

EH&S Presents...

# LSR Quarterly Meeting

February 1, 2012



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# Agenda

- EH&S Announcements
  - Waste Updates
  - Inspections
    - Schedule
    - 2011 Summary
    - 2012 Expectations
  - Video
  - UCLA Update
  - Next Steps
-



# EH&S Announcements

## Fume Hood Project

**Keep Sash Below RED ZONE  
Hood Set-up Only!**

KEEP SASH AT OR BELOW THIS LEVEL

**MORE SAFE, LESS ENERGY**

ALWAYS CLOSE SASH FOR SAFETY AND TO SAVE ENERGY

Materials: White Vinyl  
Qty: 1  
Size: 2' x 25" Rectangle  
Company: University of California, Davis  
File Name: BlowReaction\_Grip.rvt  
**PLEASE PROOF MOCK UPS CAREFULLY**  
DATE: 11/11/11  
DRAWN BY: J. GOSSETT  
CHECKED BY: J. GOSSETT  
APPROVED BY: J. GOSSETT

BLACK  
#19 Pink Red \* #198 300  
#41 Smart Green \* #198 354  
#10 PANTONE YELLOW \* #198 102

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# EH&S Announcements

## **Lab Hazardous Waste Handling Class**

Thursday, February 9, 10:00 am – 12:00 pm

Baskin Engineering 330

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# RECYCLING at UCSC



[Electronic Waste](#)



[Refrigerators/Appliances](#)



[Batteries](#)



[Regulated Lights](#)

## Regulated / Recyclable Wastes

- [Aerosol Cans](#)
- [Asbestos Waste](#)
- [Batteries](#)
- [Biohazardous or Medical Waste](#)
- [Cardboard](#)
- [Cell Phones](#)
- [Compressed Gas Cylinders](#)
- [Electronic Waste](#)
- [Empty Containers](#)
- [Glass](#)
- [Hazardous Waste](#)
- [Inkjet, Laserjet, & Toner Cartridges](#)
- [Laboratory Sharps](#)
- [Light Ballasts](#)
- [Medicine/Personal Sharps](#)
- [Metal Cans](#)
- [Oil](#)
- [Paint](#)
- [Paper](#)
- [Photographic Chemicals](#)
- [Plastic Bags](#)
- [Plastic Containers](#)
- [Plastic Pipette Tip Boxes](#)
- [Radioactive Waste](#)
- [Refrigerators/Appliances](#)
- [Regulated Lights](#)
- [Scrap Metal](#)
- [Treated Wood Waste](#)

Blue = Regulated waste

Pink = Non-regulated waste

If you have further questions or need additional information please contact [Environmental Health & Safety](#) at 459-2553 or the [Recycling Office](#) at 459-3671.

If your waste stream was not listed above or you have ideas on how to improve this website please contact Environmental Health & Safety at [hazwaste@ucsc.edu](mailto:hazwaste@ucsc.edu).

[http://ehs.ucsc.edu/waste\\_management/pubs/recycling\\_disposal\\_guide.php](http://ehs.ucsc.edu/waste_management/pubs/recycling_disposal_guide.php)

# LAB RECYCLING

## UCSC Recycling and Disposal Guide

A to Z index

- D = Disposal and Recycling Guide
- R = Recycling and Disposal Guide or
  
- EH&S web page under waste management

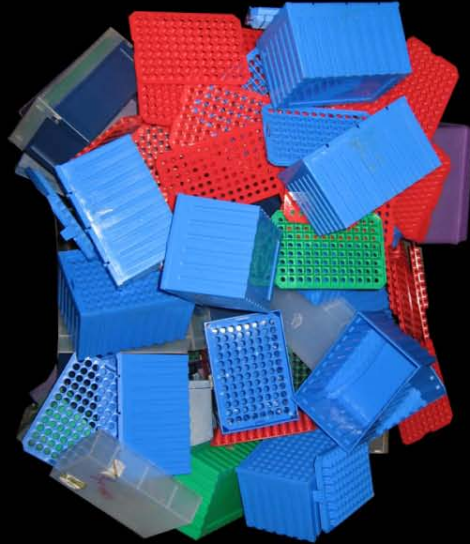
# LAB RECYCLING

- Additions to recycling streams
  - Plastic pails
  - Metal tins
  - PV cells – ewaste
  - Working on lab plastics – fingers crossed
  - Styrofoam and cooler returns
    - New England BioLabs
    - Promega



# Pipette Tip Box Recycling & Plastic Pails Only

(No Metal Handles or Contamination)



Reduce  
Reuse  
Recycle



Contact Recycling w/ questions 459-3671  
[http://ehs.ucsc.edu/waste\\_management/pubs/Pipette\\_tip\\_boxes.php](http://ehs.ucsc.edu/waste_management/pubs/Pipette_tip_boxes.php)



# TIN



THIS CAN IS NOT TO BE USED FOR  
TOXIC BY INHALATION MATERIALS  
PYROPHORIC MATERIALS.

