



**Block 1
10:30–11 a.m.**

SUSTAINABILITY

Making the Case for Climate Action: A Practical Approach Using Energy Assessments

*Robert Neimeier, O'Brien & Gere
Grand Ballroom, Salon I-II*

Greenhouse gas regulation poses a fundamental challenge to the way that campuses use energy and resources. As regulatory agencies pursue strategies to reduce the impacts on climate change, some type of emissions cap appears to be inevitable. The implications to the bottom line operations of colleges and universities are huge. However, a mitigation plan, founded on objective, quantitative operating data, will help manage competing priorities for environmental compliance and financial performance. This applies to building operations, which utilize 80 percent of the nonmobile source energy supplies in the country. Case studies will be presented to help define this process.

ENVIRONMENTAL

EPA's Academic Laboratory Rule (Subpart K): Container Labeling and Notification

Note: This session does not end until 11:40 a.m. (after Block 2)

Jessica Young, U.S. Environmental Protection Agency

Kristin Fitzgerald, U.S. Environmental Protection Agency

Waterview Ballroom

This session will provide an opportunity to discuss how to convert existing hazardous waste labels to unwanted materials labels for Subpart K with minimal impact. In addition, this session will cover how to notify to opt into the new rule. The EPA has finalized the Academic Laboratory rule to help improve the environmental performance of teaching and research laboratories owned by eligible academic entities. This rule provides increased regulatory flexibility, while enhancing safe management of hazardous waste.

NANOTECHNOLOGY

Nanomaterials: The Good, the Bad, and the Ugly

Celeste Caskey, Wake Forest University School of Medicine

Christopher Kolbash, Wake Forest University School of Medicine

Grand Ballroom, Salon III-IV

Nanotechnology revolution is projected to be in full swing by 2015 and create more than \$1 trillion in global industry. Whether nanomaterials are used in a laboratory setting or industry, the understanding of what nanomaterials are, their uses, and the potential EHS hazards are essential to the profession. The session will present how one academic medical center approaches the use of nanomaterials in research. From forming committees, finding safety advocates, and educating staff to creating buy in, developing guidelines, and communicating the hazards, this is the good, bad, and ugly of safe nanomaterial.

TECHNOLOGY

New Age EHS Communications

*Todd Houts, University of Missouri
Dover Ballroom*

There are many tools available that utilize the internet to simplify the creation, delivery, and management of information. This presentation will provide an overview of Facebook, RSS feeds, podcasts, wikis, blogs, and Twitter, as well as possible applications of these products and tools for EHS communications.

**Block 2
11:10–11:40 a.m.**

NANOTECHNOLOGY

Emerging Issues in Nanomaterial Safety and Regulation

*Lawrence Gibbs, Stanford University
Grand Ballroom, Salon III-IV*

Nanomaterial research continues to grow in college and university labs. The properties of nanoparticles that yield many of the far-reaching societal benefits may also pose risks. The challenges are to determine whether the nature of engineered nanostructured materials and devices present new occupational safety and health risks. This presentation will provide an update on some of the more current issues involved with safety and regulation of research with nanomaterials at college and university research laboratories. The focus will be on identifying what is known, and unknown, about risks, review of exposure assessment techniques for small particles, and identification of resources for others in colleges and university EHS programs.

SUSTAINABILITY

Sustainability and Safety: Inclusive Decision Making on Energy-Saving Initiatives

Michael Hanna, University of Michigan—Ann Arbor

Grand Ballroom, Salon I-II

Although the University of Michigan has been proactive in energy management for more than 20 years, recent initiatives to significantly reduce the energy footprint of flagship research buildings and individual laboratories has led to concerns for both EHS professionals and those tasked with achieving those energy reduction goals. This session will explore the university's history of collaboration on decisions affecting indoor environmental quality and design of systems to manage hazardous research operations.

TECHNOLOGY

Top Ways to Use Social Media Tools for a More Productive EHS Department

Mike Benson, *Triumvirate Environmental*
Kevin Poulin, *Triumvirate Environmental*
Dover Ballroom

Many universities use social media tools to communicate better with the campus community. This presentation will help you gain insight in how to use tools like Twitter, LinkedIn, Ning, YouTube, and Wiki to improve campus and interdepartmental communication, promote sustainability, and increase productivity. Having this knowledge will not only help you grow in your professional career as an EHS manager, but also it will enable you to become better connected to your campus community.

Block 3
11:50 a.m.–12:20 p.m.

