

# The Heavy Lifting of Compliance

A Grad Student's Perspective on Safety in the Wake of the UC Regents Settlement



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# Settlement Aftershocks

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Major safety updates:

1. PPE Compliance
2. New SOPs
3. New labeling requirements



*Sheharbano Sangji*

# David Lab Hazards & PPE

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BIOCHEMISTRY

ORGANIC SYNTHESIS

BSL2 (BUA)

RADIATION (RUA)

# David Lab Hazards & PPE

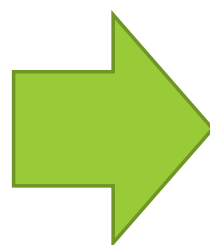
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BIOCHEMISTRY

ORGANIC SYNTHESIS

BSL2 (BUA)

RADIATION (RUA)



**10 NEW**

**LAB COATS**

**PER PERSON!**



# PPE Compliance

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threshold

# New SOPs

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TASK: Make *compound-specific* SOPs from a list of a few hundred compounds



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DAVID LAB: 18 compound-specific SOPs



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DAVID LAB: 18 compound-specific SOPs



TURNAROUND TIME: 1 month



# New SOPs

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NEW TASK: Make *control-banded* SOPs from a list of almost 7000 compounds



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DAVID LAB: ??????



# New SOPs

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NEW TASK: Make *control-banded* SOPs from a list of almost 7000 compounds



DAVID LAB: ??????



TURNAROUND TIME: 3 weeks



# New SOPs

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**Acutely toxic materials**

**Benzene**

**Carcinogens**

**Corrosives**

**Dichloromethane**

**Formaldehyde**

**Grignard Reagents**

**Heavy metal azides**

**Hydrogenated catalysts**

**Hydroperoxides**

**Metal hydrides**

**Metal powders**

**Nitroso compounds**

**Perchlorate salts**

**Peroxide compounds**

**Peroxide formers**

**Pyrophoric elements**

**Reproductive Hazards**

**Strong Oxidizers**

**Strong Reducers**

**Water Reactives**

**Working Alone**

# Updating Labeling Reqs

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LOTS of prepared-in-house mixtures

- Full English names of components
- Concise description of component hazards
- Name of preparer
- Date prepared

# New Labeling Protocol (#1)

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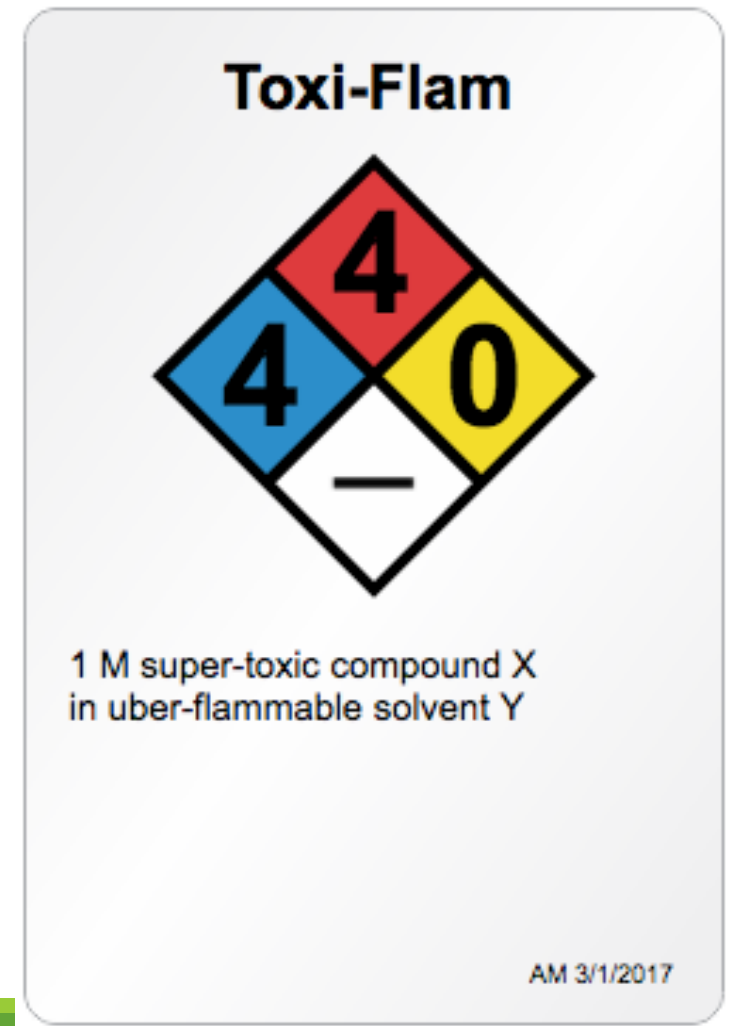
NFPA diamond style

Custom labels

([www.mysafetylabels.com](http://www.mysafetylabels.com))

Pros: super easy day-to-day use,  
info readily accessible at hand,  
fire-department-friendly.

Cons: ...



# Dictated Labeling Protocol (#2)





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Use abbreviations

Post abbreviation definitions with GHS pictograms in lab

Pros: easy day-to-day use

Cons: info not readily at-hand, not first-responder-friendly

<b>SDS</b>	Sodium dodecyl sulfate	 
<b>EtBr</b>	Ethidium bromide	 

# Dictated Labeling Protocol (#3)





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Use abbreviations *WITH* hazard keyword

Post abbreviation definitions with GHS pictograms in lab

Pros: mildly first-responder-friendly

Cons: requires lots of brainpower to implement correctly, info not readily at-hand

<b>SDS</b>	Sodium dodecyl sulfate		
<b>EtBr</b>	Ethidium bromide		

**HEALTH HAZARD, ACUTELY TOXIC**

# Compliance vs Culture of Safety

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*Do these compliance-based changes make  
the researchers safer?*

*Cynical GS view:*

*“Compliance is a necessary evil,  
& is for the protection of UC.”*

# Building a Culture of Safety

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Most impactful for the David Lab:

- Routine, casual safety discussions in group meeting
- Sheila present and engaged
- *Specifically* in situations that don't provide legal cover to the University or the PI.

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***(MY PERSONAL OPINION!)***



# Thank you!

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