# PV Cells





# Styrofoam Recycling Day

Please Recycle Styrofoam!

Bring all your Styrofoam to

The Physical Science Building (PSB) Loading Dock

February 13th 1pm-4pm



UCSC EH&S Office  
For Question  
Call 459-3086  
[hazwaste@ucsc.edu](mailto:hazwaste@ucsc.edu)



The Company Pays the  
return of the box



FROM: (YOUR ZIP CODE ONLY)

95064

POSTAGE DUE COMPUTED BY  
DELIVERY UNIT

TOTAL POSTAGE DUE \_\_\_\_\_

**MERCHANDISE RETURN LABEL**

PERMIT NO. 1  
NEW ENGLAND BIOLABS

IPSWICH MA  
240 COUNTY ROAD

**POSTAGE DUE UNIT  
U.S. POSTAL SERVICE  
27 MARKET ST  
IPSWICH, MA 01938-9998**

NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

**RECYCLE THIS BOX**  
POSTAGE PAID BY NEB

**RECYCLE THIS BOX**

PLEASE RETURN EMPTY

# Satellite Accumulation Area - SAA

- Trained
- Labeled with OTP tag
- Max 180 days in lab
- Clean containers and secondary containers
- 80% max capacity
- Segregated
- Container closed at all times





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# Lab Inspection Update

## Winter 2012

- Physics – Site visits complete, reports ongoing
  - Engineering - February
  - Anthropology - March
  - Environmental Studies - March
  - Chemistry - April
  
  - Before the Inspection
    - Self-inspection
    - Complete last year's DCN
    - Review waste
-

# Deficiency Correction Notice - Laboratory Safety Survey



UCSC Environmental Health and Safety Programs

Survey Date: June 16, 2002

Industrial Hygiene Services

EH&S Trailer

**Buddy Morris**

Please date, initial, and return this page to EH&S as soon as all items are corrected or by June 23, 2002.

Inspection Details:	Severity Risk Rank:	Days to Correct:	Correct by Target Date:	Corrected? Corrected?	Corrected: (date/initial)
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## **Records and Documentation - IIPP**

### **Lab Group**

1. Safety training required for your operations has not been provided to all employees.	<b>High</b>	5	7/4/2002	No	_____
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## **Lab Standard Compliance**

### **Lab Group**

2. Chemical wastes are not properly managed in the lab.	<b>High</b>	5	6/23/2002	No	_____
3. Chemical wastes are not properly managed in the lab.	<b>High</b>	5	6/23/2002	No	_____
4. Flammable chemicals are stored close to sources of ignition.	<b>High</b>	5	7/6/2002	No	_____
5. Flammable chemicals are stored close to sources of ignition.	<b>High</b>	5	7/7/2002	No	_____
6. Chemicals which are potentially very hazardous (explosive, reactive, carcinogenic, etc.) are not being properly managed.	<b>High</b>	5	7/6/2002	No	_____
7. Facilities Inappropriate for Work Activities	Med	14	7/16/2002	No	_____
8. Facilities Inappropriate for Work Activities	Med	14	7/16/2002	No	_____
9. Facilities Inappropriate for Work Activities	Med	14	7/16/2002	No	_____
10. Old chemicals are being stored.	Med	14	7/15/2002	No	_____
11. Excess quantities of flammable liquids are stored in the lab.	Med	14	7/15/2002	No	_____
12. Glass waste containers are not properly managed in the Lab.	Med	14	7/2/2002	No	_____
13. Glass Trash Containers not used.	Med	14	7/2/2002	No	_____
14. Switch cover is missing.	Low	30	8/1/2002	No	_____
15. An electrical cord is not properly channelled.	Low	30	8/1/2002	No	_____
16. The boiler permit on the autoclave is expired.	Low	30	8/1/2002	No	_____
17. Shelves do not have restraints to prevent items from falling.	Low	30	8/1/2002	No	_____
18. Equipment such as book shelves, cabinets, or storage shelves are not seismically braced.	Low	30	8/1/2002	No	_____

