*
KOH | Arsenic	Silice | Alox
Cyanure | Métaux lourds, etc.	Absorbants souillés, etc.
KOH | Arsenic	*Silica | Alox*
Cyanide | Heavy metals, etc.	*Soiled absorbents, etc.*

HUILES ET GRAISSES
OILS AND GREASES

Exemple / *Example:*
Huiles de pompes, graisses, etc.
Pump oils, greases, etc.

PRODUITS PHOTOGRAPHIQUES
PHOTOGRAPHIC PRODUCTS

Exemple / *Example:*
Révélateur, fixateur, etc.
Developer, fixer, etc.

MERCURE
MERCURY

Exemple / *Example:*
Thermomètres, flacons, solutions, sels, etc.
Thermometers, flasks, solutions, salts, etc.

SOLIDES / LIQUIDES COMBURANTS ET AUTRES RÉACTIFS
SOLIDS / OXYDIZING LIQUIDS AND OTHER REAGENTS

Exemple / *Example:*
Perchlorate, hydrure, sodium, etc.
Perchlorate, hydride, sodium, etc.

Conditionnés séparément
Must be conditioned separately

PEINTURES, COLLES ET VERNIS
PAINTS, GLUES AND VARNISHES

REJETS DES EAUX USÉES
WASTEWATER DISCHARGES

Les déchets liquides résultant des activités de laboratoire sont collectés séparément et traités en déchets spéciaux.
Liquid waste resulting from laboratory activities is collected separately and treated as special waste.

NE PAS négliger les petites quantités!
DO NOT neglect small quantities!

INFORMATIONS SPÉCIFIQUES AUX SITES
SITE SPECIFIC INFORMATION

Libre accès
Local D00.0653a

Free access
Local D00.0653a

dechets-speciaux@unige.ch

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Disinfectant	Compound	Active concentration	Application
Ethanol	ethanol	70 %	surface
Bleach (Javelle)	Sodium hypochlorite	10 %	liquid waste
Bleach (Javelle)	Sodium hypochlorite	2 %	surface
VIRKON-S	Pentapotassium bis(peroxymonosulphate) bis(sulphate)70693-62-840-55%Sodium C10-13-alkylbenzenesulfonate68411-30-310-12%Malic acid6915-15-77-10%Sulphamidic acid5329-14-64-6%Sodium toluenesulphonate12068-03-01-5%Dipotassium peroxodisulphate7727-21-1<3%Dipentene138-86-3<0.25%	0.5%	Surface, equipment, liquid waste (final concentration 0.5%)
Mikrozid	Ethanol, 1-propanol	100%	surface (steel)
H_2O_2 (liquid /gas)	peroxide	35%	surface/gas accessible areas
Biosanitizer	H2O2	2%	Floor, surfaces

Make sure the disinfectant is killing your bug of interest!