

## Session 2

### **Presentation: *Functional Job Description Design and Fit-for-Duty Testing- Compliance with EEOC and ADA***

**Richard Bunch, PhD, PT, CBES**

#### **Abstract:**

Injuries occur when there is a gap between employees' physical capacities and the physical demands of the job. Fit-for-duty functional testing has become an important method of closing this gap. The methodologies of how jobs must be validated and functional job description created to perform content valid and EEOC / ADA compliant post-offer, pre-placement fit-for-duty functional capacity and return-to-work tests among industries after 21 years of program implementation will be presented.

Providers of fit for duty services that are not developed properly can place their industry clients in legal jeopardy with unnecessary exposure to EEOC and amended ADA claims related to alleged disparate discrimination against three major classes: workers with disabilities, older workers (40 +) and female workers. Properly performed, valid and legal, fit-for-duty examinations have proven to be highly effective, saving industries hundreds of millions of dollars while improving productivity.

This presentation is presented by a functional capacity evaluator and certified ergonomic specialist with over 38 years of clinical and ergonomic consulting experience. Dr. Bunch will describe the specific steps required to properly set up a legal and effective EEOC and ADA compliant fit-for-duty functional evaluation program for new hires and return-to-work cases.

Expected return on investment will be presented based on independent data derived from industries who have utilized the fit-for-duty process for years. Discussion concerning human performance capacities and fit-for-duty evaluations will also be presented in the context of the impacts of these issues as they relate to an aging work force plagued by a growing epidemic of obesity and reduced fitness capacities.

#### **Learning Outcomes:**

Upon completion of the seminar, attendees will understand:

- How human performance capacities are affected by age and common medical conditions.
- The criteria for conducting properly performed physical demand validations and developing legal functional job descriptions.
- Why and how validated functional job descriptions provide the legal foundation for Fit-for-Duty employee testing, and why they are instrumental in avoiding disparate hiring discrimination charges.
- How results from physical demands validation analyses of jobs can be used to develop ergonomic and behavioral-based intervention strategies to reduce the gap between the worker's physical capacities and the required job task demands.
- How the Fit-For-Duty evaluation should be conducted to be in compliance with EEOC.
- How employers can avoid buying a pre-existing medical condition / injury that is identified effectively in the functional capacity examination even when the applicant fails to report it or tries to cover it up.
- How improper matching of the employee to the job can be effectively prevented with job-specific functional testing.
- How fit-for-duty evaluations can be used effectively and legally for incumbent employees based on EEOC guidelines.

#### **BIO:**

Dr. Bunch is a licensed physical therapist, certified clinical and behavioral-based ergonomic specialist, and professional speaker specializing in functional capacities and fit-for-duty evaluations, ergonomics, wellness, and the prevention and

conservative treatment of work-related musculoskeletal disorders (MSDs). He is a native of Houma, Louisiana and attended undergraduate training at West Point United States Military Academy in New York and Louisiana State University in Baton Rouge. He received his clinical degree in Physical Therapy and Medical Ph.D. in Human Anatomy from Louisiana State University (LSU) Medical Center in New Orleans with honors in 1983.

Dr. Bunch is currently the founder and Manager of WorkSaver Employee Testing Systems, LLC and C.E.O. of Industrial Safety & Rehabilitation (ISR) Institute, Inc., an organization that offers functional testing (fit for duty assessments) for new hire ergonomics training and consulting and state and nation-wide and return-to-work cases via a network of over 155 clinics. His organization works with Beacon Occupational Health and Safety Services in Anchorage to provide functional testing throughout Alaska (e.g. Anchorage, Fairbanks, Valdez and Soldotna).

Dr. Bunch also currently serves as a Clinical Associate Professor at Tulane University Medical Center, Department of Public Health and Tropical Medicine, where he conducts seminars in ergonomics and functional testing. He has developed the only Clinical and Behavioral-Based Ergonomic Specialist Certification (CBES) course in the United States for safety professionals, industrial hygienists, ergonomic consultants and occupational health providers. He is a frequent invited lecturer to both safety and medical conferences nationally and internationally. He has spoken at national and regional ASSE conferences on numerous occasions and won "Best Speaker" Awards twice in different divisions for the National Safety Council.

Dr. Bunch has published numerous articles and book chapters dealing with wellness, ergonomics, behavioral based injury prevention, employee functional testing, and back injury prevention.

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### Session 3

#### Presentation: *Getting to Effective Case and Claim Management*

**Michelle Grimaldo**

#### Abstract:

This presentation will review the process from cradle to grave in case/claim management of your Worker's Compensation claims and how to manage them for:

- Overall Prevention, Safe Practices, program integration and education of employee population
- Understanding why certain claims occur, looking at leading versus lagging indicators
- Ways to combat "red flag" claims and stop them in their tracks (investigation, surveillance, use of social media, etc.)
- The use of case (medical) management and how this improves your cost, employee, management, health/safety and insurance interactions
- Obtaining management buy-in and understanding of how claims not only cost insurance premium and affect your EMR, but is the internal hemorrhage you never recognized (80/20 Rule)
- Keeping employees working when injured and how to implement appropriate modified duty
- (understanding ADA, overlap with Short-term Disability programs, working with Unions)

*Conclusion:* Legally, what do I need to watch out for to protect myself as a manager and the company, pointers will be covered with review of overall regulations applicable (Workers' Comp, ADA, EEOC, etc)

#### Learning Outcomes:

- Taking your claim/case from open to closure
- Identifying "Red Flag" Claims and managing appropriately
- Involving management in case/claim management to understand how it can affect your "bottom line"

**Bio:**

Michelle has been in nursing, case/claim program management for almost twenty years and has used the experience across a variety of industry including insurance, the employer and medical provider. She has worked with workers compensation claims, personal injury, and medical malpractice across the board. Her forte is program design and implementation along with troubleshooting and Risk Management. She enjoys training and taking her experience and topics to the various groups within a company or industry to not only share insights but to add theirs to her knowledge base as well.

