

Neo/Departments of: Biosciences and Nutrition (Bio-Nut); Clinical Science, Intervention and Technology (Clintec); Laboratory Medicine (LabMed); Medicine Huddinge (MedH/HERM, LipidLab); Medicine Solna (MedS); Neurobiology, Care Sciences and Society (NVS)

Created by:
Neo Work Environment Group /

Approved by:

General Laboratory Rules¹

To maintain a good working environment and atmosphere among us at Neo there are some important rules to follow.

1. Risk assessments

Take care of the injured/ill person.

- Read the risk assessment before you start working. Your procedure may need extra protection (not only the usual safety goggles and lab coat), e.g. special gloves, and also specific routines to handle spills and waste, etc.
- If there is no risk assessment for the method (i.e. it is a new method in the lab), make a risk assessment before using the method².

2. Work safely and methodically in the lab

- Think about what you are going to do *before* doing it. Never run or rush.
- Clean lab space after your work is done
- If you use all supplies, refill.
- Take away waste and dispose of it properly
- Mark your in-house made buffers etc. properly with name, concentration, date, your name and hazard pictograms. (You may find some removable/reusable preprinted labels for common solutions in the service storage)

3. Workspace

- Organize your workspace in such a way that you will avoid future physical problems with, e.g. back, neck or arms.
- If you need help with this or if you have problems that can't be solved internally, contact your lab manager or your safety representative for help to contact Previa.

¹ KI's information and rules regarding Laboratory safety: <https://staff.ki.se/laboratory-safety>

² Depending on method you also have to make a HUMRA or BARA document together with KLARA. It is the printed and signed risk assessment that is valid. A copy of the risk assessment should be stored accessible to people in the lab.

4. Lab coat

- Lab coat must always be worn when working in the lab areas (KI rules for safe work). White lab coat in ordinary wet lab and yellow – yellow/white striped coat when working in the tissue cell room nodes.
- Lab coats and protective gloves are not allowed outside the lab area.
- All lab coats are stored at **floor 8 next to the environ room in in the window niche**. Please take only 1 coat at the time and preferable change your coat every week (or more often if necessary) to maintain a high hygienic standard. We do not have an endless number of coats so if you pile up or never change then we will have no clean coats after a while.



5. Dirty lab coats / Laundry

- Both kinds of lab coats should be changed every week (or more often if necessary) to maintain a high hygienic standard. Laundry bags are placed at the same spot where you get the clean.
- **White coats:** Empty the pockets and take away name stickers and put in the **BLUE laundry bag**.
- **Yellow – yellow/white striped coats: Put in the TRANSPARENT bag which is a special safety bag.** When this bag is closed it will not be opened before washing, the whole bag is put in the washing machine and dissolves in the hot water. This is to keep high safety level at the laundry company. So please NOTE! Never put these coats in the blue bag! This will cause incident reports for “expose others to danger” by the laundry company.
- If you find **a coat that is not proper** – buttons missing or other faults, put this in a **bag beside** and note bag with a sticker with what is wrong.



Contact person for laundry: [Petri Köttö](#)

6. Gloves

- Use gloves while working at lab³. Even within the lab the usage of gloves should be restrictive. Use it only when you need it.
- Do not touch handles/knobs and areas within the lab with your gloves. It will contaminate those areas or your gloves used for protecting your samples will be contaminated. If you have to open cupboards and doors within the lab it should be done with a hand without a glove.
- Used gloves should be considered as potentially contaminated and must be taken off when you leave the lab.

³ Use proper gloves for the purpose. See info-charts in the service storage at floor 8 and/or info at the Swedish Work Environment Authority, <https://www.av.se/arbetsmiljoarbete-och-inspektioner/publikationer/broschyer/akta-handerna---valj-ratt-skyddshandskar-mot-kemikalier/> [sv]
Search for suitable glove by name or CAS-number: Chemical resistance guide, <https://www.shieldscientific.com/resource-center/shieldscientific-gloves-chemical-resistance-guide/>

- If you need gloves outside the lab it should only be on one hand. This also applies if you wear gloves to protect your samples and you need to transport these to another room. Take off the glove on one hand and use that for opening doors and refrigerators etc. We do not want contamination of areas that other people considered safe and clean.

