



LUND  
UNIVERSITY

# Safety routines and rules for the Biology Building A

DEPARTMENT OF BIOLOGY | LUND UNIVERSITY







## General Laboratory Routines

### LAB MONITOR

Everyone is responsible for maintaining an orderly work environment in the laboratories. One person has overall responsibility for seeing that work in the lab is carried out properly and responsibly. Find out who is responsible for the lab you work in. Solitary work is not allowed in the Biology building A.

### LAB ROUTINES

The lab routines listed below concerns all laboratories in the building.

- Lab coats are to be used only in the laboratory.
- Lab coats must be used while working with hazardous material.
- Don't walk about with gloves on; there may be splashes or traces of chemicals on them (and then others in and outside the lab are exposed to chemicals or radionuclides.)
- Do not bring your laptop into the lab while handling chemicals.
- Eating or drinking in the laboratory is not permitted.
- Don't throw hazardous and unhygienic laboratory rubbish such as agar plate, sharp objects and so on into waste-paper baskets. This sort of material could injure the cleaning staff. Put it in boxes labelled "Smittförande/Skärande/Stickande avfall" or boxes for chemical waste.
- Keep the laboratory and the place where you are working clean and tidy. If you spill hazardous liquid, use vermiculite to soak it up. There is vermiculite in room 144 on Floor 1. At the smaller stairway on Floor 1, 2 and 3 there are small trolleys with everything needed to clean up. Spilled liquid + vermiculite should be treated as chemical waste. If you have a larger spillage of hazard chemical you can call (0)112 and the Rescue service will take care of it.

- Rinse all glass ware with water and remove tape and text before you put it away for cleaning.

### ROOM/APPARATUS MONITOR

Names of people with special responsibility are found on the name plate outside each room. If a piece of apparatus does not work or breaks, you should immediately inform the room/apparatus-responsible person(s) and write a notice "out of order" with name and date. If there is a problem or equipment failure that could be dangerous, contact also the safety officer. Remember to write a warning notice about the dangerous situation, if this is needed. For example: FAULTY EQUIPMENT: DO NOT USE

### RULES

Current laws and regulations (AFS) can be found on the homepage of the Swedish Work Environment Authority (Arbetsmiljöverket) [www.av.se](http://www.av.se). Here you can read, along with other texts, the regulations governing "Systematic Work Environment Management, AFS 2001:1" and "Chemical health hazards in the Working Environment, AFS 2011:19" in English. Regulations are also issued by other authorities, such as the Swedish Civil

Contingencies Agency ([Myndigheten för samhällsskydd och beredskap](#)) and the Chemical Inspectorate ([Kemikalieinspektionen](#)).

### RISK ASSESSMENT

According to Swedish and EU legislation a risk assessment should be carried out for all work. The research supervisor is responsible for making sure that this is done. Risk assessments must be done before all work/experiment starts. This is to investigate if said work can carry a particularly high level of risk, so that preventive measures can be taken. In the provision, AFS 2011:19 you can read about the demands on how you need to do your risk assessment when you work with chemicals. The risk assessment should be done in KLARA and sign by the head of the unit, Mats Hansson.

#### Risk Assessment for pregnant/breast feeding women

According to the Swedish Work Environment Authority (Arbetsmiljöverket) [www.av.se](#) a risk assessment should be carried out for pregnant/breast feeding women. In the provision, AFS 2007:5 you can read about the demands on how you need to do your risk assessment. The risk assessment should be done together with your supervisor and the safety officer.

#### FUME-CUPBOARDS (HOODS U.S.A.)

Before using the fume cupboard make sure that it is approved. When work is in progress: Pull up the protective glass to the working position. Do not pull it up fully or the extraction function will not work properly and the protective effect is lost.

When work is completed: Pull down the protective glass (otherwise it takes a lot of air from the room).

Electrical equipment in the fume-cupboard must be connected to the electrical sockets on the front of the fume cupboard/hood, especially if there are highly flammable substances in the fume-cupboard. The electrical sockets have circuit breakers.

Do not clutter up fume-cupboards/hoods with flasks/bottles and apparatus. Fume-cupboards/hoods are particularly suitable for work with very volatile substances. If the ventilation stop working you should follow your risk assessment, leave the laboratory and close the door.