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**Session 4****Presentation: *Fall Hazard Risk Assessment – Achieving Acceptable Risk*****Paul A Zoubek, CSP, CIH**

President/Principal Consultant, Zoubek Consulting, LLC

**Abstract:**

Fall hazard risk assessment attempts to answer the following questions: How the worker fall and why? What are the consequences from the fall? What is the probability that the worker can fall from an elevated surface? What are the factors that mitigate the probability of fall hazard risk?

Quantitative variables are often utilized to assess the level of risk in the simple equation of probability times severity. When evaluating fall hazards several factors must be observed and assigned to probability and severity variables to quantify risk in order to prioritize hazards needing most attention, implement control measures and bring risk down to acceptable levels. Risk can then be corresponded to the hierarchy of controls for fall protection in order to choose the best option for mitigating falls from elevated surfaces. The concepts of new fall hazard risk assessment and control are exemplified in various consensus standards including ANSI Z590.3 (Prevention Through Design), ANSI Z10 (Health and Safety Management Systems), ANSI Z690.3 (Risk Assessment Techniques) and then extrapolated into the requirements of ANSI Z359 (Fall Protection Code) for fall hazard control.

**Learning Objectives:**

- Understand the definition of risk assessment as it applies to fall hazard
- Outline fall protection solutions for worker safety and hierarchy of controls in mind (as defined in ANSI Z359)
- Utilize quantitative risk assessment variables to assess risk
- Extrapolate overall risk assessment scores in order to achieve acceptable risk variables as outlined in ANSI Z10, ANSI Z590.3, and ANSI Z690.3.

**BIO:**

Paul A Zoubek is nationally recognized EOHS consultant. He provides expert advice in the areas of management and engineering control of workplace hazards for companies nationwide. He advises companies in the areas of engineering hazard control, written safety program development, auditing, industrial hygiene and training.

Specifically Mr. Zoubek also provides services in the areas of machine safeguarding, hazardous energy control program development, fall protection, auditing, and training, safety engineering, industrial hygiene and risk assessment.

He holds a Bachelor of Science in Environmental Health- Industrial Hygiene Concentration, Illinois State University.

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## Session 5

### Presentation: *Executive Engagement for Safety Improvement*

**Mike Williamson, Ph.D., CSP**

Senior Safety Consultant, Caterpillar Safety Services

#### **Abstract:**

The first and most crucial element of Dr. Dan Petersen's Six Criteria for Safety Excellence is visible commitment from top management. After all, what leaders make important, employees make possible. This presentation shares proven methods for inspiring executive leadership to drive safety culture excellence through a demonstrated commitment to employee engagement, accountability and recognition for strong performance. This takeaway-rich presentation will empower you to start an immediate culture shift by applying the concepts. Deep expertise in sustainable culture change is coupled with data from real companies whose leaders discovered how back up with action what they feel in their hearts- that safety is an unwavering value.

#### **Learning Objectives:**

- Understand why executives must get visibly engaged in safety management, and how they can impact and influence a journey to safety excellence.
- Discover a no-math approach to safety improvement that leverages accountability and positive recognition to drive down incident rates by increasing the presence of safety.
- Learn how world-class companies have implemented the tools described to build beyond 'good,' to true safety excellence.

#### **Bio:**

Mike Williamson is a nationally recognized workplace safety consultant with more than 25 years of safety and business change management experience. His background includes serving in Engineering, Operations, and Safety Manager positions for companies such as Frito-Lay, Inc. and General Dynamics. In 1985, Mike teamed with safety author Dr. Dan Petersen for three years to develop and implement a nationwide safety accountability and continuous improvement system that helped a Fortune 20 company reduce injuries by 80% within two years. Since that time Mike has applied these and other high-impact safety principles with similar success to other Fortune 500 companies, such as General Dynamics, Baxter Healthcare, ATCO Electric, Rohm and Haas Co., and BASF. Mike earned his academic degrees at the University of California, Berkeley (B.S.), California State University, Hayward (MBA), Columbia Southern University, Orange Coast, Alabama (Ph.D. business).

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## Session 6

### Presentation: *Optimizing & Designing for an Aging Population in the Workplace*

**Kent Hatcher**

Managing Consultant, Humantech, Inc

#### **Abstract:**

This 90-minute session will explore the dynamics of an aging workforce and the role ergonomics can play in maximizing their potential. Participants will understand the impact on a worker's output as they age and how to ergonomically design for an aging workforce to reduce their potential for injury.

