A guide to implementing a **SAFETY CULTURE** in our universities

APLU/AAU Task Force - Lab Safety Task Force
Taylor Eighmy (UT) and Mark McLellan(USU), co-chairs,

Who does safety in our labs & studios?

UCLA
2008

Los Angeles Times

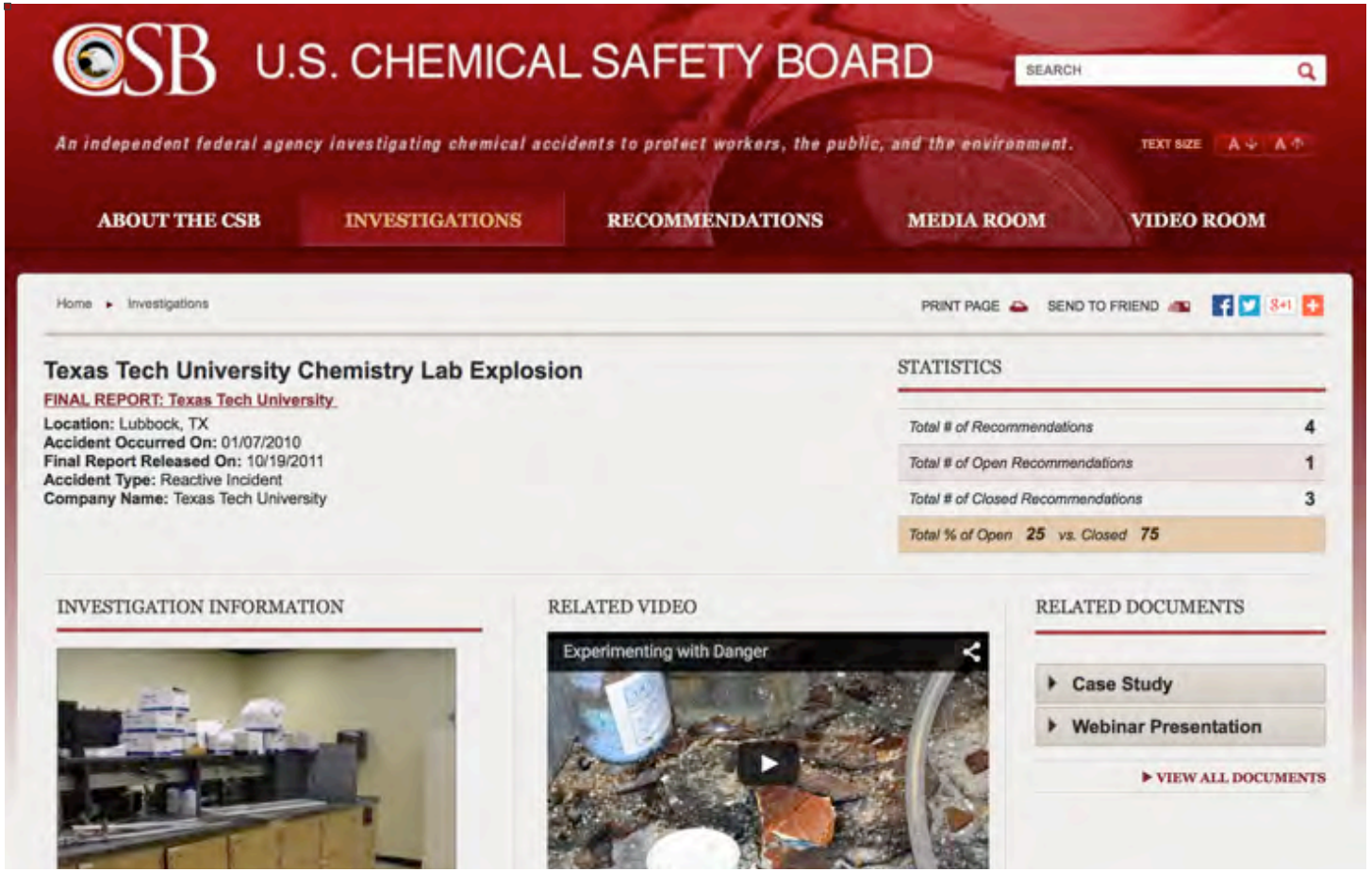
LOCAL / L.A. Now

This article is related to: Trials and Arbitration, UCLA

UCLA chemistry professor avoids prison time in fatal lab fire case

Who does safety in our labs & studios?