7. Waste handling

- Due to the environmental regulations, you have to put waste in the right fraction for recycling and destruction.
- Read the Waste Handling document for more information

Environmental rooms (Miljörum 6360, 7361, and 8360)

- Card boards, glass, plastic and small electronic should be disposed in the environmental room.

Biological, infectious, and sharp/cutting waste

- For laboratory waste, biological, chemical, sharp things, needles and scalpels and other general non-infectious waste

Bacteria waste, antibiotic waste and GMM/GMO products waste

- Read the specific document for handling waste containing GMM and antibiotics and contact the person(s) responsible for GMM and Antibiotics and other medical drugs to get more instructions.

Other waste

- Paper towels and gloves are thrown in ordinary waste bag. Non-hazardous pipette tips may be collected in used media bottles, properly labeled, put on a cap when full, and throw in ordinary waste bag.

8. Transporting chemicals and hazardous material within Neo

- When chemicals and other hazardous materials are moved between different lab areas or the chemical storage a transport container should be used. We have buckets in the chemical storages and in the labs for this purpose.
- When transporting liquid chemical waste to the waste room at floor 3 a trolley with some trays or other containers should be used. Bring a spillage kit or a container with vermiculite and some absorbent pads with it.
- For transport of chemicals or biological samples between the floors the rainbow bridge should be used, not the open access stairs or elevator at the ends of the atrium. If you need at trolley the transport elevator may be used.
- An exception for usage of lab coats outside the lab is when you transport chemicals to/from the chemical storage rooms and to the waste rooms at floor 3.

9. Liquid nitrogen

- Liquid nitrogen⁴ has special rules for filling and transporting. Contact your lab manager for further instructions. See also KI document "[Rules for handling liquid nitrogen](#)"⁵ and your local risk assessment.
- Do not travel in the elevator together with a container of liquid nitrogen, use the priority function of the transport elevator (instructions posted at elevator)
- Keep the door open when working with liquid nitrogen, to increase ventilation
- Wear appropriate protection for what you are doing (gloves, face shield / goggles, apron etc)
- If possible only handle liquid nitrogen in an area with an oxygen alarm and if the alarm is triggered, turn off or close the liquid nitrogen and leave the area.

10. Sonication

- Use ear protection devices.
- Make sure appropriate warning signs are used

11. Toxic, carcinogenic substances and radioisotopes

- Working with toxic, carcinogenic substances⁶ and radioisotopes⁷ must be done in designated rooms. Contact responsible person to start work and make sure you have the right training and always read the risk assessment.
- See the "Routines for Handling CMR Chemicals and Allergenic Substances" and "Radiation Safety" documents for further instructions

12. Fume hood

- For safe work in the fume hoods never have the front open above the safety line.
- After work in the fume hood pull the front **ALL THE WAY DOWN**. One hood with the front up is using as much energy as a small house⁸ and may also reduce flow in other hoods that may need it.

13. Service

- If service is needed at lab or in office space, contact your lab manager

14. Eat or drink

- It's not allowed to eat and drink in any lab rooms or keep food in lab fridges/freezers.

⁴ Provisions for handling liquid nitrogen: AFS 1997:7 "Gases" (updated w AFS 2017:5), <https://www.av.se/globalassets/filer/publikationer/foreskrifter/gaser-foreskrifter-afs1997-7.pdf>, and AFS 2011:19 "Chemical Hazards in the Working Environment" (latest update AFS 2019:9) <https://www.av.se/globalassets/filer/publikationer/foreskrifter/engelska/chemical-hazards-in-the-working-environment-provisions-afs2011-19.pdf> [en, amended 2018-05-08. NB! **Not** the latest version] and <https://www.av.se/arbetsmiljoarbete-och-inspektioner/publikationer/foreskrifter/kemiska-arbetsmiljorisker-201119.-andrad-och-omtryckt-i-afs-201443-foreskrifter/> [sv, amended 2019-11-01 with AFS 2019:9: Changes in sections 37 a, 37 f, 37 g, 38 and 50 regarding allergenic compounds]