This session will also help you identify ergonomic improvements to accommodate the needs of the aging workforce. You'll learn to use ergonomic assessment tools that proactively consider the physiological changes that occur as we age, and what ergonomic improvements address these changes. Attendees will find out how to assess whether workstations, tools, equipment, and accessories are truly ergonomics and how to make educated buying decisions.

This session will address several questions for the aging workforce:

- At what age is performance affected?
- What are the primary performance changes of concern in the workplace?
- What performance changes do employers not need to worry about?
- What workplace changes are needed to ensure aging workers can continue to perform?

### Learning Objectives:

As a result of the presentation, attendees will:

- Better understand the data related to the aging workforce, as compared with opinion
- Understand how ergonomics can assist the aging workforce
- Demonstrate ways to design for the aging population
- Apply ergonomics principles in a meaningful way for the aging worker

### BIO:

Kent Hatcher, Managing Consultant and Ergonomics Engineer for Humantech, specializes in managing large-scale ergonomic initiatives in the manufacturing and service industries, as well as facilitating group training sessions and developing internal ergonomic expertise.

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### Session 7

#### **Presentation: *Fault Tree Analysis and its Role in Risk Assessment***

**Jerry Davis, PhD, CPE, CSP**

Associate Professor, OS&E Program Director Department of Industrial and Systems Engineering Auburn University

### Abstract:

This presentation will cover the fundamentals of 'Fault-Tree Analysis' including background, fault-tree construction, and analysis. The use of cut & path-sets will be introduced.

### Learning Objectives:

- Ability to understand and describe basic fault-tree components and logic.
- Ability to construct a basic fault-tree from a descriptive scenario.
- Gain an appreciation for both qualitative and quantitative information derived from this analysis.

### BIO:

Jerry is a professional member of ASSE, and his teaching responsibilities include safety engineering and ergonomics courses in both the undergraduate and graduate curriculums. He is board certified in safety and ergonomics and pursues an active research agenda in safety/ergonomic related topics. Jerry is a retired United States Naval Officer, having served over twenty years in the nuclear submarine fleet, and lives in Auburn, Alabama with his wife Cathy.

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### Session 8

#### **Presentation: *Road Map to Safety Excellence: Golden Valley Electric Association Case Study***

**Mike Williamson, Ph.D., CSP**, - Senior Safety Consultant - Caterpillar Safety Services &

**Phil Newton, MAM, CSP** – Golden Valley Electric Association, Fairbanks, AK

### Abstract:

Golden Valley Electric Association is in a relentless pursuit of zero-incident culture and its road to continuous improvement is paved with accountabilities, safety responsibilities for every person throughout its organization. What does continuous improvement have to do with safety accountability, and how is safety accountability effectively implemented in the day-to-day routine of safety system performance? The presenters will explain the basics of managing safety activities within a continuous improvement framework. By looking at some of the key milestones - and identifying the crucial steps to safety

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culture transformation - attendees will gain a fresh, new perspective on how and why accountability is the necessary "hinge" to achieve a culture of world-class safety performance.

**Learning Objectives:**

- Determine your true safety culture reality using a Safety Perception Survey
- How to engage an entire organization in developing a sustainable system of safety culture improvement and accountabilities
- Learn how to engage front-line employees with executives to overcome barriers to safety improvement.

**BIOS:**

Mike Williamson - See Session #5 for Mike's Biography.

Phil Newton is an experienced leader, supervisor and manager with seventeen years of electric power industry risk management, security, and occupational safety experience. He has proven skills in organizational development and culture change having managed the first constructive cultural development process for safety and operational excellence in an Alaskan electric power utility that has shown measurable improvement in culture evident after first 2 years of project. He is the Chair of the Northwest Public Power Association Education and Workforce Development Committee serving 160 public power, cooperative and investor owned utilities in the United States and Canada.

Mr. Newton is currently the Job Training and Safety Officer at Golden Valley Electric Association in Fairbanks, Alaska where he manages corporate safety, training, security, loss control and risk management programs to minimize losses from personal injuries and illnesses; property, machine and boiler incidents and public liability incidents while maximizing operational efficiency and productivity. He served as a First Sergeant in the United States Air Force from 1987- 1994 where he assured effective mission accomplishment as primary advisor to the squadron commander on all human resource matters including promotion, demotion and career development and developed and implemented programs that maintained discipline, adherence to Air Force directives, and that provided for positive morale and welfare. He holds his Master of Arts in Management and a Bachelor of Science in Occupational Education.

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**Session 9**

**Presentation: *Using Training for Results: the High-Impact Model to Achieve Value***

**Chris Ross, CSP, CPLP**

**Abstract:**

How many of you have to actually produce results from your training activities? Do you ever have to make a business case for your learning and performance plans? How do you ensure that training investments achieve consistent--and measurable--performance and business improvement results?

It is brutal fact that in many organizations, significant financial investments in training lead to very little impact. Consider the fact that during 2000, organizations budgeted a total \$54 billion of formal training, with an estimated value derived from that training of less than \$6.5 billion in return--an abysmal negative return on investment!

If we define 'training impact' as a simply the transfer of knowledge and skills to on-the-job performance, research indicates that impact of training is realized only for about 10-15 percent of all training participants. When we define the impact of training rigorously, such as the application of new knowledge and skill to enhance performance in a way that makes a worthwhile difference to the business, then our evaluation studies typically show even more dismal results.