#### VENTILATED BENCHES

Before using the ventilated bench make sure that it is approved. Start the ventilated bench by turning the knob on the wall behind the bench. When you have finished working, turn the knob back to 0. Even at the 0 position, there is some

extraction. Up to a maximum of one-third of the perforated base plate can be covered and optimal extraction can still be maintained when working on the ventilated bench.

The ventilated bench is particularly suited to work with viscous substances.

Fume-cupboards/hoods and ventilated benches function both for volatile and viscous substances, but ventilated benches must not be used for processes involving high temperatures. The maximum temperature allowed is 40-50 degrees C. If the ventilation stop working you should follow your risk assessment, leave the laboratory and close the door.

#### SPOT VENTILATION

Before using the spot ventilation make sure that it is approved. In certain work with hazardous substances, when there is no room in fume-cupboards/on ventilated benches (that is, when weighing or using microscopes), use spot ventilation. Switch off after use. If the ventilation stop working you should follow your risk assessment, leave the laboratory and close the door.

## Chemicals

### PERMISSION

#### Biology building A:

- has reported to the Swedish Work Environment Authority (Arbetsmiljöverket) the classification of GMM F activity.
- has a permission from [Räddningstjänsten Syd](#) to handle flammable chemicals.
- has permission for a few group B (AFS 2011:19) chemicals in two laboratories.
- has dispensation for a few mercury salt chemicals in one laboratory.

The provision, AFS 2011:19 from Swedish Work Environment Authority ([Arbetsmiljöverket](#)) contains a list of group A chemicals (substances and its salts whose use is not permitted) and a list of group B chemicals (substances and its salts that can be used with special permission). Before you buy a group B chemical you need to apply for permission to the Swedish Work Environment Authority (Arbetsmiljöverket). Elisabeth Barane can help you with the application.

According to [Chemical Inspectorate](#) (1998:944) we are not allowed to use mercury salts without a dispensation. Elisabeth Barane can help you with the application to the Chemical Inspectorate.

Before buying a new chemical make sure that it's not a Group B-chemical or a mercury salt.

#### KLARA

KLARA is a database of chemicals and all our chemicals in Department of Biology is registered in this database. This help us to know where the chemicals are and which chemicals we have in the department. If you need to borrow a small amount of a chemical you can see which room the chemical is in and then you know which research leader to ask before take anything. [Log in with your CAS ID](#). Contact the department KLARA administrator, Erling Jirle, if there are general problems with KLARA.

#### PURCHASE OF CHEMICALS

Newly purchased chemicals must be reported to KLARA-operator Elisabeth Barane or Eva Svensson who will print a sticky label for the package. They need to know the name of the chemical and the CAS number, the name of the company, the amount of one package, how many package if more than one and in what room/cupboard you are planning to put the chemical.



Biology building A has a common storage for ethanol, both 96 % and 99.5 %. Elisabeth Barane, Chatarina Mattsson and Eva Svensson have the key for the ethanol cupboard.





### PURCHASE OF RADIOACTIVE MATERIALS

Write up the purchase of radioactive materials in the "Isotope binder" in the isotope lab room 130. Place the delivery document in the binder. Before you are allowed to work in the isotope lab you need an introduction course given by Marita Cohn.

[More information about radioactive material at the Staff pages \(pdf\)](#)

### STORAGE OF CHEMICAL

Flammable chemical and flammable poison should be stored in a ventilated cupboard. Acids and bases should be stored in another ventilated cupboard separately from the flammable chemicals. Acids and bases should be stored on different shelves in the ventilated cupboard. Chemicals classed as poisonous (labelled with a skull and crossbones) must be kept in poisons ventilated cupboards or in a refrigerator or deep-freeze on separate shelves that are marked or labelled. Oxidising chemicals should be stored in ventilated cupboard separated from flammable chemicals.

Ventilated cupboard			
<b>Cupboard 1</b>	<b>Cupboard 2</b>	<b>Cupboard 3</b>	<b>Cupboard 4</b>
Acids and bases on different shelves	Toxic chemicals	Flammable chemicals and toxic flammable chemicals on different shelves	Oxidising chemicals can be stored together with chemicals without pictogram
			

A maximum of 10 litres of flammable solvent can stand out on laboratory benches and a maximum of 50 litres can be stored in ventilated cupboards in lab areas. Avoid storing these in fume cupboards, as this can mean reduced protection when working. 0.5 m around a ventilated cupboard with flammable chemicals you should not place any electrical devices.

