



October 18, 2017  
Carson, CA  
The Carson Center

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2017 Joint Technical Symposium  
OC ASSE, LB ASSE  
SC AIHA, OC AIHA

**2017 Joint Technical Symposium**  
Wednesday, October 18, 2017  
The Carson Center, Carson, CA

## Speaker Bios & Session Overviews

**12:15 PM - 1:15 PM - Lunch Keynote Speaker**

**John Howard, MD, JD**

**The Future of Occupational Health and Safety in the 21st Century**

Dr. Howard will discuss the role of industry transformation and new technology on job loss, the role that nanomaterials and other advanced materials will have on advanced manufacturing, and the effects that sensor technology and data science may have on the practice of health and safety.



**John Howard** is the Director of the National Institute for Occupational Safety and Health and the Administrator of the World Trade Center Health Program in the U.S. Department of Health and Human Services.

Dr. Howard was first appointed NIOSH Director in 2002 during the George W. Bush Administration and served in that position until 2008.

In 2009, Dr. Howard worked as a consultant with the US-Afghanistan Health Initiative. In September of 2009, Dr. Howard was again appointed NIOSH Director and was reappointed in 2015.

Prior to his appointments as NIOSH Director and WTC Health Program Administrator, Dr. Howard served as Chief of the Division of Occupational Safety and Health in the State of California's Labor and Workforce Development Agency from 1991 through 2002.

Dr. Howard earned a Doctor of Medicine from Loyola University of Chicago; a Master of Public Health from the Harvard University School of Public Health; a Doctor of Law from the University of California at Los Angeles; and a Master of Law in Administrative Law and Economic Regulation, and a Master of Business Administration in Healthcare Management, both degrees from The George Washington University in Washington, D.C.

Dr. Howard is board-certified in internal medicine and occupational medicine. He is admitted to the practice of medicine and law in the State of California and in the District of Columbia, and he is a member U.S. Supreme Court bar. He has written numerous articles on occupational health, policy and law.

## **8:00 AM – 9:00 AM - Opening Keynote Speaker**

**Joe Tantarelli**

### **Buried Alive: A Survivor's Story**

Joe will explore how human error contributed to making serious mistakes that almost led him to die on the job. Buried Alive: A Survivor's Story will also look at the physical and emotional effects that incidents like this have not only on the person injured, but also on family, friends, co-workers and a company's safety culture. And by the end of the sessions, attendees will learn strategies to help workers avoid these types of incidents in the future.

#### Learning Objectives:

1. Attendees will understand how complacency and other states can lead to making errors with very serious consequences
2. Understand the consequences of a serious safety incident on family, friends, coworkers, etc.
3. Joe will provide simple safety skills attendees can use to avoid future injuries.



#### **Joe Tantarelli**

Joe has a down-to-earth training style that is a direct result of his 40 years of experience in heavy equipment construction where he went from laborer to operator to manager. Joe was a training specialist for over eight years at Trucco Construction, which provided a natural transition for him to become a speaker and implementation specialist for the past nine years.

Joe has assisted company safety directors with management and employee training in preparation for receiving Star Approval in OSHA's Voluntary Protection Program. He has been a popular speaker at the Ohio B.W.C Safety Expo, Eastern Kentucky University, Army Corps of Engineers Construction Roundtable, Kentucky Governor's Safety and Health Conference, Kentucky League of Cities Insurance Services Safety Day, numerous safety council safety expos and many safety day events for companies throughout Ohio and Kentucky.

Joe shares his compelling story of surviving a near-fatal trench collapse accident and how knowing the SafeStart concepts beforehand would have helped him to prevent this life threatening accident. Joe's commitment to family helps season his training sessions with a deep-rooted and sincere concern for the safety of session attendees, families and friends. Session attendees respond well to Joe's presentations because he is relevant on a number of levels.

**Breakout Session #1A - 9:15 AM - 10:15 AM**  
**Imke Schroeder**  
**Data Based Approach to Improving Research Safety**

Learning Objectives:

1. Analyze incident data collections and identify limitations
2. Examine lab-related accidents with respect to type, rate, and department
3. Examine incidents in select departments and devise intervention measures

The UC Center for Laboratory Safety (UCCLS) was established in March 2011 as part of a multifaceted response to a tragic accident at UCLA in 2008 which led to the death of a researcher. While implementing changes to UCLA's research laboratory safety it became clear that little to no peer-reviewed published data existed to evaluate safety measures objectively. Currently, research on accident rates and laboratory safety in academic institutions is scarce. As a consequence, the effectiveness of safety policies as a basis for improving safety is unclear. UCCLS aims to fill this gap by conducting and promoting research on laboratory safety. This presentation will provide an overview over UCCLS's incident analysis at a large university. A targeted, a data-driven intervention program in the housing department will be compared with non-data-driven approach in the animal medicine department.