We believe that this unfortunate outcome of training is due to one compelling truth: Training is defined, in many organizations, as a simply 'delivery of events,' where the primary role of the training function is to design, develop, and deliver learning programs and services. Performance improvement, on the other hand, is left to the

province of line management or becomes the specialty of an elite few 'performance consultants.'

The key to achieving consistently high impact for training, however, is to integrate performance improvement strategies and tactics into the learning process. This is the fundamental premise of high-impact learning (HIL).

We start with a basic understanding of the goals of training. From here, we then build to the concept of 'high leverage transfer,' the application of critical learning in key job applications that is most likely to lead to the achievement of business goals. Finally, we lay the conceptual foundation for the HIL framework, methods, and tools.

Making training work is all about being sure that learning drives performance, since it is performance, not just capability that contributes the most impact from training. But performance is a complex and elusive phenomenon and is driven by more factors than sheer capability. The HIL approach is based on the concept of leveraged transfer, wherein learners focus on the strategic few performance improvements that are most likely to lead to achievement of key business goals.

This session will introduce participants to the research-based and proven "High Impact Learning" framework and establish methods and tools that a number of companies worldwide have adapted to:

- "Partner" with internal customers to identify strategic needs and plan effective training interventions that are tightly linked to and driven by important business goals—and integrated with performance improvement systems.
- Increase the return on investment and sensibly evaluate the impact of training investment on key business goals and metrics.

#### **Learning Objectives:**

Participants will be able to:

- Practice and apply the key principles of the high-impact approach.
- Learn and apply the key steps partnering with line managers to surface and link critical business, work unit, and individual performance improvement goals to learning programs.
- Understand and practice using an impact mapping tool to link learning needs and performance objectives to business goals.

#### **BIO:**

Chris Ross has been a performance consultant, trainer, lecturer and presenter for over 30 years. He is President and CEO of The Engagement Effect, a multi-discipline training and consulting firm in Alaska with clients throughout North America. The Engagement Effect provides leadership and supervisory development, employee selection, strategic planning, business performance improvement, risk management, advanced safety skills training, regulatory compliance and emergency response planning. Ross has earned professional certification in Workplace Learning and Performance (CPLP) through the American Society of Training and Development and is additionally recognized by the Board of Certified Safety Professionals as a CSP and OHST and is a Professional Member of ASSE. With a background in civil engineering and organizational development, Ross has over 30 years' experience in human resources, safety management, risk management, project management, budgeting, and operations.

Ross has presented over a thousand training classes, workshops, seminars, keynote speeches and presentations. He is a DDI Master Trainer, and a certified facilitator for Franklin Covey (7 Habits of Highly Effective People and FOCUS); Development Dimensions International (over 200 leadership and supervisory development courses); Active Global (over 60 courses in leadership, customer service and work skills); Management of Aggressive Behavior (violence prevention programs). He is also a frequent contributor and columnist for "Alaska Contractor," "Council Prospector," and many other publications.

## Session 10

### **Presentation: *Silica –It's not just Sand - Sampling and Analysis Issues of Crystalline Silica***

**Ed Stuber, CIH**

Galson Laboratories

#### **Abstract:**

OSHA currently has a National Emphasis Program for Crystalline Silica and has a proposed PEL change in the works. Silica is probably one of the most misunderstood analyte for the client to sample for, the lab to analyze, and for everyone to understand the results as how it pertains to the ACGIH TLV or the OSHA PEL. This presentation covers the 3 W's of silica—What is it, Where is it? Why be concerned? We go over how silica is sampled for and various methods of analysis will be covered. Different size selective devices will be covered and the importance of matching the correct cyclone to the correct pump flow rate will be discussed. Finally, silica calculations will be explained and reviewed with examples provided.

#### **Learning objectives:**

- It is expected that after the presentation the attendees will gain: A better understanding of the hazards of silica exposure
- A better understanding of how to sample for silica
- Have the ability to calculate and interpret silica exposure data

#### **BIO:**

Mr. Stuber is the Business Development Manager with Galson Laboratories Northeast and International Region. He holds a B.S. Biology—Grove City College—1977 and is a Certified Industrial Hygienist—Chemical Aspects since 1988. He has over 30 years of experience in industrial hygiene laboratory operations. He is responsible for business development of industrial hygiene laboratory clientele, both in the US and abroad and technical consultation for industrial hygiene sampling and analysis projects.

Ed has presented several PDC's, poster sessions, and roundtables at the AIHC National Conference. He also recently came back from Mumbai, India where he was an instructor for AIHA's Fundamentals of Industrial Hygiene Course. He also was a faculty member, teaching the Occupational Hygiene Training Association's Measurement of Hazardous Substances in both Kuala Lumpur, Malaysia and Shanghai, China. Ed received the Harriett A. Hurley Award as the AIHA's Analytical Accreditation Board (AAB) 2010 member of the year.

Previous to working at Galson Laboratories, he was a project manager for the Industrial Hygiene Division of ATL where he was responsible for overseeing various IH field-sampling projects.

