

LAB

NOTES

Safety Newsletter for Lab Workers

UCSD Environment, Health & Safety Office



Inspectors Find Campus Radiation Safety Program in Great Shape

California Department of Health Services inspectors found no violations during the August 10–12 examination of the campus radiation safety program. EH&S Radiation Safety Officer, John Zummo, thanks every principal investigator and individual working with radioactive materials for their support and cooperation in maintaining a radiation safety program that makes UCSD proud.

Annual Hazardous Materials Refresher Training Online

Principal investigators: Everyone working with hazardous materials in your lab must receive **annual hazardous materials refresher training** to meet state environmental regulations. This requirement can be met by using the short (approximately 10 minutes) Enrollment Central online tutorial at https://enrollmentcentral.ucsd.edu/sed_course.cfm?cdcrs=HAZMAT.



Participants can print a Certificate of Completion at the end of the tutorial, and will also receive e-mail notification upon course completion. The tutorial will be listed on the participant's Enrollment Central training history and Blink MyTraining account.

First-time training: Individuals who have not yet completed formal training in safely handling hazardous materials must first attend "Laboratory Safety Principles/IIPP" (https://enrollmentcentral.ucsd.edu/sed_course.cfm?cdcrs=LABPRINS).

County inspectors check UCSD safety training records annually. Keep training certificates available in the lab to avoid citations. Blink MyTraining reports also serve as official documentation.

Questions? Contact the EH&S Safety Training Manager at rbelmontez@ucsd.edu or (858) 822-5974.

Safety Award For Excellence Winners!

Outstanding Individual
Arch Steele

Outstanding Work Group
Bioengineering's Safety Team

Arch Steele

Radiology Department
UCSD Medical Center



Doug Gurevitch, Beth Maples, and Loretta Smith

Bioengineering's Safety Team

Find out what it takes to be a winner when you read **SAFE Winners** on the back.

Just Say No to Open Flame in Biosafety Cabinets

Accidental fires in biosafety cabinets (BSC) are often attributed to the use of gas or other flammables. Bunsen burners are typically used inside BSCs for sterilizing inoculating loops and test tube lips. EH&S strongly discourages natural gas lines, Bunsen burners, and open flames in BSCs for these important reasons:

- Open flames are not required in the near microbe-free BSC environment.
- Class II, Type A/B3 BSCs circulate about 70% of the air, with 30% of the cabinet air being exhausted. Any flammable material (ethanol, isopropyl alcohol, gas) used within this type of BSC accumulates, creating the potential for fire or explosions. Open flame, even a tiny "pilot" flame in a BSC disinfected with ethanol or isopropyl alcohol disinfectant, may accidentally ignite.

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SAFE Winners ... continued

Read about how these four employees are making UCSD a SAFE place to work:

Arch Steele, Radiology Outstanding Individual



In addition to managing safety needs for a busy health care radiology group, Arch took on the added responsibility of tracking the department's exceptionally large number of dosimetry badges. Efficiently collecting old badges and distributing new ones, Arch consistently maintains a 98–100% return rate, ensuring expedient processing and monitoring of his coworkers' occupational exposures.



Doug Gurevitch, Beth Maples, and Loretta Smith Bioengineering's Outstanding Work Group

Recognizing the advantages of coordinating safety communications and efforts department-wide, Doug, Beth, and Loretta established a network of Bioengineering safety coordinators and building floor wardens, inviting participation in safety issues by all levels of the department. Their mutual support safety program is a great model for other UCSD groups.

Nominate someone!

The **Safety Award For Excellence** celebrates UCSD employees who excel in creating and maintaining a safe and healthy workplace. Visit the SAFE Hall of Fame at <http://blink.ucsd.edu/go/safe>. Use the online form to make your nomination.

How to Close or Relocate a UCSD Laboratory

Principal investigators leaving UCSD facilities or moving to a different UCSD location are responsible for leaving their vacated labs ready for reoccupancy or renovation. From Blink's Lab and Chemical Safety Menu (<http://blink.ucsd.edu/menu/lab>), click on "How to Close or Relocate a UCSD Laboratory" and follow the checklist steps to ensure clearance requirements are met.

Go to Enrollment Central for Safety Training

Register for safety training on Enrollment Central at <http://enrollmentcentral.ucsd.edu>. Browse "EH&S–Safety" under Course Topics for schedules.



Biosafety Cabinets ... continued

- In addition to the fire hazard, open flame in a BSC creates turbulence that disrupts the HEPA-filtered air currents supplied to the work surface. Air disturbance increases chances for contamination of products in the cabinet.
- Use of a regular large burner in the cabinet may damage the HEPA filter above the surface, ruining the cabinet.

Instead of using a natural gas Bunsen burner in a BSC, follow these best practices:

- Decontaminate bacteriological loops and needles with a small electric "furnace," a device expressly designed to eliminate the need for using flammable gas in a BSC. Alternatively, consider using presterilized, disposable loops, needles, spreaders, and scrapers.
- Use prepackaged sterile alcohol prep pads (instead of a flame) to disinfect surfaces such as bottle and flask lips.

Reduce the chances for contamination of cultures or media by doing the following:

- Wipe the work surface, interior walls, and interior surface of the window with 70% ethanol (EtOH), or a 1:100 dilution of household bleach (i.e., 0.05% sodium hypochlorite). Note: When bleach is used, perform a second wiping with sterile water to remove residual chlorine, which may eventually corrode stainless steel surfaces.
- Wipe the surfaces of all materials and containers with 70% ETOH before placing them in the BSC to reduce the introduction of contaminants (mold) into the cabinet environment.
- When use of a flame in a BSC is deemed absolutely necessary, a Touch-Matic Bunsen burner, a micro burner equipped with a pilot light to provide a flame on demand, may be used. Place it at the rear of the workspace where internal cabinet air disturbance and heat buildup will be minimized.

Questions about BSC use? Contact EH&S Biosafety Division at ehsbio@ucsd.edu, (858) 534-5366.



ChemCycle

Chemical Reuse & Recycling Program

<http://chem-tech-ucsd.edu/Reuse/>

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