### HANDLING CHEMICALS

Before using chemicals, it is the responsibility of the user to acquaint her/himself with suitable methods of handling the chemical. Before starting a new experiment read the risk assessment. Always clean scales after anything has been spilt on them. If you need the scale for toxic chemicals do not move the scale into the fume hood. Note the weight on an empty tube with lid on the scale. Go to the fume hood and put your toxic chemical in the tube, close the lid and go back to the scale. Most times you can recalculate the volume to get the right concentration. When you are making solution from chemical with pictogram you have to put the same pictogram on the bottle or tube containing your solution. Write the name of all the chemicals you have put in the bottle or tube, not only the name of the buffer you have made.

### SAFETY DATA SHEET (SDS OR MSDS)

The safety data sheet for hazardous substances should be kept in a file in the laboratory so that people can easily look up the risks associated with

chemicals (flammable, allergenic, carcinogenic, poisonous etc. and the measures to be taken in the case of accident as well as methods of disposal and destruction). It is the responsibility of the person ordering the chemical to put the safety data sheet in the right place. Safety data sheet in Swedish or English can be printed from KLARA.

### FLAMMABLE SOLVENTS

All work with flammable solvents should be done in the fume hood. It is allowed to work with small volume of flammable solvents on the lab bench as long as you have at least 0.5 m to the nearest electrical device.

### GROUP B CHEMICALS

In this house we have permission for three group B chemicals applied by two research groups. If you need to work with any of these three chemicals, Dimethyl sulfate, Ethyl methanesulfonate and o-Dianisidine you should contact Elisabeth Barane if you do not have the permission in the group you belong to. Before you start to work the these chemicals you have to make sure that you read the risk assessment for the experiment where the substance is included and sign the list for that substance.

### CMR CHEMICALS

In every research lab there is a yellow folder named CMR (Cancer genic, Mutagenic and reproductive toxicity) with an updated list of all CMR chemicals in the Biology A building. If expose to any of these chemicals the formed in the folder should be filled in. The form has to be stored for 40 years.

### MEDICAL EXAMINATION

The provision, AFS 2005:6 from Swedish Work Environment Authority (Arbetsmiljöverket) describe chemicals with a certain type of risks such as lead, cadmium, acrylamide and formaldehyde etc. The employer has an obligation to organize medical check-ups, offer the employee that is planning to work with any of these chemicals to undergo them. [Form instructions for medical examination at the HR web.](#)

## Waste disposals

Information about the university rules for the disposal of waste can be found at [Staff Pages](#).

Cardboard boxes (cartons) and plastic bags for Infectious waste, are available in room 181. Cardboard boxes and plastic bags for Chemical waste are available in room 144.

### INFECTIOUS WASTE - MATERIAL CARRYING A RISK OF INFECTION

Two types of GMO (genetically-modified organisms) are handled in Biology building A

- **GMM-waste**; genetically-modified micro-organisms
- **GMV-waste**; genetically-modified plants.

All cultures with or without antibiotics containing GMM material should be treated with Virkon. Virkon is common for all in Biology building A and can be found in room 144. The culture should be incubated with Virkon for at least 15 min but preferably over night. The Virkon treated cultures should be collected in plastic bottles and treated with swell. Swell is common for all in Biology building A and can be found in room 144. The bottles should be handled as infectious waste and be packed in well-sealed plastic bag in carton labelled "Smittföande/Skärande/Stickande avfall". 1 liters and 5 litres bottles are stored in room 144.

Untreated material carrying a risk of infection GMM or GMV should be packed in well-sealed plastic bag in carton labelled "Smittfö- rande/Skärande/Stickande avfall".

Used pipet tips, disposable pipets, cuvettes, disposable loops and spreaders should be packed in well-sealed plastic bag in carton labelled "Smittfö- rande/Skärande/Stickande avfall"

Used cannulas and scalpel blades should be collected in yellow jars. The jars should be packed in sealed plastic bags in cartons "Smittfö- rande/Skärande/ Stickande avfall".

The weight of the carton should be written on the box. There is a scale in the corridor outside the cold room 148 that can be used for the cartons. The carton is placed in room 148.