Texas Tech 2010



Who does safety in our labs & studios?

Yale
2011

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 reduced gravity.

But it was a rudimentary machine — a lathe in a campus

Who does safety in our labs & studios?

USU
2012

Yale student dies in chemistry lab accident

CBS News, Apr 2011

CBS NEWS

A Higher Bar for Pathogens, But Adherence Is an Issue

New York Times, May 2010

The New York Times

A Pfizer Whistle-Blower Is Awarded $1.4 Million

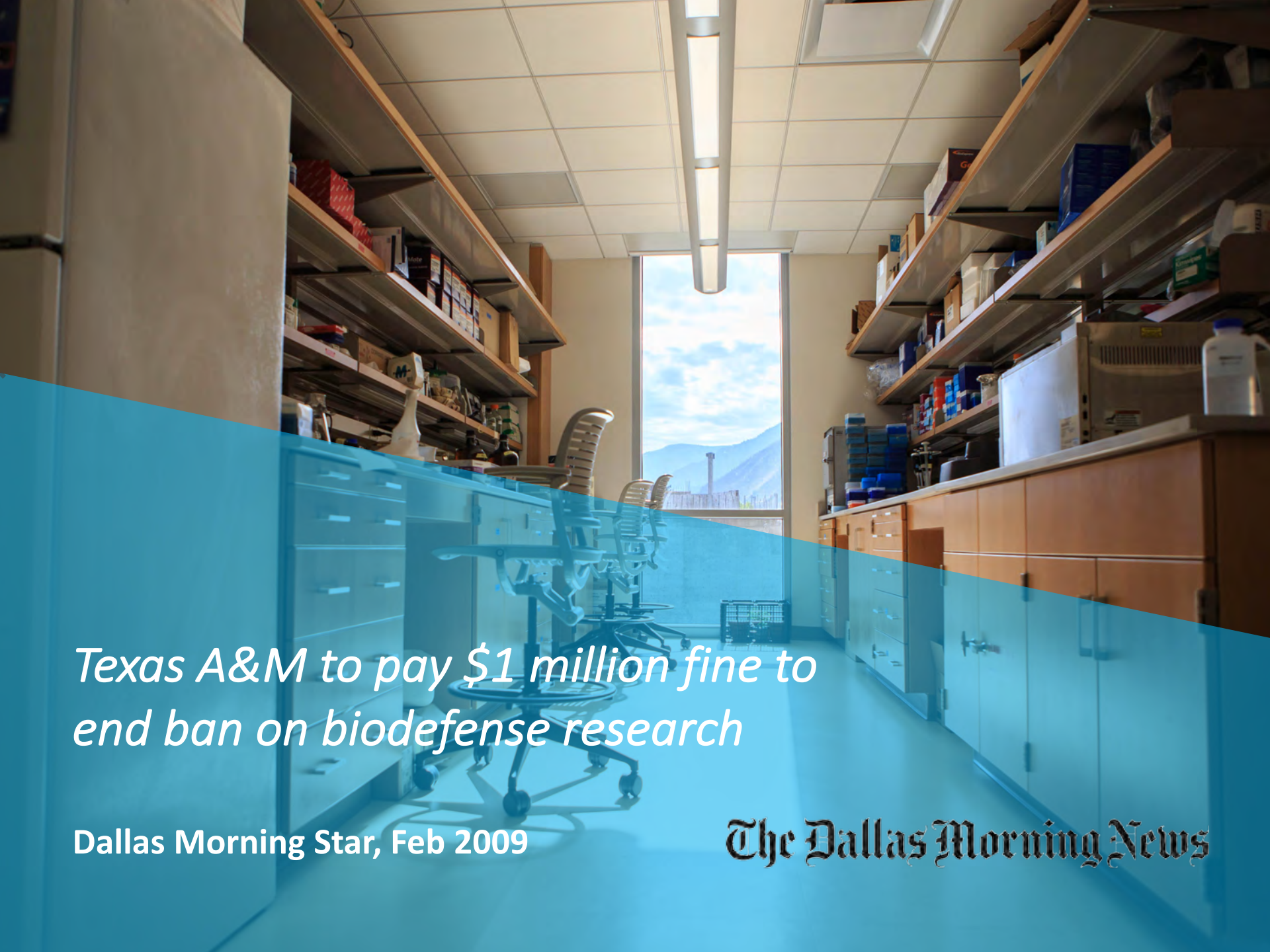
New York Times, Apr 2010

The New York Times

U. of C. researcher dies after exposure to plague bacteria

Chicago Tribune, Sept 2009

Chicago Tribune



Texas A&M to pay $1 million fine to end ban on biodefense research

Dallas Morning Star, Feb 2009

The Dallas Morning News

2008 UCLA Case

- Rewrote university expectations and concerns regarding campus safety
- Personal Accountability – case law
- 4 charges of criminal liability in staff member's death
- Plea Bargain arrived at after 4 years in criminal charges
- ~$5M paid out by university in defense costs
- Now --- civil charges ?

Task Force Members

Taylor Eighmy (Co-Chair)
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Mark McLellan (Co-chair)
Utah State University

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Oak Ridge National Laboratory

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Eastman Chemical Company

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Emory University

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Michigan Technological University

Lesley Rigg
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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

What We Did

Reached out to hear from 20 organizations and 25 institutions.

Synthesized 20 actionable recommendations from Nat'l Academies, ACS, CSB

Developed a national implementation strategy with recommendations and a tool box.

APLU Lab Safety Task Force

Call to action