**Dr. Imke Schroeder** is a research project manager at the University of California Center for Laboratory Safety since November 2012. She is also an Adjunct Associate Professor in the Department of Microbiology, Immunology and Molecular Genetics at UCLA since 2001. Imke received her Ph.D. in Microbiology from the University of Marburg, Germany, and performed her postdoctoral training at UCLA. After a year as senior researcher at the Veterans Administration Medical

Center in San Francisco, she joined the Microbiology Department at UCLA, where she investigated the energy metabolism of various bacteria and extremely thermophilic archaea. Furthermore, she examined how energy metabolism and virulence determinants are regulated in pathogens including a select agent.

Imke's current academic activities include research on laboratory safety, safety culture in academic institutions, accident investigation and analysis, identification of leading factors for accidents and unsafe behaviors, and laboratory safety training. Furthermore, she manages subject matter experts for safety training and co-organizes workshops on laboratory safety. Imke's 2016 projects include the organization of the 2016 Workshop Safety by Design at the NIH campus in Bethesda, ML, the investigation of a hydrogen/oxygen explosion at the University of Hawaii, and a safety culture survey at 5 universities of the University of California system.

**Breakout Session #1B - 9:15 AM - 10:15 AM**  
**Kent Hatcher**  
**Ergonomics for the Office of Tomorrow**

Learning Objectives:

1. Learn the basic principles of managing and implementing an office ergonomics process
2. Understand ways to effectively leverage technology to optimize efficiency and effectiveness
3. Recognize the value of implementing various training methods, i.e. e-learning vs. instructor-led
4. Understand current trends in office design

The way in which people work has changed dramatically in just a few short years. To keep up with a more global economy, technology has exploded which has enabled many employees to work everywhere. Mobile workers and telecommuters occupy coffee shops, airports, and hotel lobbies, which has left the traditional office cubicle empty. These changes in how work is performed has leading organizations reinventing their work practices and workspaces to better fit the needs of their people. This presentation will explain how the office of today must become the office of tomorrow.



**Kent Hatcher**, Director of Consulting and Ergonomics Engineer for Humantech, leads a team of ergonomists to develop, manage, and sustain global ergonomics programs using software solutions for Fortune 1000 clients across a broad spectrum of industries, including food and beverage, machinery, health care, and consumer goods. Recent client engagements include Amgen, Mercury Marine, Bristol-Myers Squibb, E & J Gallo Winery, Jack Link's, Weber Grills, and The Toro Company.

Kent received his Bachelor of Science in Kinesiology from the University of Waterloo, Waterloo, Ontario, and a Master of Science in Ergonomics from Loughborough University, Loughborough, U.K. He has achieved recognition as a Certified Professional Ergonomist (CPE).

## **Breakout Session #1C - 9:15 AM - 10:15 AM**

**Yi Tian**

### **Conducting Human Health Risk Assessments as Required by the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588)**

Learning Objectives:

- 1) Provide an overview of the AB 2588 program requirements;
- 2) Comprehend key steps in conducting an AB 2588 health risk assessment;
- 3) Summarize key changes in OEHHA's 2015 revised guidance and its implications.

This presentation will first provide an overview of the AB 2588 program; followed by discussions on how to conduct an AB 2588 health risk assessment in the South Coast Air Basin using project examples. Finally, the presenter will summarize the key changes in OEHHA's 2015 revised Hot Spots Guidance and the implications.



**Yi Tian** has 28 years of consulting experience in occupational and community exposure evaluation, human health risk assessment, indoor air quality investigation, and EHS regulatory compliance. She has been with Ramboll Environ (formerly ENVIRON International Corporation) for almost 20 years. Her projects at Ramboll Environ include air sampling and monitoring; dispersion modelling; evaluation of exposures to chemical, physical, biological and radiological agents; health risk assessments and risk communication; investigation of causes for occupant complaints in buildings (VOCs, mold and other environmental factors); product related exposure and risk assessment as well as regulatory compliance; OSHA compliance audit and program development; and health and safety issues for hazardous waste and construction sites. Yi has helped clients in the manufacturing, utility, real estate and municipal sectors to comply with EHS regulations; address and respond to stakeholder concerns; and meet litigation and due diligence challenges.

## **Breakout Session #1D - 9:15 AM - 10:15 AM**

**Sam McDermott**

### **Emergency Management: How to Organize, Evaluate and Protection Information with a Rapid Response Protocol**

Learning Objectives:

1. Develop a protocol in the event of an emergency.
2. Assess the situation quickly, completely and accurately.
3. Procure information in a manner that best ensures its protection
4. Utilize the information procured to properly evaluate the incident, its cause, potential future risks, and means in which to protect against further events in the future.

In the event of an emergency, it is critical to respond quickly and appropriately. However, it is also critical to develop as much information as possible. How did the event occur? Who was responsible for it? What must be done to prevent the incident from happening again? It is common industry practice to procure this information, but is it organized? Is it protected in the event of litigation? This presentation is intended to answer those questions and provide recommendations to further enhance and develop your emergency management protocols.