OTHER

Analysis and Discussion of the Hazards and Risks of Live Performance

Bill Reynolds, *Yale School of Drama/Yale Repertory Theatre*
Waterview Ballroom

Theater performance and training students in theater production present many hazards and risks not encountered in other academic pursuits. This session will review many common ones and discuss how these can be identified, managed, and/or mitigated as well as ideas for establishing and documenting safety and health training.

SUSTAINABILITY

The EHS and Sustainability Approach to Biodiesel Processing

Niamh Kelly, *Massachusetts Institute of Technology*

Grand Ballroom, Salon I–II

A Massachusetts Institute of Technology student group interested in alternative fuels started a club and secured funding to set up a biodiesel processor on campus. This venture raised several health and safety concerns as well as operational questions regarding production and use of the fuel. This presentation will describe the role of the EHS department with this student group and other departments within the institute, the lessons learned, time allotted to the project, and a progress report of the project four years later.

LABORATORY SAFETY

Make-Safe Considerations for VIP Visit to a Laboratory

William VanSchalkwyk, *Massachusetts Institute of Technology*

Grand Ballroom, Salon III–IV

If a VIP visits your lab, what should you do? Who needs to be involved? What safety aspects need to be managed? These issues and many more were managed in real time when President Barack Obama visited MIT laboratories in October 2009. This session will describe precautions taken to preclude an accident and to lower hazard potentials, considerations institutions should have when contemplating such a visit, the interruption caused by a high-profile visit, and the expectations of personnel operating labs to endure such a disruption.

ENVIRONMENTAL

Storm Water Management on Campuses

Andy Phelan, *University of Minnesota*
Dover Ballroom

The University of Minnesota–Twin Cities is comprised of an agricultural St. Paul Campus and a highly urbanized Minneapolis Campus. This session will examine the different ways to deal with storm water runoff based on the campus setting and how to inform the community about storm water management while doing so.

Block 4
1:45–2:15 p.m.

GENERAL SAFETY

Accident Investigations: Improving An Overlooked Element of Effective Safety Programs

Dennis Hof, *University of Texas System*
Grand Ballroom, Salon I–II

Thousands of accidents occur on campuses around the United States every year. Whether caused by the failure of equipment, environmental hazards, or unsafe behavior, accident investigations are an important and frequently overlooked element of any campus safety and health program. In this session, fundamentals of accident investigation will be reviewed, such as writing accident reports, establishing evidence gathering protocols, developing a chain of evidence, and finding professional resources.

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LABORATORY SAFETY

Chemical Safety Levels: An Idea Whose Time Has Come?

*Ralph Stuart, University of Vermont
Dover Ballroom*

Chemical safety levels are an approach to better understanding the hazards associated with laboratory use of hazardous chemicals and how they affect building operations, emergency planning, and training requirements. The presentation will discuss this concept, demonstrate a risk assessment tool for better understanding the appropriate chemical safety levels for a chemical operation, and describe potential uses of this information at the institutional level.

SMALL COLLEGES

Small College Priority Planning to Maximize Scarce Resources

Kent Clawson, Tennessee Technological University

Grand Ballroom, Salon III-IV

How institutions determine the level of EHS professionals that are required to provide adequate services is unique for each institution. Priority planning can assist in addressing these challenges as tasks and programs are assessed from a standpoint of personnel protection, institutional priorities, and regulatory mandates. Efforts to gain the financial and political support necessary to execute EHS functions requires that the professional be prepared to build a case beyond government mandates. This presentation will share experiences developing these priorities, building the business case, and developing systems to allow scarce resources to be maximized in a small college environment.

**Block 5
2:25–2:55 p.m.**

HAZARDOUS MATERIALS

Controlling Formaldehyde Exposures to Faculty and Staff during Medical Anatomy Dissection

*Frank Pokrywka, University of Pittsburgh
Dover Ballroom*

Evaporation of embalming fluids from cadavers can produce elevated formaldehyde levels in the breathing zone of students and instructors performing dissections. During the past seven years, the University of Pittsburgh EHS Department has performed extensive air monitoring during our medical anatomy course to evaluate engineering and work practice control effectiveness at reducing formaldehyde exposures. This presentation will examine the engineering and work practice controls implemented to achieve this goal.

SMALL COLLEGES

Development of an Environmental, Health, Safety, and Risk Management Quick Reference Guide

Sam McDaniel, The University of the Incarnate Word

Grand Ballroom, Salon III-IV

Due to current economic conditions and the increasing regulatory burden put on small colleges and universities, EHS and risk management offices are often run as one- or two-person departments. These offices are required to stay on top of regulatory compliance with limited personnel and budgets. Departments have the difficult challenge of finding not only the time to maintain required programs and perform necessary staff training, but also to conduct mandatory inspections with very little staff and/or funding. The goal of the quick reference guide for small and medium-sized colleges is to help minimally staffed departments stay up to date on the most pertinent rules and regulations affecting their colleges. This session will discuss the development of such a guide.

