Pictured above is the reorganized EH&S Laboratory Safety Unit. In the past, laboratory safety issues were addressed by the staff working for the Occupational Safety Unit and the Institutional Biosafety Committee. Now, there is one dedicated team of professionals to meet the needs of all laboratory personnel. Those listed in the picture (L to R; T to B) include:

Mary Jo Valenti – Technical Associate
Donna Douglass – Admin. Assistant
Sonia Rosenberger – Biological Safety Officer
Carolyn Place – Technical Associate
Bob Passalugo – Manager
Elisabeth Carroll—Technical Associate

The Laboratory Safety Unit will continue the work done previously but under this new organization. The Unit was formed to ensure every individual – whether a PI, a lab manager, a tech associate, a technician, or a graduate student - adheres to OSHA, NIH, CDC, DFA, NFPA, CAP, and other local, state, and federal regulations and to maintain the laboratory as a safe and healthy place of employment.

Although our web site [http://www.safety.rochester.edu/homepages/labsafefome.html] will be under construction during most of 2015, you should find our site provides an abundance of useful information on the safe handling of many hazardous agents.

If you can’t find the needed information or need any assistance, please contact the Laboratory Safety Unit at 275-3241.
This article is a follow up for an incident that was reported previously for three University of Rochester graduate students injured when a waste bottle over pressurized and exploded in their lab in October 2014. A review of the incident determined the cause of the explosion was residual organic material present in the waste container. The chemical reaction of the nitric acid with a trace quantity of organic material created a rapid pressure build up, causing failure of the glass waste container.

This is not the first time this problem has occurred here and at other colleges nationwide. Chemical and Engineering News (American Chemical Society) issued a report on a recent laboratory incident at a lab at Texas Tech about mixing nitric acid with organics. The link below has a video demonstrating the reaction. Imagine what would happen if the reaction vessel were sealed!

http://cenblog.org/the-safety-zone/2015/02/waste-explosion-at-texas-tech/

There are steps you can take to minimize the chance of such an incident occurring in your lab:
BEST: Use a new container for the collected waste.
BEST: Use a container for the collected waste that contained the same chemical.
ACCEPTABLE: If you NEED to use an empty organic solvent container for acid waste, rinse the container several times and direct an air stream into the container to remove all residual chemicals. For this option:
  After adding the acid waste to the container, lightly cap the container and label the container “Hazardous Waste” and record the volume and type of acid added to the container (for example, “100ml of 50% nitric acid”).
  Make sure the container is placed into secondary containment.
  After a few minutes, check for a pressure build up (this can be detected by cracking the cap slightly; if you hear a release of gas, keep the cap lightly capped).

Portland Community College Student's Finger Tip Amputated During Class, $110,000 Suit Says Oregonian (OR) (02/02/15) Green, Aimee

Portland (Ore.) Community College student Shantia Magui has filed a $110,400 lawsuit against the college for failing to properly train students for safety around airplane turbine engines, adequately supervise students, and put a cover on the engine that would have prevented his injury. Magui says his middle finger was lacerated and his right index finger was partially severed while working on an engine during an aviation maintenance technology class. The suit seeks about $10,400 in medical costs and up to $100,000 for pain and suffering.

Although we don’t have turbine engines in our labs, there are a number of physical hazards that can cause injuries to personnel. This article emphasizes the importance of documenting all site specific training provided to personnel.

All who work in a lab MUST be provided site specific training addressing the hazards present in the lab and actions that must be taken to minimize those hazards. If there is NO record of site-specific training then the assumption is that it did NOT take place.
The general safety of the laboratories at the University of Rochester has improved this last year. We saw significant reductions in the number of citations issued for compressed gas cylinder handling and storage (56% decrease), chemical storage (48% decrease), and a major decrease in GFI issues on outlets near sinks (251% decrease). These reductions have been largely contributed to the growing knowledge and commitment made to safety by laboratory personnel. Well done everyone!