Ed has run several marathons and enjoys combining travel with adventure. He has run with Bulls in Pamplona, Spain and successfully summited Mt. Kilimanjaro in Tanzania, Africa.

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## Session 11

### **Presentation: *The Enemy in the Mirror- A Highly Effective Motivational Injury Prevention and Wellness Program***

**Richard Bunch, PhD, PT, CBES**

#### **Abstract:**

Most safety professionals know that the success of any safety, ergonomics or wellness intervention program is "buy-in" and compliance by employees. Successful compliance yields very impressive results reflected by reduced injuries and increased productivity. Yet many industries fail to accomplish this. As our population ages, safety professionals are beginning to realize that they constitute the front line attack and best hope to ward off the oncoming onslaught of work and lifestyle-related injuries and illnesses that are leading to a progressive loss of productivity threatening

the foundation of our economy. Traditional medicine that addresses only symptoms and not the true causes of these problems are obviously ineffective. It is imperative that we face the basic premise of this seminar that the primary enemy for poor health and injuries is right there in the mirror facing each one of us every day.

Poor time management, stress, poor nutrition, and lack of regular exercise has turned the United States into the fattest and one of the sickest nations in the world. Employers are seeing the effects of this phenomenon by the upward spiraling costs of health insurance, lost productivity from worker absenteeism, and reduced productivity from worker presenteeism. There is no doubt that the burden of widespread declining health is fast becoming a crisis that threatens the economic foundation of the United States.

This seminar is a dynamic, motivational program that will provide invaluable, well researched, and proven integrative methods that have helped industries create more effective wellness, ergonomic, and safety programs.

**Learning objectives:**

Upon completion of this seminar, each attendee will understand

- The real causes of most health problems that affect Americans today,
- Why traditional reactive medical treatment alone is often ineffective,
- Why self-responsibility and self-discipline are critical to obtaining optimum health today,
- Ergonomic and wellness best methods to prevent MSDs, reduce the risk of cancers, heart diseases and diabetes, slow down the aging process, and restore strength, flexibility, and aerobic fitness,
- How to stop the harmful effects of everyday stress, and
- Nutritional guidelines to effectively lose excess fat, increase energy levels, and strengthen the immune system.

**BIO:** See Session #2 for Richard's Biography.

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**Session 12**

**Presentation:** *Leading Safety Metrics*

**Carl Usrey**

**Abstract:**

Safety and health performance is traditionally measured by lagging indicators that rely on injury and illness statistics. Unlike processes such as production, safety is consistently measured by failure instead of accomplishment. A new approach — focused on tracking safety and health performance through leading metrics and tying these back to lagging metrics—is needed. But what leading indicators should you examine? We will discuss a safety leading indicator process that will drive continuous safety improvement.

**Learning Objectives:**

- Discuss the difference between leading and lagging indicators
- Demonstrate both quantitative and qualitative leading metrics at a high level
- Demonstrate, using case studies, using several lower level leading metrics

**BIO:**

Carl Usrey has been a Process Improvement Leader at Predictive Solutions since March 2007. In this role, Carl is responsible for implementing solutions and best practices for customers seeking to prevent worker injuries and reduce potential liabilities through the use of an integrated safety management system that focuses on leading safety indicator. He coaches customers through an assessment, goal-setting, and goal measurement process that is designed to maximize safety improvement and widespread organizational engagement, from the field to leadership.

Carl started his career in the U.S. Navy's Nuclear Power Program in 1988. After leaving the Navy, he served as the Environmental,

Health and Safety Compliance Director at Adirondack Resource Recovery Associates, a waste-to-energy power plant in upstate New York, where he was employed for over twelve years. In 2004, Cary took a position with Turner Construction, where he served as the Business Unit Safety Director for the upstate New York office for approximately three years. Cary has completed his Associate's Degree in Occupational Safety and Health from Trinidad State Junior College in Colorado.

Cary has served for six years on the Board of Directors for the VPPPA (Region II) – two years as a Director-at-Large and four years as the Vice Chairperson. He has published many safety articles for various industry publications and is an active speaker for safety industry organizations such as ASSE, National Safety Council and the Voluntary Protection Program Participant's Association (VPPPA). Received the VPP Outreach Award (2005) from the VPPPA. Served as a Special Government Employee (SGE) in OSHA's Voluntary Protection Program, conducting evaluation audits with the OSHA team.

Cary has been a member of the ASSE since 1997. He served on the Membership Committee, served as the Public Relations Chairperson, Treasurer, and is the current Vice President for the Central FL chapter.

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### Session 13

#### **Presentation: *Navigating to Success Using the Ergonomics Maturity Curve*** **Kent Hatcher**

##### **Abstract:**

It is a fact that proactively managing ergonomic risk is a key to safety success. However, the relative maturity and specific elements of the approaches used amongst different companies to control MSDs and their costs may vary widely. Successful ergonomics programs need an investment in the strategic elements that establish a system for ongoing sponsorship, leadership, and accountability. The focus of this 90-minute session is to develop the abilities of the participants to recognize, plan, and integrate the strategic elements of ergonomics into their current business process.

##### **Learning objectives:**

This will be a working session, during which participants will:

- Identify the critical elements of their site or company ergonomics improvement process
- Learn how to establish a proactive leading goal for their company's ergonomics program
- Select appropriate metrics that will drive their organization toward the goal
- Determine the resources and support infrastructure appropriate for their ergonomics program
- Apply existing business plans and checkpoints to the ongoing management of their ergonomics program.