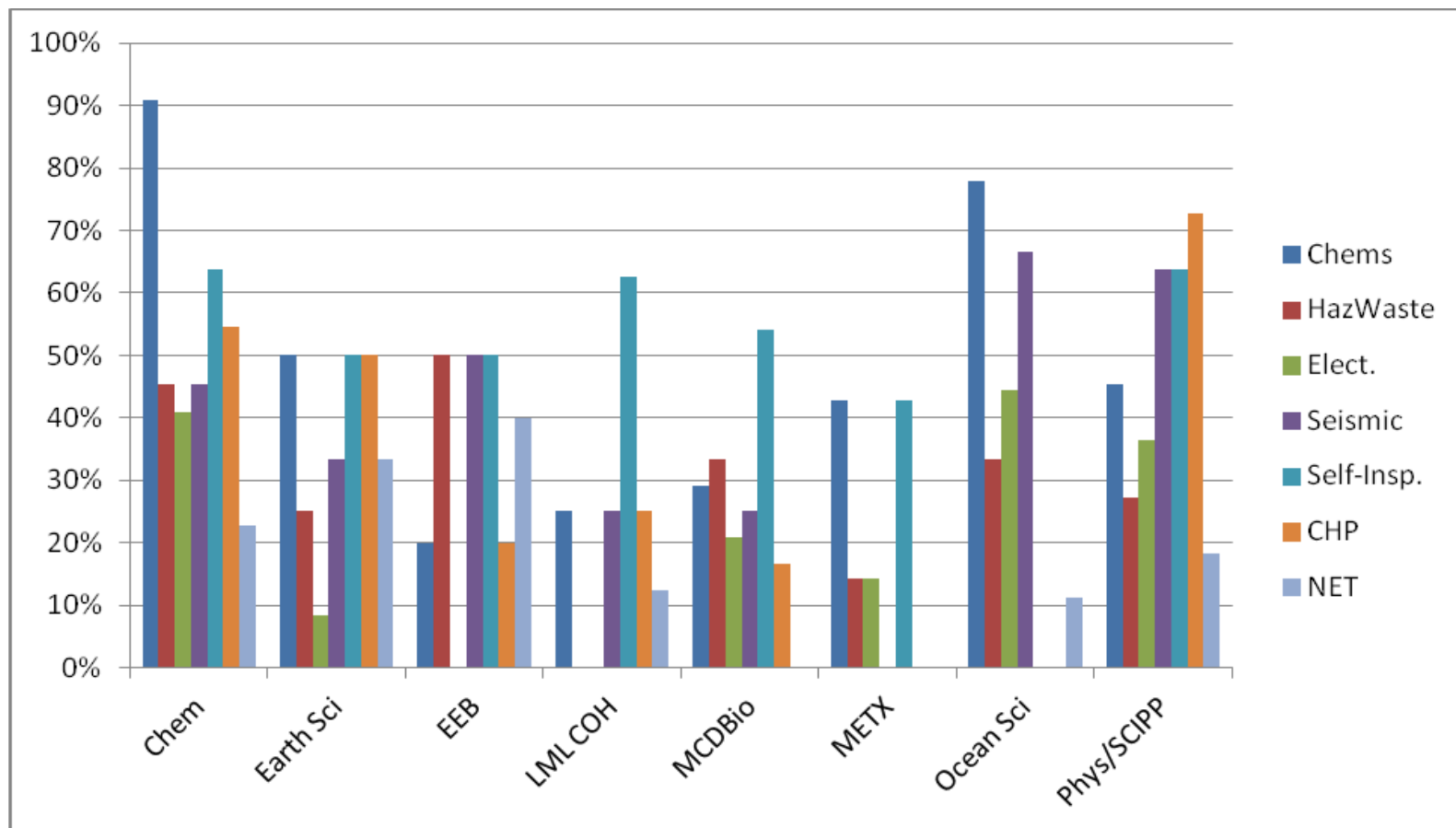
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# 2011 Lab Inspection Summary