**Sam McDermott** is the managing partner of Wood, Smith Henning & Berman's Orange County office. A highly experienced litigator, Sam handles some of the most complex and challenging matters within the firm. A skilled orator and widely sought speaker, Sam's practice spans across a wide array of construction, tort and environmental issues. Sam's construction practice alone reaches across several different disciplines, including construction payment disputes, design-build construction, schedule impact damages, onsite injuries, workplace regulations, prevailing wage claims, professional liability, construction quality and defect issues. Sam has been with the firm since its inception, and has overseen the Orange County office's growth since it opened in 1998. Sam is highly involved in industry and community organizations, including the Claims and Litigation Management Alliance (CLM) and the Public Law Center. Sam is married with twin boys. He and his family are heavily involved in their Christian faith, their church, their sporting activities, and outdoor recreational activities.

**Breakout Session #1E - 9:15 AM - 10:15 AM**  
**Tina Stanczewski, JD**  
**Environmental Law - Past, Present, Future**

Learning Objectives:

1. What changes have occurred to the existing environmental laws and regulations in the past year?
2. What is the status of court cases impacting environmental law?
3. What changes to environmental law will we see over the next year?

This presentation will discuss any legal changes to environmental laws over the past year, the current path of EPA regulations, and what changes may occur during 2018. Important legal cases, trends, and the regulatory agenda for the EPA will be discussed along with the possible impact to business and workers. A summary of key enforcement initiatives along with the future of the Clean Power Plan, WOTUS, and TSCA will be among the topics covered.



**Tina Stanczewski, Esq., MSP**, is an attorney and safety professional focusing her practice on labor and employment law including occupational safety and health, mine safety and health, and environmental law. She has represented employers and contractors nationwide in OSHA, MSHA, EPA, and local Maryland administrative law matters for the past nine years.

**Breakout Session #2A - 10:45 AM - 11:45 AM**  
**Shane Que Hee, PhD**  
**New Developments in Biomonitoring: Real Time Sampling**

Learning Objectives:

1. Identify when to do biomonitoring
2. Identify when to use direct reading devices for biomonitoring purposes
3. Evaluate direct reading device results in light of selectivity and sensitivity restrictions
4. Apply knowledge obtained when communicating with other occupational health professionals

The major hurdles to the use of biomonitoring are expense, time to obtain results, confidentiality concerns, and lack of direct reading devices. The state of the art of direct reading devices that also addresses expense and reporting time factors, will be presented. The sensitivity and selectivity of the devices will be considered.



**Shane Que Hee** obtained his BSc (1968) and MSc (1971) in Physical Chemistry/Biochemistry at the University of Queensland, his PhD (1976) at the University of Saskatchewan in the environmental analysis of the phenoxy herbicides, and had postdoctoral experience at McMaster University (1976-78) in liquid crystals research. He was Assistant and Associate Professor in Environmental Health at the University of Cincinnati 1978-89, and Associate Professor and Professor of Environmental Health Sciences at the UCLA School of Public Health 1989+. He has published over 230 peer-reviewed publications (132 peer-reviewed journal articles), mostly in the fields of industrial hygiene chemistry, air sampling method development, direct reading instruments, biological monitoring, analytical chemistry, and bioassay-directed chemical analysis. He has published four books, two on biological monitoring, one on the Phenoxy herbicides, and the other on hazardous wastes. He has been Director of the UCLA Industrial Hygiene Program since 2009, and has headed the UCLA ICP-MS Facility since 2005. He is a member and past Chair of the Biological Monitoring Committee of the American Industrial Hygiene Association of which he is also a Fellow. His current research focuses on developing sampling and analysis methods for chemicals, biological monitoring, glove permeation, and skin exposure risk assessment. He has obtained four R01 grants from NIOSH/CDCP, a Shared Instrumentation Grant from NIEHS, and grants from ASPH.

**Breakout Session #2B - 10:45 AM - 11:45 AM**  
**Mauricio Paz and David Vuong**  
**Safety Culture Index –**  
**How Data Can Improve the Health of Your Safety Culture**

Learning Objectives:

1. Using the Safety Culture Index in your organization to measure your program trends
2. Examine how to determine your Safety Culture Index
3. Applying the Safety Culture Index to promote a better safety culture
4. Examine how leading indicators provide a way to measure culture
5. Identify the right leading indicators for your business

Many safety leading indicators fall short of helping your account for areas of risk within your organization. The best leading indicator of the health of your safety program and predictor of safety risk, is safety culture. Since measuring safety culture is an intricaded matter, we will discuss during this presentation an approach to measure safety culture, through the Safety Culture Index (SCI). This presentation will elaborate on how we identify the aspects that measure the SCI in your organization as well as to help the safety professional to understand, interpret, and influence SCI trends.



**Mauri Paz, PE, CSP** is Medgate's Environmental and Safety Product Manager. With over 14 years of experience in the field of EHS and EMIS program design and implementation management, Mr. Paz has developed and implemented EMS systems, consulted for Fortune 1000 companies in matters of EHS, and implemented over 6 different EMIS platforms for several Fortune 1000 clients. He possesses a master's degree in Chemical Engineering from UCI, holds a Professional Engineer license in the State of California, a Project Management Professional certification from PMI, and is a Certified Energy Manager. Before joining Medgate, Mr. Paz held an EHS Manager position at a chemical plant where he helped obtain the Cal-VPP certification status for the site.