We ask that college and university presidents publicize their commitment and expectations within their institutions.

Implementation Guide

20 recommendations for a safety culture drawn from top resources

Tools and resources for implementation (+ values, roles, responsibilities resources).

http://www.aplu.org/projects-and-initiatives/research-science-and-technology/task-force-laboratory-safety/index.html

or just google: ”APLU” & ”Lab Safety”

A Tool Box

Cultural adoption in unique to each institution. One size does not fit all.

Tools are expected to evolve.

Focus on cultural change rather than compliance.

Cliff Notes Version:

Recommendation Categories (1-10):

1. President Commits Publicly
2. President designates lead
3. Campus Dialog
4. Safety Policies & Procedures
5. Roles & Responsibilities
6. Safety Communications
7. Safe Culture Development
8. Risk/Hazard Assessment in University
9. Unified Administrative Reporting
10. Empower Student

Recommendation Categories (11-20):

11. EH&S relationship with Faculty
12. First Responders
13. Routine Hazard Analysis in Graduate Education
14. Near Misses
15. Training
16. Safety in Curricula
17. Self Assessment for progress
18. Continuous Improvement Feedback
19. System of Accountability
20. Partnership with outside organizations

Core recommendations for Graduate Deans: Hazard Analysis in Thesis & Dissertation

Recommendation 13. The institution implements routine hazard analyses and includes them as integral components of undergraduate and graduate education; thesis, dissertation, and funding proposals; and experimental design for all experiments.

Core recommendations for Graduate Deans: Enable Graduate Students to Report Near Misses

Recommendation 14. The institution implements a process to report incidents and near misses so that the campus community can learn from these incidents.

Core recommendations for Graduate Deans: Teach & Train!

Recommendation 15. The institution provides laboratory safety education and training for students, faculty, EH&S staff, and department heads.