- Deficiencies
  - Self-inspections
  - DCNs returned
  - Attendance at LSR meetings
  - PPE
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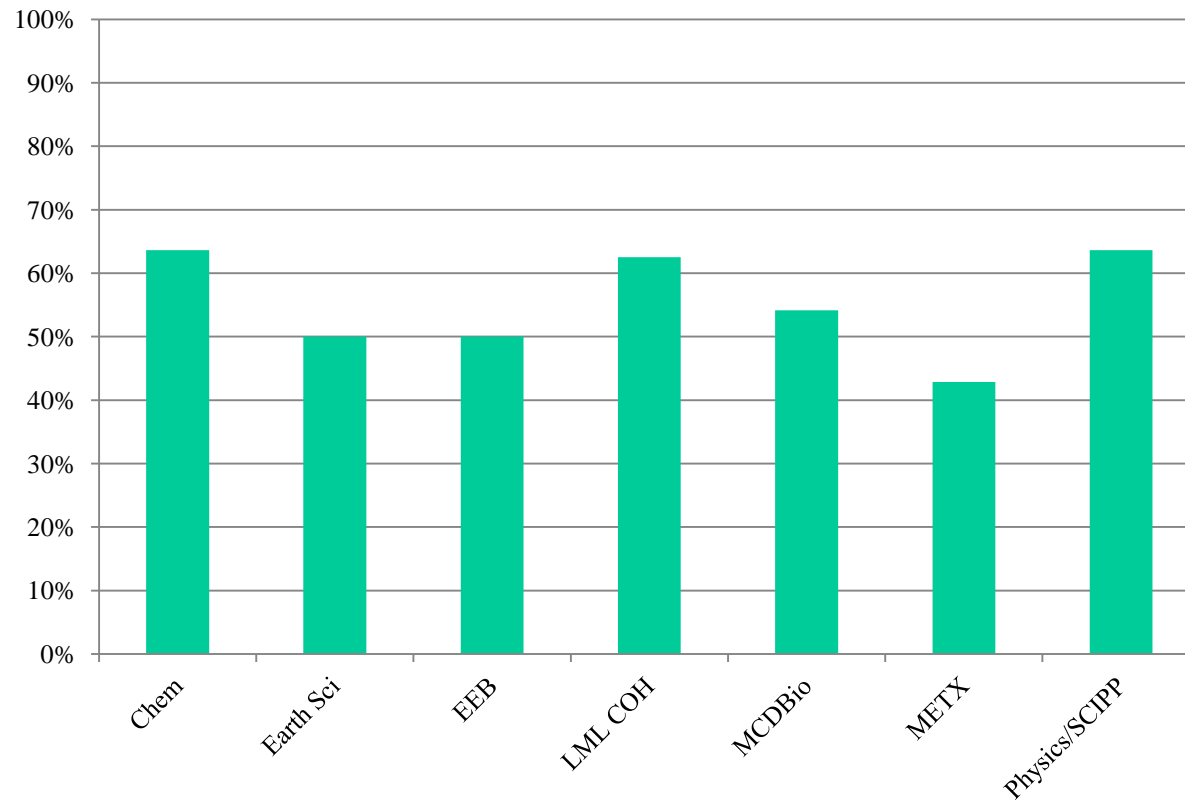
# 2011 Lab Inspection Summary

- Percentage of labs with at least 1 deficiency per category



# 2011 Lab Inspection Summary

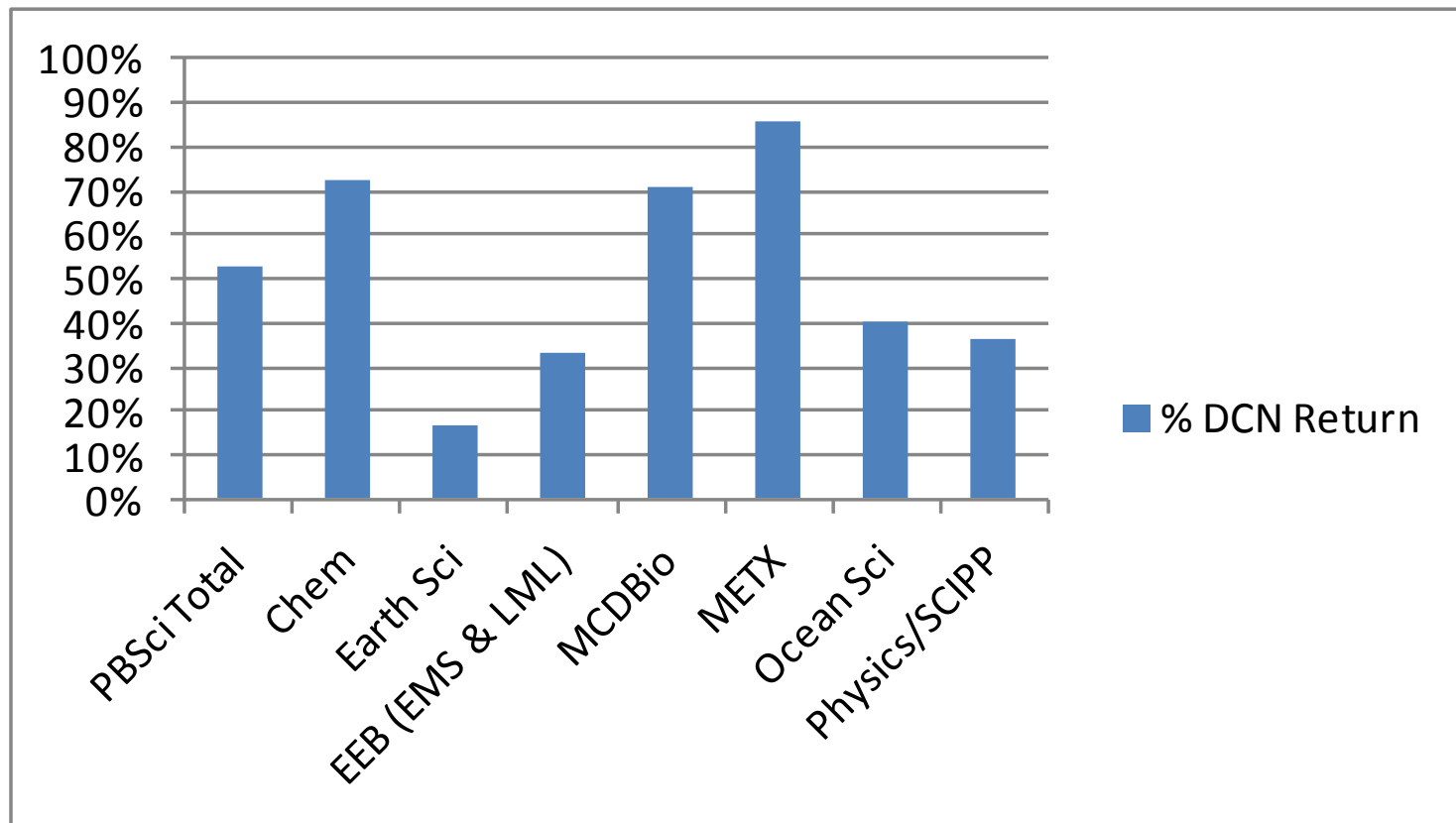
- “Lab Self-Inspections Not Documented”





