

Update from the Lab Safety Task Force

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58th Annual Conference




Overview

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- Q&A



Context



Los Angeles Times
LOCAL / L.A. Now

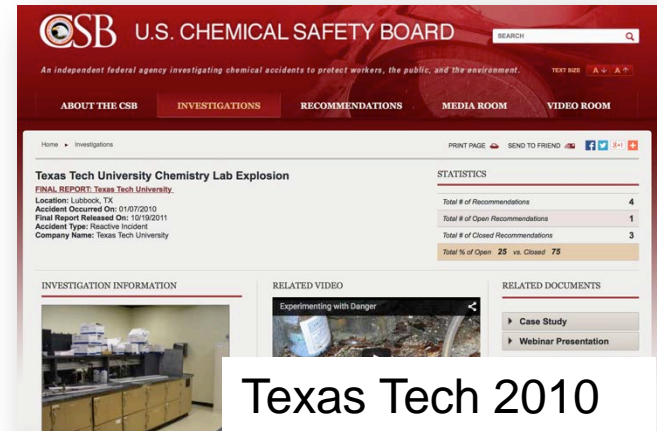
This article is related to: Trials and Arbitration, UCLA

UCLA chemistry professor avoids prison time in fatal lab fire case

COMPLYMENTAL
COMPLETELY CAPTIVATING

ADVERTISEMENT

UCLA 2008



CSB U.S. CHEMICAL SAFETY BOARD

An independent federal agency investigating chemical accidents to protect workers, the public, and the environment.

ABOUT THE CSB INVESTIGATIONS RECOMMENDATIONS MEDIA ROOM VIDEO ROOM

Home • Investigations

Texas Tech University Chemistry Lab Explosion

FINAL REPORT: Texas Tech University
Location: Lubbock, TX
Accident Occurred On: 01/07/2010
Final Report Released On: 10/19/2011
Accident Type: Reactive Incident
Company Name: Texas Tech University

STATISTICS	
Total # of Recommendations	4
Total # of Open Recommendations	1
Total # of Closed Recommendations	3
Total % of Open	25 vs. Closed 75

INVESTIGATION INFORMATION RELATED VIDEO RELATED DOCUMENTS

Experimenting with Danger

Case Study
Webinar Presentation

Texas Tech 2010



SECTIONS HOME SEARCH

The New York Times

New York City Board Votes to Freeze Regulated Rents on One-Year Leases

Chris Christie Enters Presidential Race

Squabbling, Hesitation and Luck Had Roles in Manhunt for New York Prison Escapees

N.Y. / REGION

Yale Student Killed as Hair Gets Caught in Lathe

By LISA W. FODERARO APRIL 13, 2011

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As a Yale undergraduate majoring in astronomy and physics, Michele Dufault was used to extreme physical environments. She worked on underwater robotic vehicles last summer as a fellow at the Woods Hole Oceanographic Institution in Massachusetts. She also traveled to Houston as part of a team of undergraduates chosen by NASA to perform a plasma physics experiment in red

WHAT KIND

But it was a rudimentary machine — a lathe in a laboratory — that erased what everyone imag

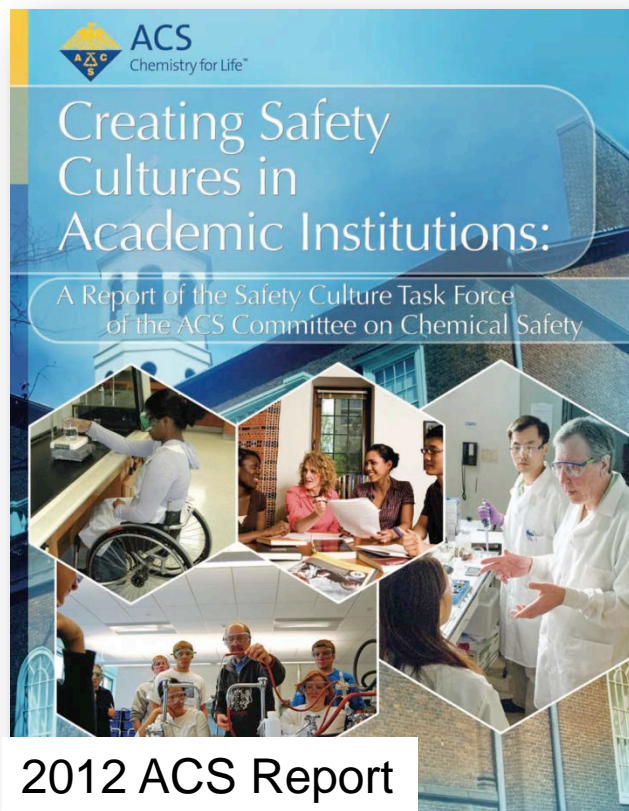
Yale 2011

Must Reads:

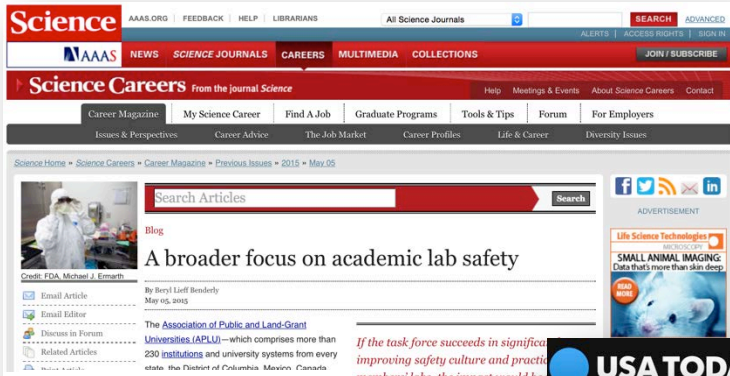
<http://www.labsafetyinstitute.org/MemorialWall.html>

<http://www.csb.gov>

Context (continued)



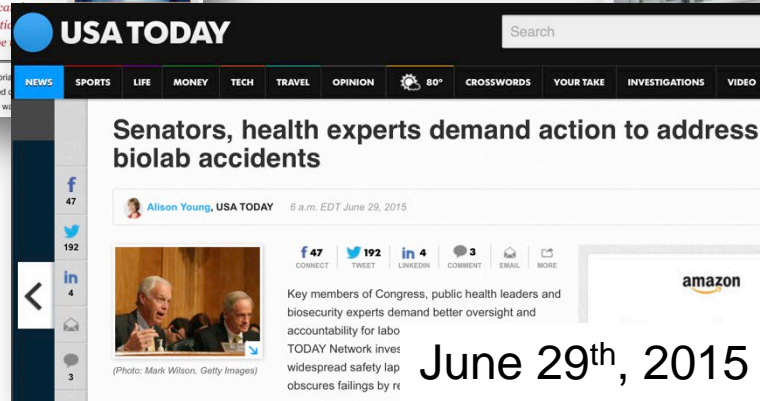
National 360



May 5th, 2015



May 7th, 2015



June 29th, 2015

- UCLA, TTU, Yale accidents
- NIH Guideline
- OSTP, NIH, other federal agencies forming biosafety task force

- Corporate hiring practices
- Governing Boards and Enterprise Risk Management

Proactive Response

- Since 2013, APLU Council on Research (CoR) has been in discussions to proactively address the lab accident epidemic on campuses.
- Summer meeting 2013 focused on the issue
- Sense that VPRs/VCRs must be proactive change agents (including responding to 2014 NRC report)
- Concerns about risk management, federal agency action, faculty workload burden
- Formal task force established in 2014, involving APLU, AAU, COGR, ACS

Task Force Charter

Key points:

- To highlight common safety risks within academic laboratories.
- To assess and benchmark innovative mechanisms to prevent and manage laboratory safety accidents in academic institutions.
- To confer with laboratory safety experts from governmental or non-governmental organizations focused on enhancing domestic laboratory safety standards.
- To assess regulatory and other national initiatives to enhance the culture of laboratory safety.
- Make recommendation as action items.



Task Force Members

- Taylor Eighmy (Chair), University of Tennessee, Knoxville
- Mark McLellan (Co-chair), Utah State University
- Gene Block (Honorary Chair), UCLA
- Kimberly Espy, University of Arizona
- Mridul Gautam, University of Nevada, Reno
- Kimberly Jeskie, Oak Ridge National Laboratory
- Dawn Mason, Eastman Chemical Company
- Jan Novakofski, University of Illinois at Urbana-Champaign



Task Force Members (continued)

- Patty Olinger, Emory University
- Joanne Polzien, Michigan Technological University
- Lesley Rigg, University of Calgary
- Tim Slone, University of North Carolina at Greensboro
- Ara Tahmassian, Harvard University
- Erik Talley, Cornell University
- William Tolman, University of Minnesota Twin Cities
- Nancy Wayne, University of California Los Angeles
- Alice Young, Texas Tech University



Task Force Staff

- Steve Bilbao, Utah State University
- Robert Nobles, University of Tennessee, Knoxville
- Kacy Redd, APLU



Listening Sessions

The Task Force has been meeting (in-person or virtual) with a range of stakeholders to hear their perspectives. So far:

- May 6, 2015: NRC, ACS, CSHEMA, AAHRP
- June 8, 2015: AAALAC
- June 15, 2015: COGR, FASEB, FDP, AAU
- June 18, 2015: NIH
- June 31, 2015: CoR
- August 3, 2015: URIMA
- August 17, 2015: ACS
- November (date TBD): CASS (deans)
- TBD: NACUA

Draft Approach: Framing Vision and Mission of Task Force

- Advocating for a proactive call to all universities to embrace *a renewed commitment to improve the safety culture* for all academic research, scholarship, and teaching.