**BIO: See Session #6 for Kent's Biography.**

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### Session 14

#### **Presentation: *Developing and Implementing a Successful Safety Culture*** **Bruce A. Brown, PhD, CSP, OHST**

*Corporate Safety and Health Manager ~ gkkworks*

##### **Abstract:**

Some of the various available tools and techniques Dr. Brown will be discussing include: Activity Hazard Analysis, safety checklists, site visits, program element reviews, on-line training and certification programs, and unique reporting procedures. He will also show how a safety program is evaluated using leading indicators and goals. These effective safety tools and procedures that are used throughout the life-span of projects, from concept and initial planning, through hazardous operations and reviews, to commissioning and close-out will all be addressed by Dr. Brown.

**Learning Outcomes:**

Dr. Brown's presentation will cover and discuss the following areas:

- Safety as an added-value contract element
- How to achieve trust and respect of management, a vital aspect of any successful safety program
- How to integrate Safety to the company's Vision and Goals
- Possible issues encountered during projects, and in working with a diverse workforce
- The safety tools and techniques responsible for repeat customer consideration and the subcontractor's desire to partner with your firm in the future

**BIO:**

Dr. Brown has more than 30 years of experience in the environmental, health and safety field in areas including construction, R&D, manufacturing, DoD and higher education. He is involved in the design and construction of various types of facilities, making sure that reliability is brought to each and every project. Dr. Brown is responsible for safety and health management for all projects, ensuring that objectives are met at each facility by interfacing with gkkworks leadership and consultants, and further coordination of the selected construction team entities.

Dr. Brown served on the Board of Advisors for the California chapters of the National Safety Council, a Los Angeles Chapter Executive Board Member, and Society Delegate for the American Society of Safety Engineers and a Team Leader for the Board of Certified Safety Professionals Item-Writing Team. Additionally, he maintains multiple Environmental, Health & Safety certifications and degrees, including a Doctorate degree, and has been published in numerous EH&S publications. He is an Adjunct Professor and has spoken internationally on Safety and Workplace Violence. He is a 2012 Inaugural recipient of the BCSP Award of Excellence.

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**Session 15****Presentation: *Disasters Having Learning Potential – Culture Based Global Challenge*****Jitu Patel, CPEA****International Ambassador, and Fellow of ASSE****Abstract:**

Join us as Mr. Jitu C. Patel, CPEA talks about the primary reason for “Risk Assessment” and what disasters worldwide have taught us with improved loss control through a professional safety management system. We have to put serious thoughts on our traditional way of thinking and behaving. We may have to make some sacrifice for the safety of our people and facility. Our upbringing and our beliefs must not come in the way of running our business that could result in to unsafe situation leading to accidents. Learn what managers must do to give safety a prime importance! Learn how success could only be achieved through a sound safety culture which is employee owned, management driven, and operationally consistent that maximizes creativity and innovation. Adopt the cultural belief that all incidents are preventable. An employer that institutes a cultural change toward the zero incident concepts is bound to see safety improvement that the entire workforce can be proud of!

Major international Process Plant Disasters will be narrated, as examples!

**BIO:**

**Mr. Jitu C. Patel**, CPEA is an international HSE consultant and a speaker who has a BS in Chemistry and an M.Phil in Energy & Fuel Science. For 21 years, Mr. Patel has provided health and safety professional services to Aramco, the world's largest oil and gas producing and processing corporation. He also has provided technical training and conducted research for 15 years on fires, explosions, health, safety and environment at a chemicals manufacturing company in the UK. Mr. Patel has developed and conducted fire and safety seminars for Safety & Fire Prevention engineers and line management of industry operations. He has presented many technical presentations, which are published in international journals. His work has

taken him throughout the world serving on such boards and committees internationally. He is a membership chair of the ASSE International Practice Specialty, a member of the BEAC Training & Education and also is a Senior Board Advisor to the ASSE Arizona Chapter. He is a founder of the ASSE Middle East, Philippines and five Chapters in India. Mr. Patel was honored with a Howard Hiedeman Award of Safety Professional of the Year. He is a member of the ASSE COMRA Global Committee. Mr. Patel was honored in Chicago with the highest and most prestigious award of a “Fellow of the ASSE”. Mr. Patel also is a recipient of the ASSE’s Diversity and Practice Specialty awards. ASSE Board of Directors has confirmed him an ASSE Ambassador.

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## Session 16

**Presentation:** *Welding Health and Safety Exposures/Risks*

**Tony Barnard, CIH, CSP, BPXA Liberty HSE Manager for Projects &**

**Beatrice Egbejimba, CIH, CSP – BPXA Industrial Hygienist N. Slope AK**

### **Abstract:**

Welding operations are common here in Alaska. These operations are critical to our continued economic growth and the support of our existing markets, such as the petroleum and fishing industries. It is imperative that health and safety professionals understand and manage the welding health and safety exposures/risks associated with their operations.

