

Gupta Lab Safety Rules/Regulations

1. On your first day, please obtain the Biology Safety Test, do the test and hand it in to the Biology Office. This will allow you obtain keys to the lab.
2. **You will also familiarize yourself with all the documents in the Gupta Lab Safety book and the Environmental & Occupational Health Support Services (EOHSS) web site (<http://www.workingatmcmaster.ca/eohss/>).**
3. **Dial 88 if there is an emergency** (medical, fire, chemical spill, etc).
4. Pathogen handling: all bacterial over-night cultures and supernatants should be treated for a minimum of 10 minutes with 25% bleach prior to disposal. Once treated, the culture should look clear, if it is not clear add more bleach solution. These cultures can then be thrown down the drain.
5. NO mouth pipetting—use the proper pipette-aides.
6. Some chemicals/antibiotics are dissolved in methanol or ethanol (e.g. rifampicin, kanamycin), ALWAYS know the recipe and NEVER FLAME the mouth of such bottles!
7. Before using a particular chemical, familiarize yourself with its properties by reading its MSDS sheet found either in the MSDS Book (bookshelf in lab or in mail room, code 341) or by looking online (<http://ccinfoweb.ccohs.ca/>).
8. While using sterile technique, be careful not to burn hands, arms, hair or clothing.
9. Chemicals and solutions stored in the fume hood, (including Ethanol, hydrofluoric acid & methanol), must be used in the fume hood.

10. Use phenol solutions in the fume hood. Dispose of phenol or other chemicals in the appropriate waste containers in the fume hood.
11. Weigh sodium dodecyl sulfate (SDS) and ethidium bromide in the fume hood. (Move the balance to the fume hood). ALWAYS WEAR APPROPRIATE SAFETY GEAR (gloves, lab coat or safety goggles)
Note: SDS is very light and will blow around in the hood, therefore, block the area around the balance with a box, and weigh out SDS carefully.
12. Always wear a lab coat, gloves and safety goggles when using acids, strong bases, phenol, ethidium bromide, SDS or other toxic chemicals.
13. Ethidium bromide (EtBr) is a carcinogen, always wear gloves, lab coat and safety glasses while using it. Dispose of used EtBr solutions, gels and any other dry material in the appropriate labeled container. Once the container is full it should be disposed in chemical waste. (see chemical waste procedures).
14. DO NOT autoclave acids (e.g., HCl) or bases (e.g., NaOH).
15. **DO NOT eat or drink in the lab and NEVER store food or drink in the lab.**
16. DO NOT handle radioactive material unless you have completed and passed the radioactive training program. NEVER use radioactive material outside the radioactive area.
17. When removing hot liquids from the autoclave, do not open the door too quickly if the temperature is 100°C or above as the liquid may boil over. Also ALWAYS use the lab trolley to carry hot liquids.
18. ALWAYS turn off or disconnect the power source to the electrophoresis apparatus before removing your gel. ALWAYS wear gloves when handling agarose gels.

19. NEVER view agarose gels directly using UV light. ALWAYS wear UV safety glasses.
20. ALWAYS dispose of worm and bacterial culture plates in autoclave bags.
21. The Spill Kit is found in the cupboard next to the flammable cupboard under the fume hood (bottom left).
22. The First aid kit is on wall by the entry door to the lab.
23. The Shower is next to the fume hood (on left) and in the west wing of the main hallway.
24. The Eye wash station is outside lab, on wall to the left of the window
25. It will be necessary for you to work alone in the lab on occasion at night or on the weekend. Please observe all the rules and procedures as indicated in this document. When working alone do not perform a technique or experiment that you have not done before or that you are not familiar with. Keep the lab locked to ensure your security and/or let Security (x24281) know that you are working alone. **When alone, take extra care when performing sterile technique, preparing solutions, using the hot plate, autoclave, liquid nitrogen, phenol etc.**

I have read and I understand the Gupta Lab safety rules.

Name: _____
(please print)

Signature: _____

Date: _____

Supervisor's Signature: _____