

Lab Specific Training Outline for the Manalis lab
12/1/09 by Andrea Bryan

Safety information located near the front door and emergency numbers located on outside of lab.

- 1) Ordering Chemicals
 - a. Check shelves, *inventory* (email me), and *wiki* before ordering new items
 - b. For new chemicals, get MSDS, prepare for appropriate handling and disposal, and put MSDS in notebook

- 2) Chemical Storage
 - a. General Storage
 - i. Liquids require secondary containment.
 - ii. Solvent storage, Acid/Base storage separated by secondary containers.
 - b. Refrigerator
 - i. EVERYTHING must be labeled with name (and date)
 - ii. No flammables in the refrigerator.
 - iii. 4-way test tube racks are not for permanent storage.
 - iv. Be neat and use space conservatively.
 - v. Fridge clean-up coming soon...

- 3) Chemical Labeling
 - a. Label chemicals with “date opened” or “date received.” Some things remain in the lab for years and years after people graduate because it is not clear who/when they belong.
 - b. Label tubes with name/date/*full* chemical name/hazard warning as needed.

- 4) Chemical Use
 - a. Use hazardous volatile chemicals in the fume hoods
 - i. Clean up after yourself and keep uncluttered
 - ii. Work at least 6 inches behind sash, keep the sash down
 - b. Wear lab coat, safety glasses, and appropriate gloves when working with hazardous chemicals
 - i. Purple nitrile gloves are thicker than latex gloves.
 - ii. General coats are near the gloves, glasses are in Jay’s bench.
 - iii. I can order safety glasses/shields and/or lab coats for anyone.
 - c. No open-toed shoes or shorts
 - d. Remove gloves before handling phones, handles

- 5) UV Illuminator
 - a. Please wear a lab coat and the appropriate glasses—but these are not 100% protection!
 - b. Stand near the door to prevent someone from accidentally entering.
 - c. UV light spills into the room even when the shutter is closed (during warm-up period)

6) Waste Disposal

- a. Sharps (defn: “Materials that can puncture, cut, or scrape the skin”
 - i. Chemical sharps go into the two white containers (one by solvent hood, one by acid hood). Write “traces of...” on the tag.
 - ii. All biohazard waste goes into the red bin
 1. Please don’t put all gloves into the biohazard bin.
 2. These bins are collected by EHS (must be sealed with one zip tie when in the hall) and these bins are autoclaved by EHS.
 3. biosharps@mit.edu : # of bins, building, room number
- b. Liquid biohazards – bleach cell culture waste for > 20’ and pour down the drain
- c. Chemical waste – bottles are next to the solvent hood, tags are under both the solvent and acid hood, waste should be in secondary containers in the appropriate satellite accumulation area
- d. Battery and air can disposal is located next to the solvent hood.
- e. Waste Pickup: Date the red waste tag, go to the wiki and schedule the pickup

7) Emergencies

- a. Exit to MIT Medical lobby (E25) if bad weather, and E15 plaza for good weather
- b. Shower and eyewash located next to gloves, second eyewash in the acid hood
- c. Spills
 - i. Major spill (any ONE condition) x100
 1. The spill is in a common area or may reach a common area.
 2. Large quantity, toxic, fire hazard, or unknown waste.
 3. Unsure
 - ii. Minor spill (ALL conditions are met)
 1. Known, not highly toxic, small, no fire hazard, easy to clean up (gloves), contained
 2. NOT in a common area

8) Stockroom

- a. Keep it clean! This is not a dumping ground.
- b. Low-stock items should be added to the wiki, many of the item numbers are already on the wiki...so this is pretty easy.

9) Wiki

- a. Openwetware.org
 - i. Safety information, ordering page, datasheets
 - ii. Additional guidelines for lab coats and eye protection

10) Other items

- a. Sign the safety binder.