⁵ Rules for handling liquid nitrogen, <https://staff.ki.se/liquid-nitrogen>

⁶ <https://staff.ki.se/chemical-safety>

⁷ <https://staff.ki.se/radiation-protection>

⁸ <http://fumehoodcalculator.lbl.gov/>

15. Headphones

- It's not allowed wearing headphones in lab area.

16. Equipment

- Before you use any equipment for the first time, contact the responsible person (the equipment is marked with this person's name). If something's goes wrong, you must inform the responsible person immediately. In every room, there is a file containing manuals and log sheets for the instruments in that room/platform.
- ***If any equipment is malfunctioning or alarming***, put a note on the machine and inform the responsible person. ***Do not leave the alarm unattended*** (or mute it and leave it unattended)!

17. Fridge and freezers

- Never leave anything unmarked in freezers, fridges or on lab shelves (mark with name, date and content). Unmarked items will be removed.

18. Glassware / Dishwashing

- Should be handled according to the washing instructions.
- All hazardous material, chemicals and infections, should be removed or deactivated before sending the glassware to be washed.
- Take away all labels from the glass and rinse it before you hand it to the washing facility.

Contact person for dishwashing: [Petri Köttö](#)

19. Incidents

- Report incidents e.g. a stolen bag, chemical spillage or the like.
- You should also report "Near accident" (an incident that may have caused an accident), accidents when travelling to/from work and work-related illness.
- You fill in the form on line at <https://staff.ki.se/report-an-incident>. Contact your safety representative if you need help.

20. Fire safety

- Emergency exit must be kept free. Keep up a clean and tidy environment free from card boxes etc. and react if something is wrong. This is everybody's responsibility.
- For more information see the Fire Safety document⁹ and the info on the KI web.¹⁰

21. Flammable goods

- When handling flammable goods you have to follow additional rules and laws.
- For more information see the Fire Safety document and the info on the KI web.¹¹

22. Self-inspection of fire protection and safety equipment

- Four times a year the fire protection should be documented using a self control list from KI intranet.

⁹ <https://staff.ki.se/neo-work-environment-and-safety>

¹⁰ <https://staff.ki.se/fire-safety>

¹¹ <https://staff.ki.se/flammable-goods>

- Emergency showers should be tested every month
- Checklist for self-monitoring of fire safety installations
<https://staff.ki.se/media/219/download>

23. Neo safety documents

More information and specific documents describing more in detail how to handle work related issues in Neo can be found at <https://staff.ki.se/neo-work-environment-and-safety>

24. Revisions

Revision 1.1

- Ch “Transporting chemicals and hazardous material within Neo” added
- Ch “Revisions” added
- Links updated, both KI internal and to updated AFS
- The numbers for Environmental rooms changed to correct numbers.
- Minor spelling mistakes corrected
- Some footnotes to clarify was added

Revision 1.2

- Added section “Neo safety documents”
- Changes in sections “Lab Coat”, “Incidents”, and “Other waste”
- Added information under “Liquid Nitrogen” and “Glassware”, “Gloves”
- Section “Dirty Lab Coats / Laundry” added
- Renumbering of sections following “Dirty Lab Coats / Laundry”
- Minor grammar and spelling corrections in “Work Safely ...”
- Updated links to provision AFS 2011:19 ”Chemical Hazards in the Working Environment” (latest amendment is AFS 2019:9)
- Updated footnote in “Risk assessments”
- Updated “Transporting chemicals and hazardous material within Neo” and “Gloves”

Revision 1.3

- Added LabMed to departments in head of first page and set correct document name
- Formatting
- 1.3.1: Added link to <https://www.shieldscientific.com/resource-center/shieldscientific-gloves-chemical-resistance-guide/>