**David Vuong** is Medgate's Analytics Product Manager. David brings with him nearly a decade of experience in the enterprise business intelligence space where he worked with large telecommunications companies, retail manufacturers, and government bodies to implement BI systems. A graduate of Queen's University's Master of Science in Management, David is also passionate about bringing quantitative, data-driven practices to organizations everywhere. Today, David is focused on bringing the best aspects of multi-million dollar BI implementations to the BI suite at Medgate.

## Breakout Session #2C - 10:45 AM - 11:45 AM

**James Kapin**

**How Clean is Clean?**

**The Challenge of Evaluating Removable Indoor Contamination**

Learning Objectives:

1. Describe the facility decontamination process, from initial evaluation through development of a clean-up plan to preparation of a closure report.
2. Establish clean-up levels and prepare a work plan that addresses different regulatory and professional approaches
3. Develop an appropriate sampling strategy, evaluate decontamination activities using surface wipe samples and prepare a report documenting results.

EH&S professionals are frequently asked to measure indoor surface contamination in order to evaluate the potential for worker exposure, to verify the effectiveness of control measures or to determine whether a structure is “clean” after use of hazardous materials has been discontinued. Unfortunately, there is little regulatory guidance to determine how clean is clean.

- OSHA regulations (where applicable) require areas to be “as free as practicable” of removable contamination, without providing a definition of that term.
- Environmental regulations have been established for soil and other media, but those standards do not apply to indoor areas.
- Other commonly used approaches, including HUD levels for lead and DOE beryllium standards are limited in scope and difficult to apply to other contaminants.

This presentation will discuss several commonly used approaches for evaluating indoor contamination, will evaluate their strengths and weaknesses and will provide EH&S professionals with the tools to select a method of evaluation that is appropriate for their project or situation.



**James Kapin** is the Manager of EM Services for ACT Environmental, based in San Diego, California. He has over 25 years of experience providing health, safety and environmental consulting and regulatory compliance services. His specialties include exposure assessment, EH&S program management, mold and indoor air quality, hazardous materials spill response as well as OSHA and environmental compliance. Mr. Kapin is a Certified Industrial Hygienist and earned a Masters of Public Health degree with an emphasis in Occupational Health from SDSU.

## **Breakout Session #2D - 10:45 AM - 11:45 AM**

**Najm Meshkati, PhD**

### **Human Factors and Safety Culture in Process Safety Management (PSM)**

#### Learning Objectives:

1. Identifying major human factors and safety culture considerations in PSM
2. Examining the 3 new HF+SC related elements in the revised Cal OSHA PSM standard (General Industrial Safety Order 5189.1)
3. Examining instrumental roles HF+SC in the BP Texas City Refinery (2005) and Chevron Richmond Refinery (2012) accidents
4. Recommending strategies as how to address HF and SC in organizations.

Major catastrophes are caused by a multitude of factors that can compromise barriers to the loss of control or breach defenses for safe functioning of intended systems. Based on our last 30-years research on the safety and reliability of complex, large-scale technological systems (i.e., nuclear power and chemical plants, refineries, gas and liquid fuels processing facilities) catastrophic systems' failures and technological accidents typically start with equipment malfunction, process breakdowns, or operator error. But, they are further aggravated by a series of factors that are related to poor initial design, inadequate training, and lack of proper management oversight and inadequate or weak safety culture. The safety culture goes beyond specific rules and rote adherence to standard operating procedures in any organization. Creating healthy safety culture means instilling attitudes and practices in individuals and organizations that ensure safety concerns are proactively addressed and treated as high priority. An organization fostering strong safety culture encourages employees to cultivate a questioning attitude, a prudent approach to all aspects of their jobs, and creates open communication between employees and management.



**Dr. Najmedin Meshkati** is a (tenured, full) Professor of Civil/Environmental Engineering; Industrial & Systems Engineering; and International Relations at the University of Southern California (USC). He was a Jefferson Science Fellow and a Senior Science and Engineering Advisor, Office of Science and Technology Adviser to the Secretary of State, US State Department, Washington, DC (2009-2010). He is a Commissioner of The Joint Commission (2016-; a not-for-profit organization that

accredits and certifies nearly 21,000 healthcare organizations and programs in the United States and operates in 92 countries around the world, <http://www.jointcommission.org/>) and is on the Board of Directors of the Center for Transforming Healthcare.

For the past 30 years, he has been teaching and conducting research on risk reduction and reliability enhancement of complex technological systems, including nuclear power, aviation, petrochemical and transportation industries. He has been selected by the US National Academy of Sciences (NAS), National Academy of Engineering (NAE) and National Research Council (NRC) for his interdisciplinary expertise concerning human performance and safety culture to serve as member and technical advisor on two national panels in the United States investigating two major recent accidents: The NAS/NRC Committee "Lessons Learned from the Fukushima Nuclear Accident for Improving Safety and Security of U.S. Nuclear Plants" (2012-2014); and the NAE/NRC "Committee on the Analysis of Causes of the Deepwater Horizon Explosion, Fire, and Oil Spill to Identify Measures to Prevent Similar Accidents in the Future" (2010-2011).