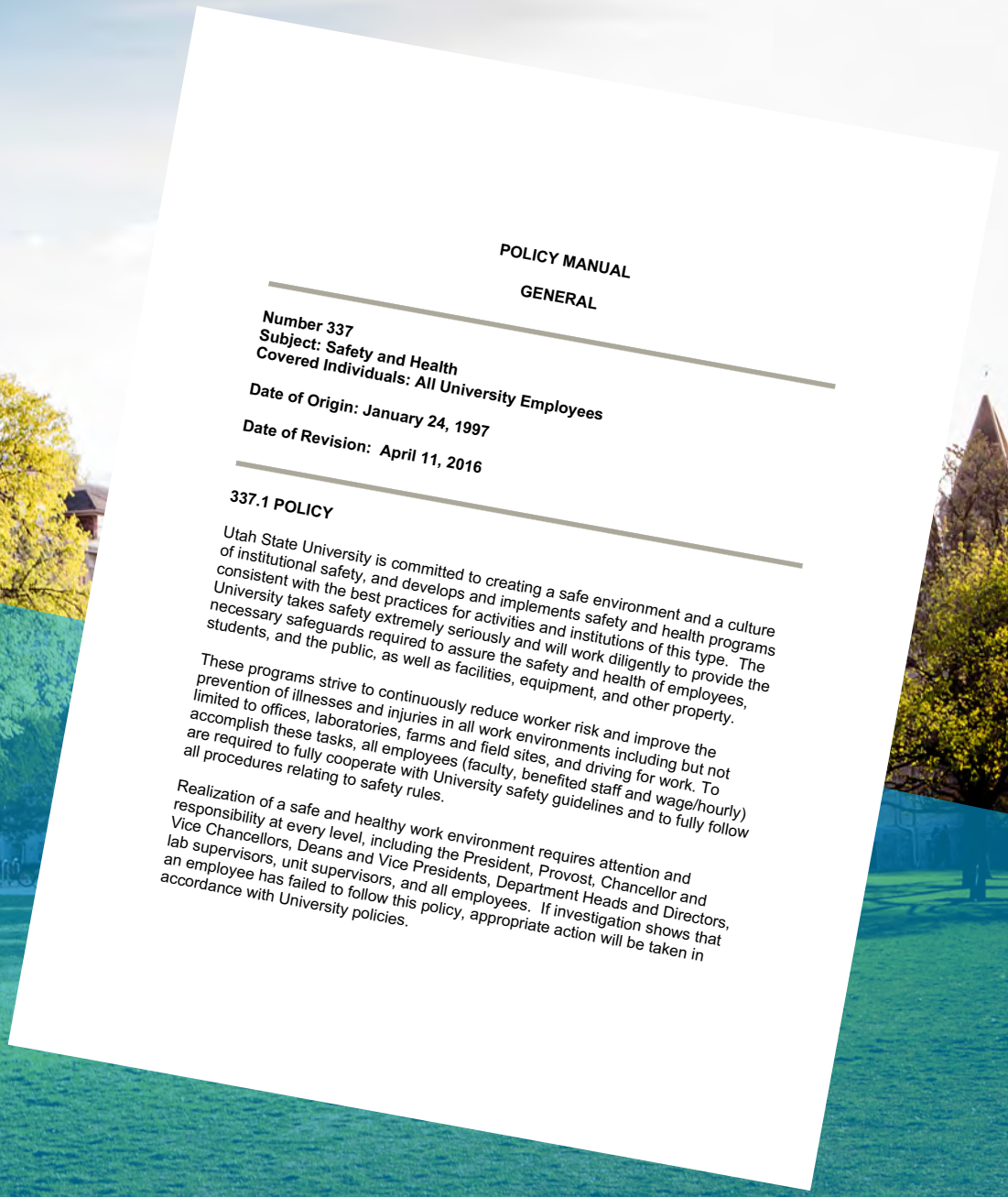
Core recommendations for Graduate Deans: Safety in to Curriculum

Recommendation 16. The institution ensures undergraduate and graduate science and engineering curricula include an emphasis on safe practices.

Suggested Core Institutional Values

- Safety is everyone's responsibility.
- Good science is safe science.
- Safety training and education is critical to research and education.
- Safety culture is necessary to implement true risk reduction.
- Diversity and flexibility of approaches and methods.

Utah State University's Approach



POLICY MANUAL

GENERAL

Number 337
Subject: Safety and Health
Covered Individuals: All University Employees

Date of Origin: January 24, 1997

Date of Revision: April 11, 2016

337.1 POLICY

Utah State University is committed to creating a safe environment and a culture of institutional safety, and develops and implements safety and health programs consistent with the best practices for activities and institutions of this type. The University takes safety extremely seriously and will work diligently to provide the necessary safeguards required to assure the safety and health of employees, students, and the public, as well as facilities, equipment, and other property.

These programs strive to continuously reduce worker risk and improve the prevention of illnesses and injuries in all work environments including but not limited to offices, laboratories, farms and field sites, and driving for work. To accomplish these tasks, all employees (faculty, benefited staff and wage/hourly) are required to fully cooperate with University safety guidelines and to fully follow all procedures relating to safety rules.