GMV-waste packed in well-sealed plastic bag in carton (labelled "Smittfö- rande/Skärande/Stickande avfall" should also be labelled with "Gen-modifierat växtmaterial/Genetically-modified plant material". Cartons should be stored in the respective growing rooms until they are collected.

There are two sizes of carton, 25 litres and 55 litres. A full carton may weigh up to a maximum of 8 kg and 12.5 kg respectively.

### CHEMICAL WASTE

Certain chemicals are collected in waste bottles which can be found in the non-sterile glass ware store room 246. Bottles must be labelled with [the label "Laboratorieavfall/Chemical waste" \(png\)](#) and carry a hazard symbol (pictogram, when mixing waste chemicals, state all ingredients on the label and put on all hazard symbols needed). Full waste bottles should be stored in ventilated chemical waste cupboard in room 144.

<b>Laboratorieavfall / Chemical waste</b>	
Lösningsmedel / Solvent:	_____
	_____
Innehåll / Content:	_____
	_____
	_____
Namn / Name:	_____
Avd / Dept:	_____
Tel / Phone:	_____ Datum / Date: _____

Larger quantities must be packed by the user in cartons for chemical waste (38 litres). The bottles and jars of chemical waste are placed in a plastic bag with vermiculite in the bottom and around the containers. Seal the plastic bag. The carton should be sealed with tape and marked with the label "Laboratorieavfall/Chemical waste" stating the contents and user. Cartons are stored in room 144.

Pipet tips, disposable pipets, cannulas and scalpel blades used for hazardous chemicals should be collected in jars labelled "Laboratorieavfall/ Chemical waste". The jars are kept in ventilated chemical waste cupboard in room 144 or packed in sealed black plastic bags in unlabelled 38 litre cartons. The carton should be sealed with tape and marked with the label "Laboratorieavfall/Chemical waste" stating the contents and user. The cartons are put in room 144.

Agarose gels with Midori Green should be handled as chemical waste and packed in sealed black plastic bags in unlabelled 38 litre cartons. The carton should be sealed with tape and marked with the label "Laboratorieavfall/Chemical waste" stating the contents and user. The cartons are put in room 144.

All acrylamide gels should be handled as chemical waste and packed in sealed black plastic bags in unlabelled 38 litre cartons. The carton should be sealed with tape and marked with the label "Laboratorieavfall/Chemical waste" stating the contents and user. The cartons are put in room 144.

In [the waste handbook \(pdf\)](#) you can see which chemicals you are allowed to pour down the sink.

### OLD HAZARDOUS CHEMICALS

Old hazardous chemicals that are not used anymore should be deposited in the ventilated chemical waste cupboard in room 144. The KLARA labels on the package should be taken off and put on a piece of paper. The paper should be placed in the grey box in room 144. Elisabeth Barane or Eva Svensson will take care of the paper with the labels on.

### EMPTY BOTTLES OR CONTAINERS

Empty bottles or containers that have contained hazardous chemicals and have any of the pictogram below should be handled as chemical waste and placed on the shelf in room 144.



The KLARA labels on packages of used chemicals should be taken off and put on a piece of paper. The paper should be placed in the grey box in room 144. Elisabeth Barane or Eva Svensson will take care of the paper with the labels on.

Elisabeth Barane is responsible for chemical waste and deals with chemical waste collection.

### RADIOACTIVE WASTE

The general rule at Lund University is that flushing any liquid radioactive waste down the drain is prohibited. If a research team wishes to rinse a nuclide down the sink, the radiation protection physicist must be consulted beforehand. [On the Staff pages there is more information about the radioactive waste \(pdf\).](#)

### Decontamination

Radioactive  $^{32}\text{P}$ ,  $^{35}\text{S}$  solutions can be stored in bottles. Label these "Radioaktivt avfall, Avklingning" and fill in all the information. Store bottles in room 199.

Radioactive waste with  $^{32}\text{P}$ ,  $^{35}\text{S}$ , for example pipette tips, waste paper, gloves etc. should be in plexiglass container". Attach the label "Radioaktivt avfall/Avklingning". Fill in all the information. Store in room 199 for one year. The well-sealed plastic bag can thereafter be placed in the container outside the back door.