**Breakout Session #2E - 10:45 AM - 11:45 AM**  
**Kent Hatcher**  
**5 Mistakes Companies Make with Ergonomics**

Learning Objectives:

1. Identify the critical elements of your site or company ergonomic improvement process
2. Establish a proactive leading goal for your ergonomics program
3. Select appropriate metrics that will drive your organization toward the goal
4. Determine the resources and support infrastructure appropriate for your ergonomics program

The long-term success of a company's ergonomics program is dependent upon a strong foundation established by leadership. Too often, ergonomics programs fail due to lack of a systems approach or appropriate strategy when the business climate and direction change, or when key leaders change. Failure to demonstrate effective results and ROI from the ergonomics program can lead to loss of credibility and trust by employees and management, and wasted resources.

Through a series of benchmarking studies, we have identified both the barriers to and the opportunities for successfully managing an ergonomics program and demonstrating its value. This presentation examines the five most common mistakes that can derail your ergonomics program management efforts, and shares some key elements of successful programs.



**Kent Hatcher**, Director of Consulting and Ergonomics Engineer for Humantech, leads a team of ergonomists to develop, manage, and sustain global ergonomics programs using software solutions for Fortune 1000 clients across a broad spectrum of industries, including food and beverage, machinery, health care, and consumer goods. Recent client engagements include Amgen, Mercury Marine, Bristol-Myers Squibb, E & J Gallo Winery, Jack Link's, Weber Grills, and The Toro Company.

Kent received his Bachelor of Science in Kinesiology from the University of Waterloo, Waterloo, Ontario, and a Master of Science in Ergonomics from Loughborough University, Loughborough, U.K. He has achieved recognition as a Certified Professional Ergonomist (CPE).

**Breakout Session #3A - 1:30 PM - 2:30 PM**  
**Paul Papanek**  
**Cal/OSHA Update (Enforcement) –**  
**New OSHA Standards for Silica Exposure**

Learning Objectives:

1. Attendees will be able to identify Table 1 of the standard as the key for silica regulation in construction
2. Attendees will be able to name at least three new requirements for employers covered under the OSHA silica standards
3. Attendees will be able to identify and locate Appendices A and B of the silica standards as sources of information about the medical surveillance requirements

OSHA's new standard for occupational exposure to crystalline silica in the construction trades is slated to take effect in California on September 17, 2017. This talk will provide an overview the new silica standards, including a discussion of how the new standard improves on the old PEL for silica, a background on silica-caused diseases, and a description of the new standard, with a focus on its medical surveillance requirements.



**Dr. Paul Papanek** is a life-long resident of California. He was Board Certified in Family Medicine, and later in Occupational Medicine. He has served as a Public Health Officer with Los Angeles County, as the Chief of the Department of Occupational Medicine at two Kaiser Hospitals in Southern California, and most recently as Public Health Officer with the Cal/OSHA Medical Unit. He has served on the Board of Directors of the Western Occupational and Environmental Medical Association and the American College of Occupational and Environmental Medicine.

## **Breakout Session #3B - 1:30 PM - 2:30 PM**

**Christopher Curtis, JD**

### **OSHA Incident Circumstances – Application of Criminal Charges and Penalties**

#### Learning Objectives:

1. Identify common circumstances surrounding OSHA fatalities/serious injuries.
2. Understand the decision making process surrounding the filing of OSHA criminal charges from a prosecutor's perspective.
3. Learn safety/compliance steps that can be taken that may constitute an affirmative defense if an OSHA investigation is initiated.

The presentation will give an overview of Potential Criminal Charges and Penalties that may arise out of a Workplace Death or Injury. It will cover elements of two potential felony charges that can be filed: (1) Labor Code Section 6425, Willful Violations of Safety Standards that result in death, as well as (2) Penal Code Section 192(a), Involuntary Manslaughter. Some of the questions and issues that will be addressed in the presentation will be "Can independent supervisors, managers, or officers be charged with a crime?" and "How to Establish an Independent Employee Act Defense?". The presentation will also delve into many of the elements that are analyzed in determining when supervisors, managers, safety officials, and employers will actually be charged with a crime. There will also be a recent case study integrated into the presentation itself.



**Christopher Curtis** is a senior Deputy District Attorney with the Los Angeles County District Attorney's Office. He is currently assigned to the DA Office's Environmental Crimes/OSHA Unit, where he investigates and prosecutes felonies, misdemeanors, and civil law enforcement actions against corporations and individuals. He is responsible for prosecuting OSHA death cases and Labor Code violations, and has won high-profile convictions against multi-billion dollar corporations as well as individuals, including safety managers, business owners and construction forepersons. He was co-lead counsel on the District Attorney's prosecution of Bumble

Bee Foods, a case where the corporation, the company's previous safety manager and the general manager were all charged with felonies related to a worker's workplace death in Sante Fe Springs in 2012. The case resulted in a \$6 million dollar fine, penalty, and restitution judgment against the corporation as well as convictions on the individuals, which represented the first of a safety manager in California history.