Realization of a safe and healthy work environment requires attention and responsibility at every level, including the President, Provost, Chancellor and Vice Chancellors, Deans and Vice Presidents, Department Heads and Directors, lab supervisors, unit supervisors, and all employees. If investigation shows that an employee has failed to follow this policy, appropriate action will be taken in accordance with University policies.

Utah State University's Approach

New Safety Policy

- New committee structure – reporting from base unit to institution
- New cease and desist authority
- New emphasis on personal accountability
- Faculty-conducted hazard assessments
- Safety training for students, employees and visitors

Utah State University's Approach

Department Head/Directors

- Works with dean/unit director and faculty, supervisors or foreman to identify and allocates resources as deemed appropriate and needed for implementation and maintenance of departmental safety programs.
- Ensures, within reason, that faculty and staff members understand and implement responsibilities as listed and assumes responsibility for work and laboratory space, including field sites, and safe operations.
- Identifies a Departmental Safety Representative.
- When applicable, establishes curricular goals for safety education of students.
- Ensures, within reason, that the development and implementation of safety practices, safety protocols, and safety rules for undergraduate and graduate teaching laboratories and work space, including field sites, as well as affiliated shops, storerooms, stockrooms, and corridors within their purview.
- Reviews EHS-documented safety training for faculty and staff to ensure, within reason, that it is complete and up to date.
- Ensures, within reason, that all safety practices, protocols, and safety rules are fully and regularly discussed by faculty and staff.
- Includes discussion of safety training and goals in regular annual reviews of faculty and staff.
- Works with EHS to respond to regular inspections of both teaching and research laboratories.
    - After receipt of the laboratory/work space inspection report meets with faculty members to discuss cited violations and to ensure, within reason, that timely actions to protect personnel and facilities and that the department remains in compliance with all applicable federal, state, university, local, and departmental codes and regulations.
- Ensures, within reason, that the health and safety of departmental personnel, authorized visitors (including student volunteers, visiting scholars, vendors, and contractors), and students any time there is a change in use of departmental space.
- Develops and maintains a list of Return to Work options within their department or unit with the assistance of faculty members, principal investigators, and supervisors as appropriate.

Personal Accountability

- President
- Faculty/Principal Investigators
- Provost, VPs, Chancellors
- Lab/Supervisor/Foreman
- Deans, Executive Directors
- Employees/Lab Workers
- Dept. Heads, Directors
- Students

Concerns

Deans/Dept. Heads	Cost and time overhead, field Res
Classified workers	Voice—making a difference
EHS	Manpower
PIs	SOP development/Hazard analysis
VPR	Multi-year effort to move culture

Socializing the Policy

- Many, many meetings and conversations
- College-by-college meetings
- One-on-one meetings with PIs
- Faculty Senate (committee) meetings
- Deans: New committee structures and flexibility

Utah State University's Approach

UtahState UNIVERSITY

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Thank you.

Organizations

APLU's Council on Research (CoR); Association of American Universities (AAU); American Chemical Society (ACS); Council On Governmental Relations (COGR); Council of Graduate Schools (CGS); National Academies of Sciences, Engineering, and Medicine (NASEM); U.S. Chemical Safety and Hazard Investigation Board (UCB); Oak Ridge National Lab; Eastman Chemical Co; Centers for Disease Control and Prevention (CDC); American Biological Safety Association (ABSA); Association for the Accreditation of Human Research Protection Programs (AAHRPP); Campus Safety, Health, and Environmental Management Association (CSHEMA); Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC); Federation of American Societies for Experimental Biology (FASEB); Federal Demonstration Partnership (FDP); University Risk Management and Insurance Association (URMIA); National Association of College and University Attorneys (NACUA); National Association of College and University Business Officers (NACUBO); National Postdoctoral Association (NPA); Council on Undergraduate Research (CUR); and Council of Colleges of Arts and Sciences (CCAS).

Institutions

Duke University, University of South Florida (FDP), University of Pittsburgh, University of California, University of Nebraska Lincoln, The University of Utah , The University of Texas Health Science, Auburn University , University of Notre Dame , University of Arizona , Texas A&M University System, University of Maryland , University of Tennessee, Knoxville , Utah State University , University of California Los Angeles, University of Arizona , University of Nevada, Reno, University of Illinois at Urbana-Champaign , Emory University , Michigan Technological University , University of Calgary , Harvard University , Cornell University, University of Minnesota Twin Cities, and Texas Tech University