June/July 2011

Case Western Reserve Environmental Health and Safety

Service Building, 1st Floor
Phone: (216) 368-2906/2907
FAX: (216) 368-2236
Website: case.edu/ehs

In this issue:

Meet our new Executive Director!

This is the first edition of the newly revised Environmental Health & Safety newsletter and my first Executive Directors column. As you may have noticed, we are no longer DOES. We are now the Department of Environmental Health & Safety (EHS), which hopefully better defines are expanding role on campus in environmental health and related issues both inside and outside the lab. Our staff is working hard to serve the campus community to help you meet your safety and regulatory responsibilities, to develop our campus 'Safety Culture', and to continue to promote CWRU's reputation of excellence in all that we do!

As a newcomer to CWRU, I would like to tell you a little bit about myself in my first column. I arrived on campus as the new Executive Director of Environmental Health & Safety in December,

(Continued on page 4)

Bloodborne Pathogens or Laboratory Safety: Tuesdays from 3:30 to 4:45, or 11:30 to 1:00 on the following Fridays: July 8, August 12, September 9.

Laser Safety: 2:30 to 4:30 on the second Wednesday of each month.

Radiation Safety: Third Thursday of each month from 2:00 to 4:30.

As always, you can find our most recent training offerings at

case.edu/ehs/Training/

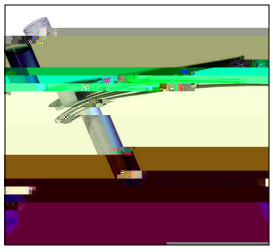
Many years of observations have led to the conclusion that research labs in academia not industry are on the whole infamously . The title begs us to consider when that mess is unsafe. We have a plethora of examples that constitute the poor housekeeping category in our own inspection checklist (aisle impassible, chemical stored on oor, emergency eye wash blocked, bench clu tered, glass bo t les stored on top shelf, sink lled, fume hood stu fed). You may even have seen this item checked once or twice on you lab inspection, to what avail. One person's mess is another's method!

A new text, Laboratory Safety for Chemistry Students[1], list some interesting reasons why some labs are not in an orderly condition. First let's de ne what the term housekeeping means; after all, we are not at home or in our room, (and Mom (Dad) doesn't work here) right? Housekeeping in this context refers to , the behaviors of laboratory workers with regards to keeping labs clean and orderly enough so as not to pose hazards for the occupants. , The authors, Hill and Finster, list four factors that make academic labs prone to limited safety education, limited supervision, multiple lab workers, and sporadic activity.

Academic research labs are populated primarily by students who have li t le safety education outside of labs that are associated with courses. These labs have been optimized for safety, being well organized with relatively few chemicals on hand and the hazards have been minimized. It follows then that students entering a research lab would not readily take it upon themselves to keep a lab organized and clean.

Laboratories are generally supervised by faculty who may or may not actually spend time in the lab. Professors, like students, may have a fairly weak education in safety and unfortunately place modest value on the issues of safety, especially in comparison to the goal of producing results. Research labs often have very li t le supervision or guidance with regard to the issues of safety.

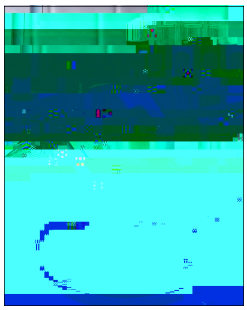
Academic labs are often shared by multiple students with multiple sets of chemicals and multiple sets of lab apparatus. A lack of awareness about the experiments of colleagues can l o



In order to help create a sustainable culture at Case, EHS has a recycling program. Laboratory plastics can be recycled as long as they are handled properly. In order to prepare plastic chemical bottles, media bottles, old carboys, or any other plastic marked with a #1, #2, #3, or #5 recycle code you must first deface all chemical labels. The best way is to take a permanent marker and blackout any lettering on the outside of the bottle. Next, the lids can be disposed of in the regular trash and the bottle should be triple rinsed to ensure that no residue is left behind. Taking these steps helps to ensure that personnel removing the plastics are safe.

As mentioned above, most plastics marked with the appropriate recycle code can recycled. This does not include pipette tip boxes or inserts. Many distributors like Laboratory Product Sales and USA Scientific will take pipette tip boxes and inserts which you have purÆ Æ Æ rÀF m q j £ ⊣N • ♂np j v ab

There has been growing concern about the effects of x-rays on infants and children during clinical radiological procedures. Although the x-ray is a valuable tool for diagnosing clinical problems, technicians need to exercise proper shielding. Coning the radiation to only the body part needed for diagnosis and shielding other parts is basic. Regulating the amount of radiation is crucial sg 4 hield s



are squeezed into half day or hourly sessions, around classes and labs. This kind of sporadic schedule makes it easy to focus on productivity instead of safety which results with lots or equipment and chemicals just out on the bench, experiments in

There has been much concern over the last few months about the accident at the Fukushima Daiichi nuclear power plant in Japan. More followed Gerald Matisoff's detection of ^{131}I from the reactor in rainfall with his student Mary Carson.

With all the media commotion, it's easy to lose sight of the true amounts involved ( ). The amount detected in rainfall was picocurie-range: less than one of the small blue blocks in the diagram. To become sick from these amounts of radiation you would need to drink a swimming pool full of rainwater on the peak day of release.

Thankfully, the iodine has now decayed; drink all you want.

(Continued from page 3)

chemical vapors from the chemical fume hood, which will in turn compromise your safety.
3. Another good reason for keeping your lab doors closed is beter security and beter control over possible property theft. Keeping an air of collegiality is very important in the academic environment, but collaboration should never take place at the expense of safety and security. We recommend that you keep your office doors open as much as you would like, but keep the doors to your lab closed.