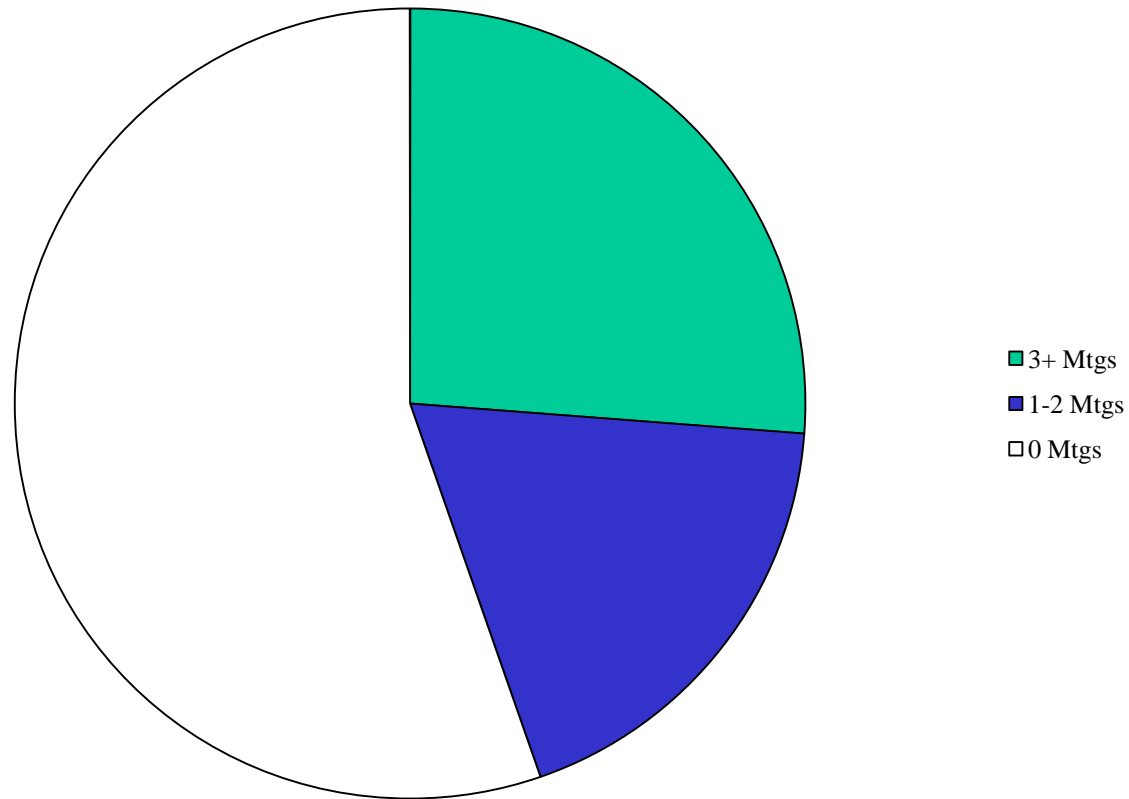
# 2011 Lab Inspection Summary

- Percentage of labs returning DCNs



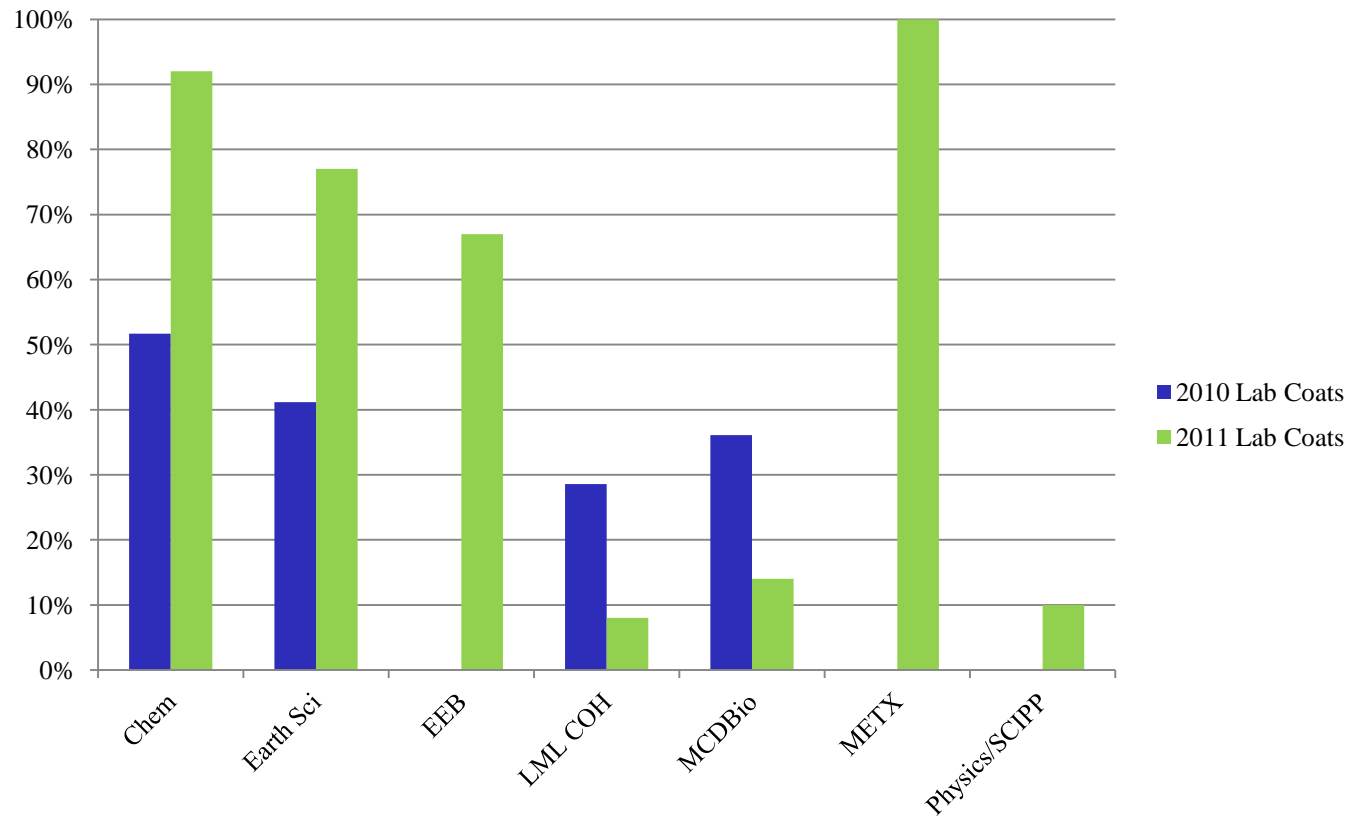