Radioactive  $^{32}\text{P}$ ,  $^{35}\text{S}$  solutions containing hazardous chemicals should be labelled with both the label Radioaktivt avfall, Avklingning" and the label "Laboratorieavfall/Chemical waste". After the decontamination the waste should be handled as chemical waste.

The person putting out material for decontamination is also responsible for putting it away after it has been decontaminated.

### LOW-LEVEL RADIOACTIVE WASTE

Radioactive  $^{32}\text{P}$ ,  $^{35}\text{S}$  solutions can be stored in bottles. Label these "Radioaktivt avfall, Avklingning" and fill in all the information. Store bottles in room 199.

Radioactive waste with  $^{32}\text{P}$ ,  $^{35}\text{S}$ , for example pipette tips, waste paper, gloves etc. should be in plexiglass container". Attach the label "Radioaktivt avfall/Avklingning". Fill in all the information. Store in room 199 for one year. The well-sealed plastic bag can thereafter be placed in the container outside the back door.

Radioactive  $^{32}\text{P}$ ,  $^{35}\text{S}$  solutions containing hazardous chemicals should be labelled with both the label Radioaktivt avfall, Avklingning" and the label "Laboratorieavfall/Chemical waste". After the decontamination the waste should be handled as chemical waste.

The person putting out material for decontamination is also responsible for putting it away after it has been decontaminated.

[www.medarbetarwebben.lu.se/sites/medarbetarwebben.lu.se/files/lagradioaktivt\\_avfall\\_etikett.png](http://www.medarbetarwebben.lu.se/sites/medarbetarwebben.lu.se/files/lagradioaktivt_avfall_etikett.png). The label include information on nuclide, activity and a signature which is required to certify that the surface dose rate is less than  $5\mu\text{Sv/h}$ , the activity is less than 1 limit value (L) and whether it is a point source with activity less than 50 kBq. The box is also to be marked with the name of the person who packed it (preferably the contact person),

the department and telephone number. Cartons should be stored in room 144.

Scintillation containers are treated as chemical waste if they do not contain  $\alpha$ -radiating sub-

[www.medarbetarwebben.lu.se/sites/medarbetarwebben.lu.se/files/etikett\\_vatskescintillationslosning.pdf](http://www.medarbetarwebben.lu.se/sites/medarbetarwebben.lu.se/files/etikett_vatskescintillationslosning.pdf).

Store in room 144.

stances or activity concentrations  $<10\text{ Bq/ml}$  or  $<100\text{ Bq/ml}$  for  $^3\text{H}$  or  $^{14}\text{C}$ . Pack in unlabelled 38 litre cartons. The containers are placed in a plastic bag with vermiculite in the bottom and around the containers. Seal the plastic bag. The carton should be sealed with tape and marked with the label "Kemiskt avfall, Vätskescintillationslösning".

### Medium- and high-level radioactive waste

Medium- and high-level radioactive waste should be packed in unlabelled cartons and placed in room 199. Cartons should be labelled with "Radioaktivt avfall", nuclide and your name. Marita Cohn is responsible for the collection of radioactive waste.

### SPILLS OF HAZARDOUS CHEMICALS OR INFECTIOUS WASTE

How to manage spills and emissions of chemicals that are hazardous to the environment and to health. Appendix 2 in the Waste Management Handbook [www.staff.lu.se/sites/staff.lu.se/files/waste-management-handbook-lu-version1-2017-02-10.pdf](http://www.staff.lu.se/sites/staff.lu.se/files/waste-management-handbook-lu-version1-2017-02-10.pdf).

[How to manage spills or leakage of infectious waste. Appendix 3 in the Waste Management Handbook \(pdf\).](#)