The presentation will review the common types of welding. Specific topics related to health exposures will then be discussed to include hexavalent chromium and manganese, which are the risk drivers for most of the welding operations where carbon steel and other common rods/wires are used in welding operations. Emphasis will be given to manganese and how the revised ACGIH TLV may impact employee protection during welding operations. Exposure mitigation strategies (such as respirator use and ventilation) will also be described.

### **BIOS:**

**Tony Barnard, CIH, CSP**

*Tony Barnard* has a BS in General Science with Chemistry Emphasis from the University of Wisconsin- Platteville. He also has an MS in Industrial Hygiene with a Hazardous Substances Emphasis from the University of Michigan. He began his IH career in the US Army, did some graduate fellowship work for the Dept. of Energy, and performed HSE consulting work for 12 years primarily in Colorado, Hawaii, and Alaska. He specializes in industrial hygiene evaluations, indoor air quality, HSE risk evaluations, environmental impact assessments, and general safety. Tony then worked for Arctic Slope Regional Corporation as their CIH and safety consultant for 2 year after he left the US Army. He is currently working for BPXA as the Liberty HSE Manager for Projects. Tony is active with the local and national sections of American Industrial Hygiene Association (AIHA) and encourages current and aspiring industrial hygienists to become involved.

**Beatrice Egbejimba, CIH, CSP**

*Beatrice Egbejimba* has a BS in Biochemistry from the University of Nigeria, Nsukka and a Master's degree in Environmental Management from the University of London. She currently works for BPXA as an Industrial Hygienist on the North Slope. Beatrice began her carrier with BP after working for the State of Alaska for 10 years in various roles. Her last position with the State of Alaska was an Industrial Hygiene position with Consultation and Training. In this role she conducted onsite safety and health audits and air and noise exposure assessment for private companies throughout Alaska.

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**Session 17****Presentation: *Predicting and Eliminating Injuries*****Chuck Pettinger, PhD****Abstract:**

Many companies search for true leading indicators. These indicators are essential for moving safety cultures from good to great. Much leading indicator data is gathered from inspections/observations, however, organizations often struggle with quality. This talk will help participants find their “golden eggs” through a case study and ongoing statistical research on over 120 million observations. This will help provide a gauge of your safety culture and ultimately may help predict your next incident.

For many years, organizations have established some form of inspection process to assess compliance with rules/regulations and policies/procedures (See Factories Act of 1833; Raouf, & Dhillon, 1994; Weindling, 1985; Wilson, 1985). More recently, companies have begun to add an observation process to focus on safety-related behaviors (Geller, 1996; Komaki, Barwick, & Scott, 1978; Krause, Hidley, & Hodson, 1996). Having an inspection and observation process can, by themselves, increase safety awareness and impact the organization’s safety culture (Tuncel, Lotlikar, Salem, & Daraiseh, 2006). But while these methodologies are an essential part of a dynamic proactive safety culture, they do not guarantee world-class safety performance. In fact, some practitioners question the validity and effectiveness of the intelligence collected from their inspections/observations (Guastello, 1993).

**BIO:**

Chuck has over 20 years of experience designing, implementing and evaluating culture step-change initiatives. His major interests include developing large-scale corporate behavior change initiatives, assessing industrial safety cultures, using advanced predictive analytics to develop leading indicators and conducting organizational Leadership Workshops.

Chuck has consulted with a wide variety of industries including Bechtel, BD Biosciences, Bombardier, Caterpillar, Chevron, Coca-Cola, Cummins, ExxonMobil, Honeywell, JEA, Kiewit, Kaiser Permanente, Los Alamos National Laboratory, Monsanto, NSTAR, National Grid, Pfizer, PP&L, Southern Company, Turner, Union Pacific, WE & Xcel Energy.

Chuck earned his Bachelors from the University of Florida, his Masters from Rensselaer Polytechnic Institute, and his Doctorate from Virginia Tech under Dr. E.Scott Geller. Before joining Predictive Solutions, Chuck was a Senior Project Manager with the Safety Performance Solutions and a Grant Project Manager with Virginia Tech's CABS, a research and development organization led by Dr. E.Scott Geller. While at Virginia Tech, Chuck and Dr. Geller completed many research grants including a two-year project funded by the National Institute for Occupational Safety & Health titled "Critical Aspects of Behavior-Based Safety." This research investigated several key strategies for implementing a successful Behavior- Based Safety processes in industry. Chuck is also a Certified Behavior Analyst and has served as a Behavioral Program Specialist for the State of Florida and other private industries.

Chuck has also played a prominent role in writing and conducting research grants. He has managed projects, worth more than 2.5 million dollars, funded by the Alcoholic Beverage Medical Research Foundation, Centers for Disease Control, Department of Motor Vehicles, NIOSH, MSHA, National Institute on Alcohol Abuse and Alcoholism, the National Collegiate Athletic Association, and the U.S. Department of Energy.

In addition to being named one of the 101Top Leaders in Safety by /SHN, Chuck has authored many training/technical manuals while designing, customizing and developing training materials for use in industry and government agencies. In addition, he has numerous published abstracts and papers and many

scheduled speaking engagements at professional conferences yearly, including invited international multi-day workshops in Africa, Australia, China, France, Hong Kong, India and Singapore.