The following chart is all deficiencies found in laboratories categorized by type in 2014:

Want to reduce the number of findings in your lab? Take a self assessment available through Chematix! You can use the same checklist we use for your annual inspection for chemical and biological inspections. Simply log onto www.rochester.chematix.com, enter your HRMS Net ID and password, click the “Inspection” tab in the top left corner, click the “Lab Name” of the room you would like to inspect, then use the “Perform the self inspection” button at the bottom of the page. There is a drop down menu for the type of room (main lab, storage, or environmental room) so make sure you use the correct form. The main lab inspection form has eight sections covering a wide variety of topics. There is no limit to the number of self-inspection preformed, and citations are not recorded, it is simply for your lab’s benefit.

In 2015 we are going to be focusing to ensure that all laboratories have standard operating procedures (SOP’s) for all hazardous chemicals used. There are two types of general SOP’s: chemical and procedural. EH&S will be working throughout the year to produce several common hazardous chemical SOP’s. There is no University requirement for a specific template, as long as the SOP is complete and has outlined all handling, controls, storage, potential exposure points, and PPE concerns. If you have any questions about SOP’s, contact your EH&S representative or submit your questions to questions@safety.rochester.edu. Ideally your lab will have an SOP for every hazardous chemical and/or procedure performed your lab.

In December 2014, OSHA changed the reporting process should a work related fatality or hospitalization were to occur. Work-related fatalities must be reported within eight hours and hospitalizations within 24 hours. Such reporting will be done by EH&S. Because of the reduced time to make such a report, the Laboratory Safety Unit recommends printing a copy of this information, available at the EH&S link http://www.safety.rochester.edu/safetyinfo/reportingsevereinjuries.html, and placing it in your laboratory notebook for ready access.
Lab Safety Tips!

As the weather outside gets warmer, your lab may need to deal with some concerns specific to this time of year. Below are some tips for dealing with Springtime Safety Issues.

TIP #1
If your lab area becomes uncomfortable due to the temperature in your lab (either too hot or too cold),

DON’T ABANDON YOUR PPE (lab coat, gloves, and face protection)!!!!

INSTEAD CALL FACILITIES @ X 34567 OR GENERATE AN ONLINE WORK ORDER @ HTTP://WWW.FACILITIES.ROCHESTER.EDU/ TO ADDRESS YOUR TEMPERATURE CONCERNS.

TIP #2

No open–toed shoes in the lab! This includes flip flops and sandals.

If you wear these shoes to work, BRING IN A SUITABLE PAIR OF SHOES (CLOSED TOED / SNEAKERS) TO KEEP AT WORK AND CHANGE INTO THESE SHOES BEFORE STARTING WORK IN THE LAB AREAS INCLUDING THE VIVARIUM.

TIP #3

PROTECT THE SKIN YOU’RE IN!

Lab work poses both chemical and physical hazards. Recommended summer lab apparel includes long pants or Capri’s (no shorts please) in addition to the usual PPE (lab coats, gloves & face protection).

TIP #4

DON’T BRING YOUR WORK HOME WITH YOU!

Don’t use portable electronic devices (such as iPods, cell phones, etc…) while you’re working especially if you have gloves on! These items could get contaminated and might actually transmit your biological to others.

TIP #5

DO SOME SPRING CLEANING!

When you think Spring; think SPRING CLEANING!

Are those dusty, old chemical bottles really needed or are the chemicals still good? CALL HAZARDOUS WASTE FOR REMOVAL (X52056)

Are your Tissue Culture Room Floors anything but clean and shiny? CALL ENVIRONMENTAL SERVICES TO SCHEDULE A FLOOR CLEANING (X 59203)

What’s growing in your Tissue Culture Hood? When was the last time you cleaned out under the front grill? Do yourself and your experiment a favor. Prevent culture contamination by keeping your biosafety cabinet clean and uncluttered! We hope that these reminders will help to keep your lab safer this season.

FINAL TIP!

REMININDER—NO FOOD OR DRINK IN THE LAB