**MISCELLANEOUS HAZARDOUS WASTE**

- Broken clean laboratory glass should be placed in plastic bags and packed in suitable cartons (not cartons for risk waste or chemical waste). Plastic bags and cartons should be sealed with tape and disposed of in the skip outside the back door.
- Broken laboratory glass contaminated with micro or plant organism should be handled as infectious waste and should be placed in plastic bags and packed in cartons labelled "Smittförande/ Skärande/Stickande avfall". The cartons are placed in room 148.
- Cannulas and scalpels should be collected in a yellow jar with lid and handled as infectious waste. The closed jar should be placed in plastic bags and packed in cartons labelled "Smittförande/Skärande/ Stickande avfall". The cartons are placed in room 148.
- Mercury lamps and thermometer with mercury: should be kept in ventilated chemical waste cupboard in room 144. Are disposed of as chemical waste.
- Batteries: These are collected in the workshop.
- Fluorescent tubes: These are collected by the workshop. If the tube is broken it should be handled according to [appendix 1 in the Waste Management Handbook \(pdf\)](#).
- Light bulbs and low energy lamps: These are collected in the container for light bulbs and low energy lamps outside the back door. If the bulb is broken it should be handled according to [appendix 1 in the Waste Management Handbook \(pdf\)](#).
- Other equipment containing substances dangerous to the environment, PCB's, for example: Contact the University Buildings Unit/Byggnadsenheten.
- Electronic scrap (computers, printers): These should be deposited in the electronic scrap container outside the back door.
- Photochemicals, used film, developer and fixing solutions are disposed of as chemical waste.
- Empty lead containers are disposed of as chemical waste.

**MISCELLANEOUS WASTE**

- Colourless glass (not laboratory glass): To the bin for colourless glass outside the back door.
- Coloured glass (not laboratory glass): To the bin for coloured glass outside the back door.
- Metal: To the skip for metal outside the back door.

- Plastic: Empty and cleaned plastic should be put in the bin for plastic outside the back door.
- Paper: To the normal waste-paper containers in the corridors.
- Cartons: To the normal waste-cartons containers in the corridors.

## Special Questions

**COURSE IN FIRE PROTECTION**

All employees at the Biology institute should every fifth year take a course in fire protection. The course is divided into one theoretical part and one practical part. The theoretical part is an online course that you can find in Kompetensportalen "Basic fire training". The practical part is organized by Carl Sjökvist.

**WORKING AT THE COMPUTER**

To avoid strain and work-related injuries, take care with the arrangement of your work station and the way you sit when you work. If you need terminal glasses you can apply for that with your supervisor approval ([information on the Staff pages](#)).

**GAS**

Only people with special training are allowed to change gas cylinders in the cage at the back of the building.

**Gas cylinders:** Check the main tap, gasket and thread and tighten the screw hard when changing the reducing/relief valve from cylinder to cylinder. Cylinders must not be transported with the reducing/relief valve fitted. Cylinders must always be secured with a chain. Highly flammable gases must be stored only in areas set aside for this purpose. The exception is small cylinders of max. 2 litres in volume (for instance, butane) that can be handled in the lab, but which must be taken back immediately after use to the place where they are stored.

**Gas in the laboratory:** If you use gas in the lab, it is your responsibility to turn it off afterwards. Keep all instrument and electrical devices at least 0.5 m from the gas outlet.

**LIQUID NITROGEN**

When liquid nitrogen evaporates, the nitrogen level in the air increases. In poorly ventilated areas this can lead to a lack of oxygen in the room.

Use protective goggles! Contact with liquid nitrogen can cause frostbite, a skin reaction that resembles a burn. Liquid nitrogen is stored in the cold room 254. The workshop will fill up the container.

**PERCHLORIC ACID AND PERCHLORATES**

Small amount of perchloric acid and perchlorates are allowed to be used in normal fume hoods. Information about in which rooms/fume hoods these chemicals have been used must be found at the department.

**ULTRA-VIOLET LIGHT**

Use approved UV-protective goggles or a protective eye-shade when working with UV-light (light tables, lighting tubes etc.). There should be a pair of protective goggles or a protective eye-shade at every UV-workbench.



## BIOLOGICAL SUBSTANCES

Micro-organisms, cell cultures and human internal parasites that can cause disease are defined in AFS 2005:1 as contaminant or biological substances.

Biological substances are classified according to the following categories of risk:

Risk class 1.....	Protection level 1
Risk class 2.....	Protection level 2
Risk class 3.....	Protection level 3
Risk class 4.....	Protection level 4

Only organisms belonging to risk class 1 & 2 are used in the Biology building A. When using biological substances belonging to risk class 3 & 4 a register should be done containing the persons in the risk zone for exposure.

## GREENHOUSES

There are special growing rooms and greenhouses for genetically-modified plants. Chatarina Mattsson has more information if you would like to use a growing room or greenhouse.