# 2011 Lab Inspection Summary

- Attendance at LSR meetings (PBSci)



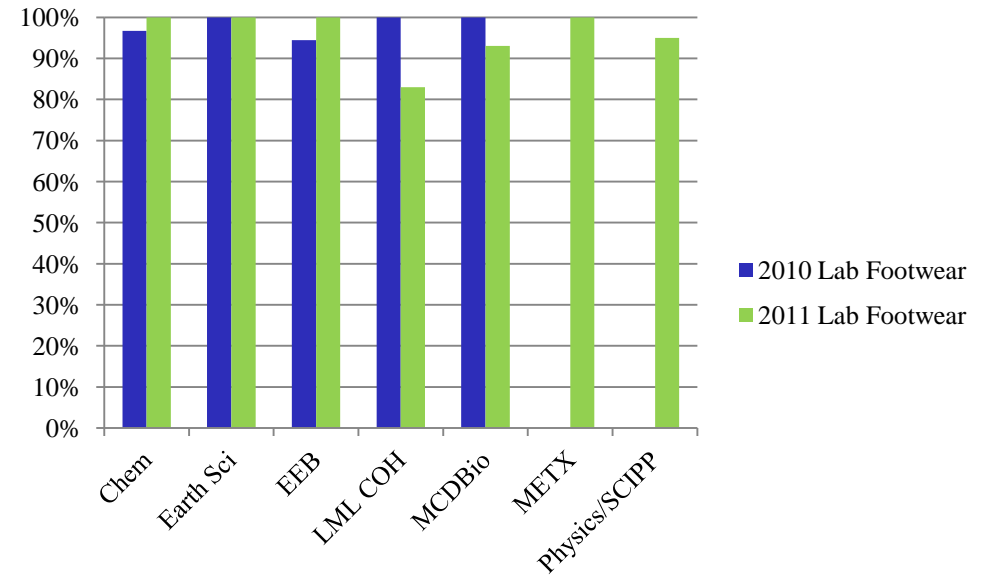
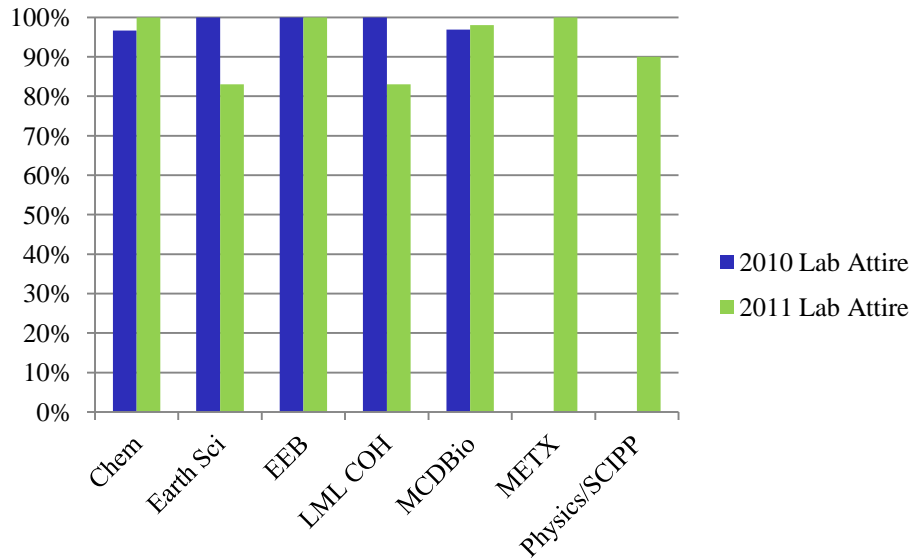
# 2011 Lab Inspection Summary