During his eleven years with the District Attorney's Office, Chris has prosecuted over 50 jury trials all around the county, including a \$25 million dollar civil judgement in San Francisco Superior Court against Uber and a \$4 million dollar settlement against Southern California Gas Company for the gas leak at its Aliso Canyon facility. Prior to his eleven years with the District Attorney's Office, Chris worked in private practice working in complex business litigation. He graduated with a B.A. degree from Duke University and received his law degree from Georgetown University Law School. He served as a law clerk and intern for DreamWorks SKG, a large New York international law firm, and the National Association of Securities Dealers (NASD). He is a Los Angeles native.

## **Breakout Session #3C - 1:30 PM - 2:30 PM**

**Ben Stapleton, MBA**

### **Clean Technology and its Overlap with Corporate EHS**

#### Learning Objectives:

1. Introduce LACI and clean technology initiative
2. Relate DOE funded SoCalEdge Program and Cluster Initiative at LACI to corporate EHS practice.
3. Integrate clean technology to environmental health and safety profession.

Starting with an introduction to Los Angeles Cleantech Incubator, Ben will explain how green technologies fit well with corporate EHS. He will talk about various program platforms that exist here in LA, through which every company can engage in the cleantech sector and reach their environmental targets.



**Ben Stapleton, MBA** is a true believer in the triple bottom line of people, planet, and profit. Ben is also an LA native—often a rare thing these days—and brings a creative mind and a consultative approach to real estate advisory, with a focus on facilities operations, financial modeling, and site assessment with experience across a wide range of companies and real estate investors.

In 2008, Ben founded Jones Lang LaSalle's global Cleantech Practice Group, which focused on representing renewable energy and clean technology companies in addressing their real estate needs. This only fueled his passion to explore the nexus of energy and real estate, coming to the belief that increasing the energy efficiency of our buildings is one of the most powerful tools to create a truly sustainable society.

## **Breakout Session #3D - 1:30 PM - 2:30 PM**

**Renard Arsanault**

### **The Difference Between Life & Death - Creating an Effective Workplace Emergency Medical Response Program**

Learning Objectives:

1. The common barriers to establishing and maintaining a practical, effective emergency response plan.
2. Emergency response organizational structures/models that have been successfully implemented.
3. Discuss trends in emergency response system technology and the benefits.

Safety Professionals face significant challenges when creating internal emergency response plans. The speaker is well aware of potential obstacles and will discuss research, successes, and lessons learned while developing emergency response systems for national and global clients. This presentation will cover the design and implementation of behavioral-based emergency response programs with the focus on successfully incorporating them into the corporate safety culture.

Emergency University successfully implements population-specific training programs at corporate and governmental agencies. Each group is oriented to their specific roles and provided with the necessary training and tools to meet their responsibilities. To fill the gaps, new technologies were studied, developed and implemented to ensure that emergency equipment was properly maintained, easy to locate and that an immediate response from trained personnel could be predictably provided.

Incorporating an effective Emergency Response program into your organization's safety culture saves lives.



**Renard Arsanault** has dedicated over 26 years to his work in Emergency Medical Services field operations and management in both the public and private sectors. During his tenure, he was very involved with the education and training of both lay and professional rescuers. Renard's work now focuses on researching and developing "results oriented medical response programs" for corporate and government agencies with the ultimate goal of improving survival rates.

## **Breakout Session #3E - 1:30 PM - 2:30 PM**

**David Casavant**

### **Making Your OH&S Training Come to Life (and Change Behaviors)**

Learning Objectives:

1. Effectively use the “Think, Pair, Share” technique to get your audience motivated
2. Identify creative uses of technology to add fun and interaction into your training
3. Produce “learning-centric” PowerPoints that won’t bore your audience

In a recent survey of those who provide technical training, we found that the #1 problem was “How to make the training interesting”. In fact, four of the top five issues for trainers involved not technical issues, but how to be a better, more polished speaker (and without getting so nervous).

If you’re interested in becoming a better trainer - this presentation was designed for you! Whether a new trainer or a seasoned veteran, you’ll find this training presentation helpful. We share cutting edge ideas that will help you easily explain difficult ideas and help you get your message across to your audience.

Here’s a sampling of what we’ll cover:

- How to use Participatory Based Training (PTE) to make an impact
- Simply technology that is fun for the audience and makes your job easier.
- Using stories and current events to bring your training to life
- The concept of “Feel, Felt, Found” and how it can change attitudes
- Bring Your PowerPoint’s to Life (But don’t rely on them)
- How to have fun (you and the audience) when training those difficult subjects

So, if you want to be more comfortable as a trainer, really reach your audience and change their behaviors, this presentation is for you!



**David Casavant** is the Executive Director at the Sustainable Workplace Alliance, a non-profit adult training organization. He is a member of the Central Florida ASSE Chapter in Orlando.

In the last 15 years David has personally trained over 10,000 professionals in such difficult topics as OSHA & DOT regulatory compliance. David is an Authorized OSHA Trainer in both Construction and General Industry programs. He is a regular presenter and keynote speaker at dozens of industry conferences and trade shows, including dozens of ASSE Chapters and PDC's across the U.S.

You’ll read his articles in your favorite trade magazines and he was awarded the Distinguished Author designation for his book Emergency Preparedness – A Guide to Safety Planning & Business Continuity.