# Useful Information

## FIRE ALARMS AND FIRE-FIGHTING EQUIPMENT

- Fire alarms are connected directly to the fire station.
- If there is a fire call (0)112 and inform them about the situation.
- Signs showing emergency exit routes are situated by the stairs on each floor and at the main entrance.
- Fire extinguishers (with foam for chemicals, electronic equipment etc.) are situated in the corridors and in the course laboratories.
- Fire hoses are situated in special cupboards in the corridors and in the course laboratories.
- Fire blankets are situated in the corridor and in course laboratories.
- In the case of a minor fire, try to put it out with a fire blanket, fire extinguisher or hose.
- By law, everyone must leave the Biology building during a fire alarm. The assembly point is the lawn to the south facing the big greenhouse".
- You should assembly with the research group you belong to. Check if you are missing anyone that maybe is still in the building. Choose a person that will tell it to someone with the yellow vest.

## POWER AND/OR VENTILATION OUTAGE

Follow the list below if the power and/or the ventilation goes down.

- Make sure that no one is in the lab before close all the doors to the lab.
- Put up the sign on the door with the time for the outage written.
- If the outage last less than one hour you can go into the lab again when the power and ventilation have been on for one hour.
- If the outage last more than one hour you should evacuate the building.
- Put up the sign on the front doors with the time for the outage written so no one by mistake goes into the building.
- When the power and ventilation have been on for one hour you can

go back into the house.

## BREAKDOWN OF WATER SUPPLY

- If the water supply breaks down you are not allowed to work in the laboratories due to that the emergency shower doesn't work.
- You are allowed to work in the office but look up the location of the nearest functional toilet.

## OTHER SAFETY EQUIPMENT

- Use protective goggles when working with substances that could splash or spray. If a substance splashes into someone's eyes: rinse the eyes thoroughly (for a long time) with the eye-spray part of the emergency shower or an eye-spray bottle.
- There are emergency showers in the corridors and course labs, and eye-spray bottles are placed in all laboratories. The bottle should be used only on the way to the doctor.
- There are emergency showers in the corridors and course labs, and eye-spray bottles are placed in all laboratories. The bottle should be used only on the way to the doctor.
- First-aid kits are situated in the corridors and outside course labs.
- A Heart Starter is placed at the main entrance in Biology building A.

## ACCIDENTS AND INCIDENTS

All accidents and incidents (that could have become accidents) must, by law, be reported. Contact both the safety officer, your supervisor and Mats Hansson.

## SAFETY ROUND

A safety round is done once a year by the head of the department and the safety officer. If you notice anything that look dangerous please inform the safety officer.

# Useful Addresses, Telephone Numbers and Names of Contact People

---

Head of Molecular Cell Biology Unit.....	Mats Hansson ....	046-222 49 80, 070-278 99 57
Safety officer .....	Chatarina Mattsson.....	046-222 77 87
Assistant Safety officer.....	Nils Sundqvist .....	0707-90 74 78
Klara administrator .....	Erling Jirle .....	046-222 49 99
Handling flammable goods .....	Elisabeth Barane .....	046-222 77 94
Ionising radiation .....	Marita Cohn.....	046-222 86 24
Workplace hygiene .....	Vacant .....	046-222 70 26
Infectious waste .....	Elisabeth Barane.....	046-222 77 94
Risk waste.....	Chatarina Mattsson.....	046-222 77 87
	Sysav.....	046-635 18 80
Chemical waste.....	Elisabeth Barane.....	046-222 77 94
	Per Malmqvist (Sysav) .....	040-635 19 02
Building supervisor.....	Carl Sjökvist .....	046-222 38 03
Radiation protection physicist .....	Hanna Holstein.....	046-222 07 93
Akademiska Hus (University buildings).....	Lars Pålsson.....	046-31 14 65
Företagshälsan (Health in the workplace) .....		046-222 32 80

[www.av.se](http://www.av.se)

[www.msb.se](http://www.msb.se)

[www.kemi.se/en](http://www.kemi.se/en)

[www.rsyd.se](http://www.rsyd.se)

[www.staff.lu.se/support-and-tools/premises-and-parking/waste-hazardous-waste-and-recycling](http://www.staff.lu.se/support-and-tools/premises-and-parking/waste-hazardous-waste-and-recycling)