- PPE



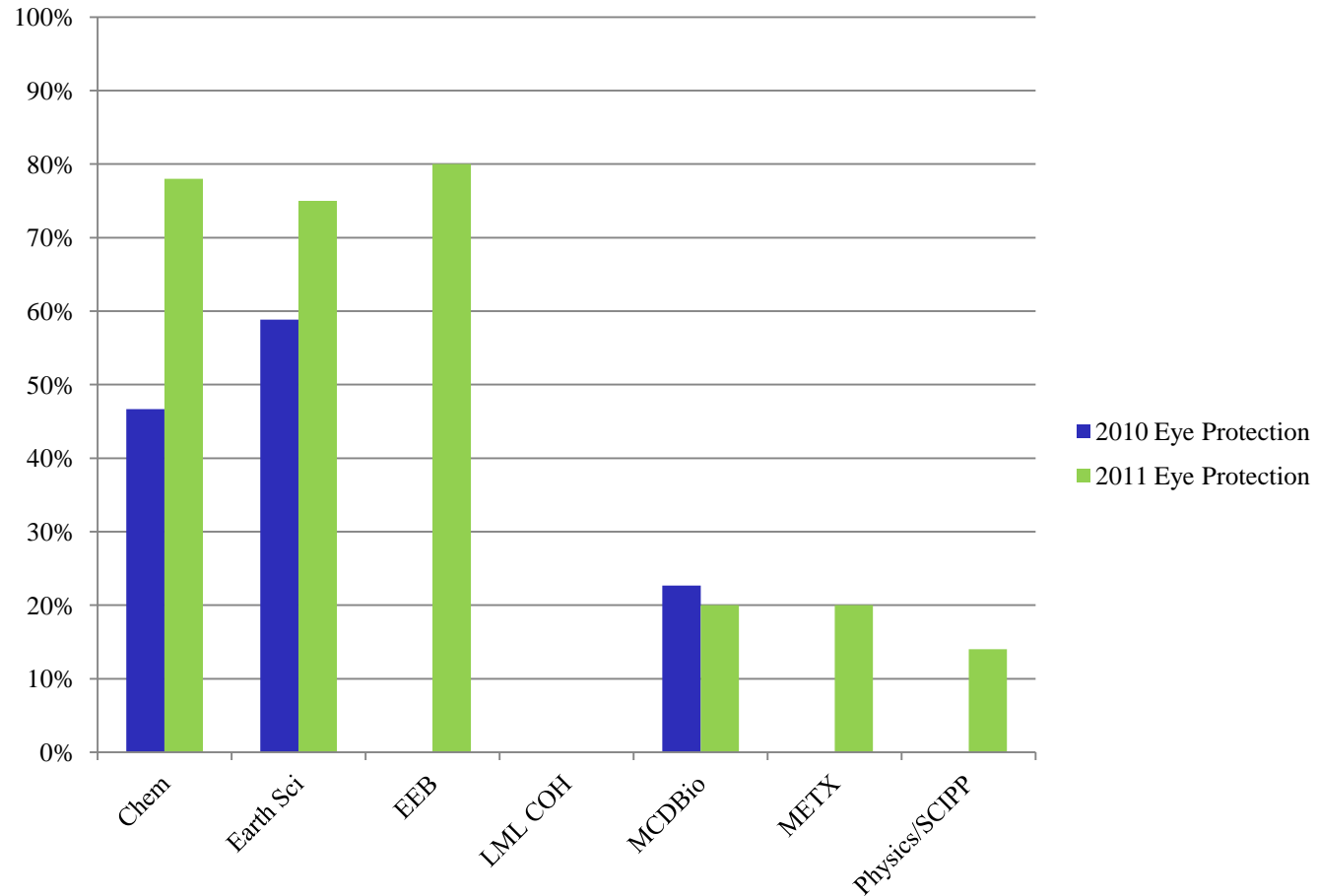
# 2011 Lab Inspection Summary

- PPE



# 2011 Lab Inspection Summary

- PPE



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# 2012 Lab Inspection Expectations

- Self-inspections
  - DCN to EH&S
  - LSR meetings
  - Training
  - PPE
-



# 2012 Lab Inspection Expectations

- Training
    - **New Laboratory Worker Health & Safety Orientation form:**  
[http://ehs.ucsc.edu/lab\\_research\\_safety/pubs/chp/LabEmployeeTraining.pdf](http://ehs.ucsc.edu/lab_research_safety/pubs/chp/LabEmployeeTraining.pdf)
    - **Laboratory Safety Training Check List:**  
[http://ehs.ucsc.edu/lab\\_research\\_safety/pubs/facts/Lab\\_Training\\_List.doc](http://ehs.ucsc.edu/lab_research_safety/pubs/facts/Lab_Training_List.doc)
  - Special training documentation
  - SOPs with signature sheet
    - High hazard processes
    - Particularly hazardous materials
-

# 2012 Lab Inspection Expectations

- PPE



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# 2012 Incentive

- If your lab group:
    - Conducts and documents self-inspections
    - Completes and returns the DCN
    - Attends each quarterly LSR meeting
    -
  - Then:
    - Award for your group
    - Raffle for “big” award
  - And:
    - The satisfaction of knowing you’ve done the right thing!
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# CSB Video

- “Experimenting with Danger”
- <http://www.csb.gov/videoroom/detail.aspx?VID=61>



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# CSB Video

- Recommendations
    - Include physical hazards of chemicals in CHP
    - Develop specific written protocols and training for research hazards
    - Develop an incident and near-miss reporting system
-

# UCLA Update

- **§5191. Occupational Exposure to Hazardous Chemicals in Laboratories.**
  - **(f) Employee information and training.**
  - **(4) Training.**
    - (A) Employee training shall include;**
      1. Methods and observations that may be used to detect the presence or release of a hazardous chemical (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
      2. The physical and health hazards of chemicals in the work area; and
      3. The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.
    - (B) The employee shall be trained on the applicable details of the employer's written Chemical Hygiene Plan.**