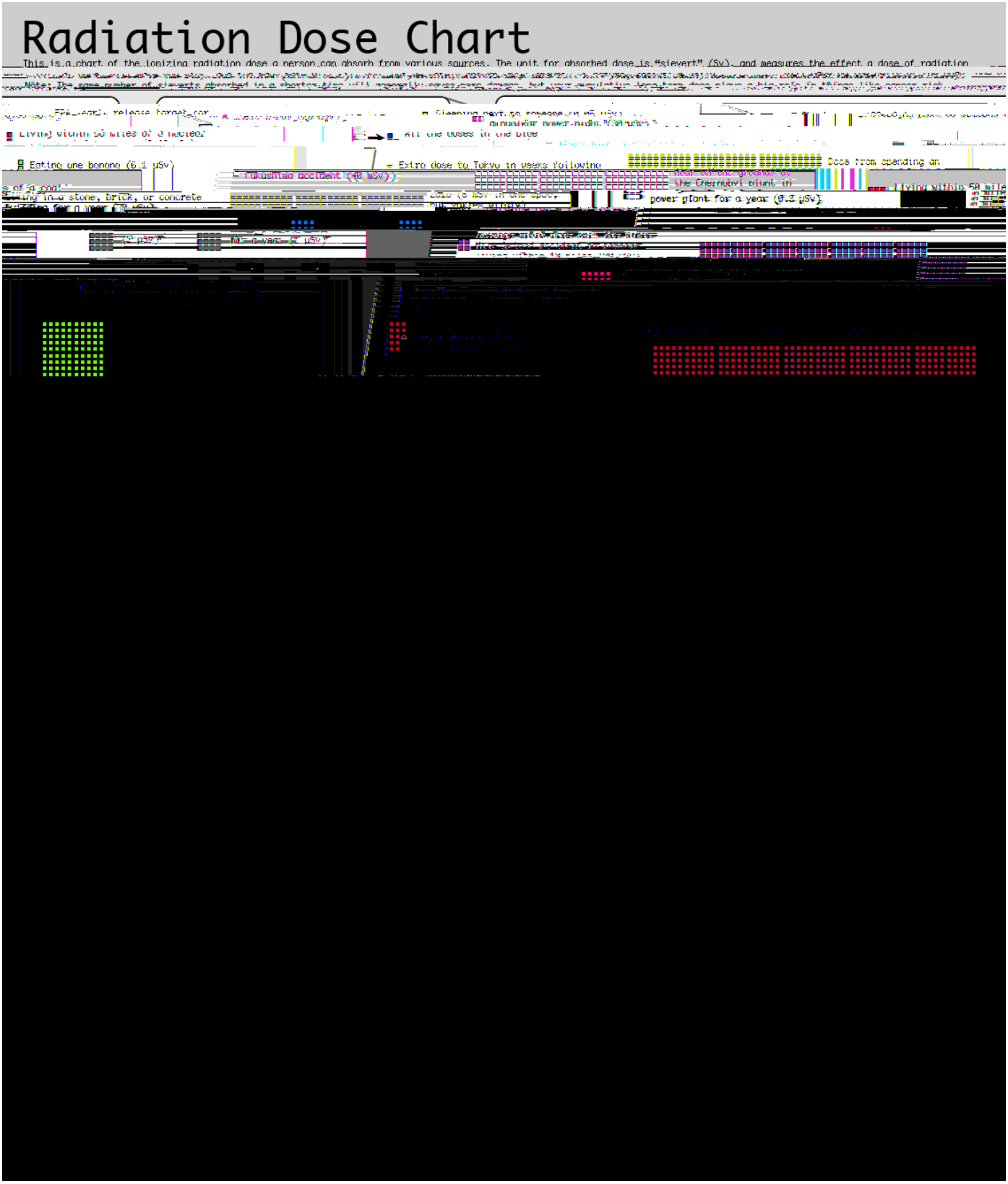


Diagram courtesy of Randall Munroe .

EHS STAFF

Dr. Chuck HART (chuck.hart), Executive Director
Charles GREATHOUSE (charles.greathouse), Analyst Programmer II
Shirley MELE (shirley.mele), Office Manager; Ergonomics/Respirator Program
Marc RUBIN (marc.rubin), Director of Safety Services, Biological Safety Officer, Chemical Safety Officer, Select Agents ARO
Dr. W. David SEDWICK (w.sedwick), Director of Radiation Safety, Professor, and Radiation Safety Officer
Felice THORNTON-PORTER (felice.porter), Assistant Radiation Safety Officer, QA Manager

SAFETY SERVICES

Tom MERK (tom.merk), Safety Services Operations Manager, Specialist II
Jim DAHLE (james.dahle), Fire & Life Safety Specialist I
Bill DEPETRO (william.depetro), Safety Services Specialist II
Anna DUBNISHEVA (anna.dubnisheva), Safety Services Specialist I
Robert LATSCH (robert.latsch), Safety Services Specialist II
Jason MAY (jason.may), Chemical Safety Department Assistant I
Zach SCHWEIKART (zachary.schweikart), Industrial Hygeine Specialist II
Dr. Mary Ellen SCOTT (maryellen.scott), Safety Services Specialist II

RADIATION SAFETY

Joe NIKSTENAS (joenick), Operations Manager Specialist II, RRPT
Victoria COOK (vcook), Health Physics Specialist II
Gwendolyn COX-JOHNSON (gwendolyn.cox-johnson), Radiation Safety Department Assistant II
Yelena NEYMAN (yelena.neyman), Health Physics Specialist I

Please Remember, all back issues of the EHS Newsletter can be found online at case.edu/ehs. Simply click on the "Newsletter" link in the left-hand column!

Environmental Health and Safety
Case Western Reserve University
(FAX: (216) 368-2236