Draft Approach: Suggested Core Institutional Values

- Safety is a component of scholarly excellence and responsible conduct of research.
- A campus environment that ensures the health and safety of our entire community is necessary.
- Increased focus on safety is important for our students' careers.
- We are determined to create a culture to ensure risk reduction.
- As safety cultures are developed, one size does not fit all and thus diversity and flexibility of approaches and methods that involves the entire community is the best approach.



Draft Approach: Primary Recommendation

- *Recommend that APLU and AAU call upon all academic institutions to renew their commitment to improve the safety culture for all academic research, scholarship, and teaching.*
- *Letter from APLU and AAU leadership to all universities with a copy of the task force report*

Draft Approach: Primary Recommendation

Letter to include:

- Language about what we value.
- References to national reports and recent incidents and accidents (e.g., UCLA, Yale, TTU, Biosafety and federal labs, NIH plan) Asking all academic institutions to use this tool box as each selects a direction.
- Asking all academic institutions to also look beyond the traditional research lab and to embrace a commitment to improving safety in the lab, in the teaching classroom, and in the field.
- Asking presidents to publicize their commitment and expectations within their institutions.
- Inform that APLU and CoR will work to routinely recognize exemplary programs and will sponsor an annual safety culture award.

Draft Approach: Tool Box Components

- Use the tool box concept
- Tool box can evolve
- Each institutions can best select the tools that best work for them
- Path of and rate of change around cultural adoption is unique to each institution, one size does not fit all
- Separate cultural change from compliance
- Accreditation is not a component of the tool box



Draft Approach: Start Up Tools to Initiate Cultural Change

We are drawing heavily upon the recommendations made by NAS and ACS. These include (just a beginning list):

- Campus dialogues with all stakeholders
- Collegial relationships between faculty and EH&S
- Empower Students - Graduate & Undergraduate
- Transparency on roles of all stakeholders
- Trusting and safe culture (celebrate learning from near misses), rather than a punitive culture
- Recognition/reward system
- Incorporate language about safety expectations in hiring documents, annual performance reviews
- Promote academic and industrial/government partnerships
- Training: Students, Faculty, Department Heads, Deans



Draft Approach: Tools to Help Maintain Culture

- Tools to Help Win Hearts and Minds
- Training Tools
- Operational Tools
- Assessment Tools
- Personal Accountability Tools



Draft Approach: Assessment Tools as an Example

- Internal self-assessment of culture and practices for programs. This can be done at the institutional level or at the sub-unit level (e.g., departments, colleges, institutes).
- External peer assessment (like grad program review) of culture and practices, again at various levels. Peers can be selected based on their academic and research profiles and maturation of their safety culture. This practice is common to the academy, especially around graduate program review.
- External assessment from professional consulting organizations (e.g., paid review). These organizations typically work closely with industry and national laboratories.
- CSHEMA model -- comprehensive and extensive campus-wide guided self-assessment (this is a more extensive process than a, b, and c). Typically this is a year long process.



Draft Approach: Roles and Responsibilities

- President/Chancellor
- Provost
- Senior Research Officer
- Designated Lead for Safety
- Department Heads
- Faculty
- Students
- Job descriptions/hiring



Draft Approach: Resources (examples)

- NRC report
- ACS reports
- CSB reports
- Lab Safety Institute web site
- UC System approach
- Stanford approach
- CSHEMA
- NIH/Federal Task Forces



Cross Referencing Underway

- Making sure we align our draft approach with relevant recommendations from NRC, ACS, others
- Looking at U.S. CSB recommendations regarding TTU
- Looking at “Laboratory Safety Attitudes and Practices: A Comparison of Academic, Government, and Industry Researchers (J. Chemical Health & Safety, 2015)
- Exploring OSHA “Culture of Safety” recommendations



Proposed Remaining Schedule

- Continue obtaining input from stakeholders (Summer)
- Finalize report (November)
- Draft letter (November)
- Present Tool Box in November, 2015
- Formal letter from CoR to APLU, AAU, Chancellor Block (December?)
- Letter and report from APLU, AAU, Chancellor Block to APLU and AAU institutions (January, 2016?)

Q&A

- What you think will work for improving the safety culture in academia?
- Suggestions for toolbox?
- Integrated approach to safety?
- Are you supportive of separating the safety culture push from the compliance requirement?



Thanks to Taylor Eighmy, Mark McLellan, Kacy Redd, Howard Gobstein for the slides.



THANK YOU!