[www.staff.lu.se/sites/staff.lu.se/files/lund-university-radiation-protection-regulations.pdf](http://www.staff.lu.se/sites/staff.lu.se/files/lund-university-radiation-protection-regulations.pdf)

[www.stralsakerhetsmyndigheten.se/Global/publikationer/Forfattning/SSMFS/2010/R%c3%a4ttelse-SSMFS-2010-2.pdf](http://www.stralsakerhetsmyndigheten.se/Global/publikationer/Forfattning/SSMFS/2010/R%c3%a4ttelse-SSMFS-2010-2.pdf)

[www.staff.lu.se/employment/work-environment-and-health/glasses-for-computer-work](http://www.staff.lu.se/employment/work-environment-and-health/glasses-for-computer-work)

[www.staff.lu.se/sites/staff.lu.se/files/label\\_chemical-waste.png](http://www.staff.lu.se/sites/staff.lu.se/files/label_chemical-waste.png)

[www.medarbetarwebben.lu.se/sites/medarbetarwebben.lu.se/files/lagradioaktivt\\_avfall\\_etikett.png](http://www.medarbetarwebben.lu.se/sites/medarbetarwebben.lu.se/files/lagradioaktivt_avfall_etikett.png)

[www.medarbetarwebben.lu.se/sites/medarbetarwebben.lu.se/files/etikett\\_vatskescintillationslosning.pdf](http://www.medarbetarwebben.lu.se/sites/medarbetarwebben.lu.se/files/etikett_vatskescintillationslosning.pdf)

## EMERGENCIES: CALL 0 112 (0 IS NEEDED IF YOU USE A STATIONARY PHONE)

The digital version of this document:

[www.biology.lu.se/internal/sites/biology.lu.se/internal/files/safetyiroutinesbba2020.pdf](http://www.biology.lu.se/internal/sites/biology.lu.se/internal/files/safetyiroutinesbba2020.pdf)

Latest revision June 2020 by Elisabeth Barane and Mats Hansson.

After a review of the safety information, two signed copy of the certificate should be given to Elisabeth Barane. The participant will get a test containing 5 questions (the safety routines are allowed to be used during the test). The answers will be corrected by Elisabeth Barane and the participant will back a sign certificate if the test is approved.

## Safety Review Certificate

---

Instructor/supervisor: .....

I hereby certify first that I am aware of the above "Safety routines and rules for the Biology Building A, Department of Biology, Lund University", and secondly that I will comply with these routines and rules.

Date:.....

Signature: .....

Name (print clearly or fill it in on the computer)

.....

What status do you have?

Employee       Post doc       PhD       Student       Other

### RESULTS ON THE TEST

.....

OK

Not OK

# Safety routines for Biology building A Test

---

Put a ring around the right answer.

Only one answer for each question is correct.

**1. What should you do before you start an experiment that is completely new to you?**

- a) Read the method and the risk assessment for the experiment so you know what to do in all steps in the experiment.
- b) Read only the method. What to do with the waste you can figure out later.
- c) Go and take a "fika".

**2. When should you wear gloves?**

- a) All the time, also in the corridors between labs so you will be protected all the time and contaminate all door handles with the chemicals from your experiment.
- b) Only when you do steps in the experiment where either you or the sample need to be protected according to the risk assessment for the experiment.
- c) On a cold winter day.

**3. What should you do if a common instrument breaks down?**

- a) Nothing, the person responsible for the instrument will find out sooner or later.
- b) Put a note on the instrument saying "Out of order".
- c) Put a note on the instrument saying "Out of order" together with your name and date and notify the person responsible for the instrument/room.

**4. What is a CMR chemical and what should you do if you handle a CMR chemical?**

- a) I don't know but I can check on the internet.
- b) It is a chemical that could be carcinogenic, mutagenic or/and toxic for reproduction. You handle these chemicals according to the risk assessment for the experiment. If you are exposed to a CMR chemical you need to write it in the list in the yellow folder named CMR chemical. There is one folder in each research group including the course lab.
- c) It's a chemical starting with C, M or R. It should always be handle in the fumehood.

**5. What should you do if you hear the fire alarm?**

- a) Leave the building and meet up at the assembly point.
- b) Keep on working, science is the most important thing.
- c) Go home.