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# UCLA Update

## ***What Is To Be Done:***

- **Train** everyone in lab on specific hazards and processes
  - **Document** training
    - Signed lab-specific training checklist
    - Signed SOPs
    - Other documentation of mentored procedures
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# UCLA Update

## **§3203. Injury and Illness Prevention Program**

**(a) Effective July 1, 1991, every employer shall establish, implement and maintain an effective Injury and Illness Prevention Program (Program). The Program shall be in writing and, shall, at a minimum:**

(6) Include methods and/or procedures for correcting unsafe or unhealthy conditions, work practices and work procedures in a timely manner based on the severity of the hazard:

(A) When observed or discovered; and,

(B) When an imminent hazard exists which cannot be immediately abated without endangering employee(s) and/or property, remove all exposed personnel from the area except those necessary to correct the existing condition. Employees necessary to correct the hazardous condition shall be provided the necessary safeguards.

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# UCLA Update

## ***What Is To Be Done:***

- Perform **self-inspections**
- **Correct** deficiencies and **document** corrections
- Return EH&S Deficiency Correction Notice

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# UCLA Update

## **§3383. Body Protection.**

**(b) Clothing appropriate for the work being done shall be worn.** Loose sleeves, tails, ties, lapels, cuffs, or other loose clothing which can be entangled in moving machinery shall not be worn.

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# UCLA Update

## ***What Is To Be Done:***

- **Adequate protective measures for recognized hazards (PPE):**
  - Cotton or flame retardant lab coat
  - Eye protection
  - Long pants
  - Closed toe shoes
  - Appropriate gloves
  - Other PPE as needed
- **In addition:**
  - Highly flammable materials - Flame retardant lab coat
  - Pyrophoric or air sensitive materials - Nomex lab coat, pilot's gloves

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# Next Steps

- Potential Incidents / "Lessons Learned"



- BSAS Funding Solutions





Questions?