David’s latest book, *Surviving the OSHA Audit - Common Sense Solutions to Your Most Feared OSHA Compliance Issues* was released in June 2017 and is helping organizations achieve compliance while better protecting the organizations most valuable asset - its employees.

**Breakout Session #4A - 3:00 PM - 4:00 PM**  
**Neal Langerman, PhD**  
**Reactive Chemistry Incidents: Lessons to be Learned**

Learning Objectives:

1. Recognize the “reactive chemistry” hazard
2. Identify the failures leading to reactive chemistry incidents
3. Examine the similarities of incidents across process scale
4. Develop an ability to examine your own workplace for reactivity hazards

Reactive chemistry is a hazard analogous to flammability, corrosivity, and toxicity. The significant difference is the latter all apply to specific chemicals, while the former requires a combination of chemicals (a reaction). The hazard, and the risks associated with various processes will be presented by examining a series of incidents from lab-scale to full production scale. The incidents will include:

- Lab-Scale - UCLA pyrophoric chemical release and resulting employee fatality  
Texas Tech explosion and resulting severe injuries to student
- Pilot Plant Scale - Formosa Pilot Plant Explosion
- Production Scale - T2 Laboratories Explosion, Terra Industries Ammonium Nitrate Explosion
- Overview - CSB Review of Run-Away Reactions

Information from the presenter's own investigations and from the U.S. Chemical Safety and Hazard Investigation Board will be used.



**Dr. Langerman** is a chemist, earning a Ph.D. in biochemical thermodynamics at Northwestern University. He received a B.S. in Chemistry from Franklin & Marshall College in Lancaster, Pennsylvania. Following a NIH Post-Doctoral year at Yale, he joined the faculty of the Departments of Biochemistry and Pharmacology at Tufts University Medical School in 1970. In 1975, he went west and joined the Chemistry Department of Utah State University. At both Tufts and USU, he assumed responsibility for departmental safety programs. In 1979, Dr. Langerman learned of RCRA, and this started him on his career as a consultant.

Dr. Langerman established his first consulting company, Chemical Safety Associates, in 1980, in conjunction with other members of the USU faculty. He headed this firm until 1997, when he sold his interests in MSDS production and set up his current consulting firm, Advanced Chemical Safety.

Dr. Langerman's professional interests are in the prevention of chemical incidents and injuries. His professional time is spent consulting on chemical, safety, and regulatory issues. He served as the Chair of the Division of Chemical Health and Safety of the American Chemical Society in 2004 and also, in 2004 and 2013, received the Tillsman-Skolnick Award for contributions to the field of chemical health and safety through the ACS from the Division. He is currently the Treasurer of the Division.

Dr. Langerman is an avid SCUBA diver and photographer.

## **Breakout Session #4B - 3:00 PM - 4:00 PM**

**Dan Lenier**

### **Cal/OSHA Update (Consultation)**

Learning Objectives:

1. Attendees will be able to evaluate their safety and health programs (Injury and Illness Prevention Program, Heat Illness Prevention Program, etc.) to determine compliance with Cal/OSHA requirements.
2. Attendees will be able to identify in their workplace(s) the most frequently cited Cal/OSHA regulations.
3. Attendees will be able to evaluate what injuries/illnesses are reportable to Cal/OSHA.

Dan Leiner will provide an overview of the Enforcement and Consultation Branches of Cal/OSHA, hot topics (heat illness, confined spaces, tree trimming), and frequently cited regulations including the IIPP, hazard communication, lockout/tagout, respiratory protection, reporting injuries and illnesses.



**Dan Leiner** is currently the Area Manager of the San Fernando Valley Cal/OSHA Consultation Services office in Van Nuys. He started his career with Cal/OSHA in 1994 as an industrial hygiene consultant with Cal/OSHA Consultation's Santa Fe Springs area office before becoming an Area Manager in 2000.

Dan is an instructor with University Of California, San Diego's OSHA Training Institute Education Center, and was an instructor with California State University, Dominguez Hills' certificate program in Environmental, Safety and Health and with their OSHA Training Institute Education Center.

Dan has over 25 years of experience in the health and safety field as an industrial hygienist working in the aerospace industry, in a Los Angeles County lead-using industry outreach project, and with Cal/OSHA Consultation.

**Breakout Session #4C - 3:00 PM - 4:00 PM**  
**Edith deGuzman**  
**Local Water & Urban Cooling:**  
**Climate-Adaptation Strategies for Southern California**

Learning Objectives:

1. Identify climate issues affecting So Cal, including environmental and public health impacts of weather extremes (increased heat, drought, flood);
2. Identify the most heat-vulnerable neighborhoods and demographic groups in LA County
3. Describe multiple climate adaptation strategies, including rainwater harvesting and urban heat mitigation using trees and reflective surfaces

As climate impacts hit California, our region must rapidly prepare for higher temperature extremes, longer heat waves, and water resource extremes including drought and flood. This presentation will offer examples of regionally-appropriate innovations and practices that can be implemented at various geographic scales to support climate mitigation and adaptation related to urban heat, water supply, water quality and flood management. The presentation will include information on the following project:

1) The StormCatcher project of the Greater LA Urban Water Collaborative, which in 2016 retrofitted residential properties with rainwater-harvesting cisterns and other green infrastructure outfitted with real-time controls to allow for remote monitoring and management of water management at the parcel level by local water agencies. A detailed scaling analysis of all LA County residential properties was conducted to identify the potential of broad implementation on 1.2 million residential parcels that were conservatively found to be suitable to be retrofitted with green infrastructure.