BIOSAFETY

The Institutional Review of Biological Research

Robert Hashimoto, University of California-Berkeley

Waterview Ballroom

In 2009, the National Institutes of Health proposed changes to the Guidelines for Use of Recombinant DNA Molecules. These changes were designed to update the guidelines with regard to the use of synthetic genomics and experiments that involve oligonucleotide sequencing. Other changes included but were not limited to changes in the size of the viral genome that would require institutional review and approval. This presentation is designed to discuss the proposed changes and the effects on an institution receiving National Institute of Health funding.

GENERAL SAFETY

Teaching International Students about Safety Before the Fire

*Todd Houts, University of Missouri
Grand Ballroom, Salon I-II*

As soon as international students arrive in the United States, there are a number of requirements that they must complete in order to attend school, including updating vaccinations, registering for classes, obtaining work permits, and procuring insurance. Because of this, there is not a lot of time to present other information during welcome orientations. This presentation discusses lessons learned from five years of working with international students to make them feel safe in their new home. Information will be presented on what these students know, what they want to know, and hints to making safety presentations to these students more effective.

Block 6
3:30–3:35 p.m.

GENERAL SAFETY

Managing Wildlife on Campus

Carin Peterson, University of Texas–Austin

Grand Ballroom, Salon I–II

Managing wildlife can be a challenge, and at some institutions, the responsibility falls on the EHS office. This session will describe the Animal Make Safe Program at the University of Texas–Austin, which started in 2002 as a response to increasing campus wildlife incidents. Today, the program handles approximately 200 incidents a year. The presentation will include a short video which follows EHS as it responds to wildlife incident calls.

HAZARDOUS MATERIALS

Mercury Exposures in University Herbarium Collections

Brent Webber, University of Kentucky

Dover Ballroom

Several universities retain herbarium collections, consisting of dried and treated plant specimens on backing paper. Mercuric chloride was formerly used in the preservation of specimens, though it is highly toxic and capable of sublimation. While widespread use of mercuric chloride for herbarium preservation in the United States ceased in the early 1960s, several older mercury-poisoned specimens still exist. This session will examine the findings at two large public universities that evaluated the presence of mercury in the air and on surfaces in the herbaria.

SMALL COLLEGES

Preparing a H1N1 Pandemic Plan and Implementing the Plan at a Small School

Kristine Rossmiller, Drake University

Grand Ballroom, Salon III–IV

This presentation will discuss the formation of Drake University’s H1N1 Pandemic Plan and the implementation the plan, including the selection of a planning committee, the planning assumptions, various scenarios, and the revisions. Further, this presentation will address the implementation of the various stages, what triggered the changes of stage, how Drake University tracked illness on campus, and the problems encountered.

BIOSAFETY

Shipping and Exporting Research Materials

Kevin Charbonneau, Yale University

Waterview Ballroom

Due to increased regulatory scrutiny in recent years, Yale University EHS has developed a Research Material Shipping and Export program. This program was developed to efficiently manage a variety of shipments from Yale. This enhanced program includes online request forms, a database for tracking information, online training programs, an export controls review process, and a fully trained EHS shipping team. This presentation will review the planning and implementation process as well as the pitfalls encountered along the way.

Block 7
3:45–4:15 p.m.

LABORATORY SAFETY

Review of Hydrogen Safety in the Research Laboratory

Markus Schaufele, Northwestern University

Dover Ballroom

The issue of selecting the proper hydrogen safety management methods in the research laboratory is sometimes a perplexing one. Architects, engineers, EHS professionals, and research laboratory users may have different perspectives on the applicability of safety controls. This session will look at literature and standard reviews of the best practice controls of hydrogen in research laboratories and clarify the basic safety hazards of hydrogen and metal hydrides and the currently available hydrogen sensor technology.

BIOSAFETY

Ultraviolet Bulbs and Biosafety Cabinets

Thomas Boyle, University of Medicine and

Dentistry New Jersey

Waterview Ballroom

The National Science Foundation, Center for Disease Control, and National Institute of Health state that the use of ultraviolet bulbs is not recommended or required. This session seeks to find how prevalent ultraviolet bulbs are in biological safety cabinets, whether the sash is integrated with the ultraviolet bulb, and how many ultraviolet bulbs meet the minimum irradiance in a biosafety cabinet.

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