2) The Los Angeles Urban Cooling Collaborative and its ongoing research and implementation efforts to identify the necessary levels of vegetative cover and reflectivity in Los Angeles to mitigate extreme-heat-related public health risks, including morbidity and mortality. The Collaborative is also looking at social science approaches to equip vulnerable communities to take protective actions, and identifying inclusive policy and funding pathways for implementation.



**Edith deGuzman** is Director of Research at the Los Angeles-based nonprofit TreePeople, where she has been since 2003. Edith manages research into best practices for the sustainable transformation of the Greater Los Angeles area, exploring environmental, social and economic aspects of urban ecosystems. Her work centers on identifying the efficacy, benefits and applicability of various approaches to urban sustainability, with a special focus on urban water management and heat-island reduction, and how these can be effectively managed through strategic partnerships with policymakers, agencies and communities. In her tenure with the organization, she has been a lead or team member on groundbreaking research, demonstration projects and public planning in areas of urban forestry and watershed management. Such projects include the LADWP Stormwater Capture Master Plan, Los Angeles County-wide Basin Stormwater Conservation Study, Greening Plan for Inglewood and Lennox, and an extensive study tour of 5 Australian cities focused on their historic Millennium Drought and lessons for California. Edith received a master's in Urban Planning from UCLA and a bachelor's in History and Art History, also from UCLA.

**Breakout Session #4D - 3:00 PM - 4:00 PM**  
**Thomas Heaton, PhD**  
**ShakeAlert Seismic Warning System for Western US**

Learning Objectives:

1. Prepare to use the ShakeAlert system
2. Formulate a plan of action based on ShakeAlert

ShakeAlert is an automated earthquake alerting system that provides advance warning (seconds to 10's of seconds) of imminent ground shaking. The system has been developed by a joint venture of the US Geological Survey, Caltech, UC Berkeley, and the Univ. of Washington. The system is scheduled for a limited release in 2018. Selected collaborators (e.g., BART, MetroLink) are working with the project to design automated actions that promise to decrease losses in future earthquakes. I will describe the current status of this project as well as plans for the future.

**Thomas Heaton** is a Professor of Engineering Seismology at the California Institute of Technology with a joint position in the Division of Engineering and Applied Science and the Division of Geological and Planetary Science. He is also the Director of Caltech's Earthquake Engineering Research Laboratory.

Dr. Heaton's research falls into two broad topics, 1) understanding the physics of earthquake ruptures, and 2) understanding the impact of large earthquakes on cities. His current research on earthquake physics focuses on bridging the gap between the laboratory observations of dynamic fault friction, and large scale rupture of the Earth's crust (i.e., earthquakes). This requires the development of statistical physics of highly nonlinear dynamic systems.

Dr. Heaton has also studied the nature of ground shaking in large earthquakes. Although he was originally trained as a physicist, his career took a new direction when he joined the Civil Engineering Department at Caltech. Much of his research has been on understanding the dynamics of different types of buildings. He has shown that, although tall buildings can be expected to perform well in moderate sized earthquakes, they may experience severe damage, and possibly collapse, in large earthquakes similar to the 1906 San Francisco earthquake. Dr. Heaton is also a pioneer in the development of automated systems to react to an earthquake during the time between its origin and the onset of strong shaking at a particular site (seconds to tens of seconds). He is currently a co-Principal Investigator on The ShakeAlert Project of the California Integrated Seismic Network.

**Breakout Session #4E - 3:00 PM - 4:00 PM**  
**Rosa Carillo**  
**Safety Culture and Leadership**

Learning Objectives:

1. Define the applications of relationship centered leadership
2. Examine the role relationship plays in safety performance
3. Evaluate the data available on the connection between safety performance and psychological safety
4. Learn how you can create an environment where people will speak up to stop an unsafe condition.

A 2012 DuPont survey of 120 worldwide executives concluded that the #1 characteristic of a strong safety culture is employees who are able and willing to speak up to stop an unsafe action. This talk will examine why that is so difficult and how it can be achieved by looking at case studies and research data. Our topics include:

- Eight beliefs of relationship centered leadership
- What role does relationship play in safety performance?
- Inclusion and psychological safety
- Complex responsive processes
- Why people don't speak up.



**ROSA ANTONIA CARRILLO, M.S.O.D.,** president of Carrillo and Associates, is an internationally recognized leader in creating transformational culture change with a focus on the safety, environment, and health function. Since 1995 she has authored on the topic of safety culture leadership, and has consulted on this topic to governmental and corporate clients in multiple industries around the world. Ms. Carrillo holds a Masters of Science degree in Organization Development at Pepperdine

University and is a former member of the Faculty in the Presidential Key Executive MBA program at Pepperdine University, specializing in Organizational Behavior.