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### Session 18

#### Presentation: Getting to the “Risk” in your Risk Management Understanding

Michelle Grimaldo

#### Abstract:

This presentation will cover the processes involved when looking at your internal programs from the outside in. It will cover:

- Identifying trending in various departments, what that could mean and how it ties together
- Reversing your "lagging" indicators in a succinct process (pre-cautionary versus reactionary)
- Risk is a top down culture understanding
- Integrating health and safety understanding with Human Resource functions and Management concerns when knowing your work and employee population risks
- Stopping "Risk" at the door-new hire protocols matching to your jobs and essential functions
- Bringing it all together under the "Risk" management umbrella

#### Learning Outcomes:

- Understanding the areas of risk in your employee population, health/safety program, company objectives
- Mitigating the findings of your risk assessments
- Getting management and senior management buy-in for project and program risk buy-in

**Bio:** See Session # 3 for Michelle’s Biography.

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### Session 19

#### Presentation: Are you up to PAR?

Bruce A. Brown, PhD, CSP, OHST

*Corporate Safety and Health Manager gkkworks*

#### Abstract:

So you are looking for a job in Safety or maybe stepping up to a better job and you are flooding the market with your resumes with little or no luck at all. There is a science to this that looks at key words, the company Vision and Goal, and how you can get your foot across the threshold of the hiring person. What then? Are you already losing because they *are* just interviewing but have an internal candidate picked already? Been there, done that, rejected and rejoiced, flattered and flattened, there is a way to be the candidate of choice.

#### Learning outcomes:

Dr. Brown's presentation will cover and discuss the following areas:

- What is your motivation?
  - Picking the right jobs
  - Seven words you must have in your resume
  - Lying is out, omitting is permitting
  - How to understand Vision and Goal of companies
  - How to raise you up while respecting your competition
  - How to use PAR (Problem Action Results) to prove you exceed their expectations
  - How to handle that dreaded money question
  - How to negotiate your employment contract
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Some of the various available tools and techniques Dr. Brown will be discussing include: picking the right jobs, designing your resume to the company, using key words, networking, "Elevator" interviews, use of PAR, and straight talk of money and contract negotiations.

**BIO: See Session # 14 for Bruce's Biography.**

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## Session 20

### **Presentation: *Making a Difference: Transforming the Safety Professional's Role in Maximizing the Workers' Compensation Investment***

**Daniel G. Hopwood, MPH, ARM, CSP** (also, CBCP and CHS-III), Assistant VP HSE Zenith Insurance

#### **Abstract:**

Without question, the safety and health professional can, and should play a critical role in assisting an organization manage their Workers' Compensation program. For many companies, the Workers' Compensation investment is a considerable part of their operational budget and the relative and net costs of Insurance are directly related to Injury and Illness performance.

This presentation will focus on the considerations a safety and health professional should concentrate upon to assist their organizations in controlling not only the costs of Workers' Compensation Insurance but, as noted, maximizing the Investment in other regards. We will use the backdrop of understanding the need to "transform" the role of the safety professional as opposed to just changing it to something different than it already is.

A "*four bucket*" analogy model will be highlighted, such that attendees can analyze their existing contributions to their organizations Workers' Compensation program and develop a plan where enhancements may prove beneficial. The "buckets" of thought or analysis that will be reviewed include:

- The financial bucket
- The technical bucket
- The relationship bucket
- The leadership bucket

Some of the basic considerations within the buckets include, but are not limited to strategic planning, financial management, working to control the Experience Modification, helping to manage internal and external relationships and being a program leader, even in the face of not having dedicated/formal responsibilities.

The Workers' Compensation investment goes beyond the costs, or premiums for insurance. It also includes assuring the overall acquisition process is sound and that obtaining Workers' Compensation Insurance includes input from the safety and health team. As such, the role the safety and health professional should occupy includes many elements, including (these are some of the discussion points that will be found within the "bucket" dialogue):

- Strategic planning – Workers' Compensation is not just about the financial and contractual transaction that takes place to acquire Insurance. The more the safety professional understands this dynamic and is engaged in the process the more sound the Workers' Compensation relationship will be,
- Understanding the financial ramifications of loss, that is, injuries and illnesses on the Workers' Compensation program and its relative costs, both direct and indirect,
- Understanding how the safety professional can favorably influence many workers' compensation factors, including the Experience Modification. Just as importantly, our discussion on the experience modification will include how to leverage that factor in obtaining resources to help enhance the safety and health program in the future,
- Recognizing temporal considerations – that is, truly understanding the value of making a difference "now" vs. later", including a discussion of how to do so,

- The ability to nurture, negotiate and influence others is essential; recognizing internal and external constituents is important. Using them to benefit the goals of maximizing the Workers' Compensation investment is an essential tactic- moving all of us from thinking of Workers' Compensation as simply a transactional matter, to one that can be (organizationally) transformative will be a strong point of emphasis as well,
- The session will include a portion on the value of "leadership" in maximizing the Workers' Compensation investment- this is focused upon the need and criticality of the safety professional to lead – both passively and actively, to help assure their organization can improve their Workers' Compensation program, or keep one that is functioning well, strong and successful.

**Learning outcomes:**

- The safety professional will develop a much stronger understanding of their role in helping their organization maximize their Workers' Compensation investment,
- The attendee will be able to use the "four bucket" analogy model as an analytical and strategic planning tool,
- Attendees will be provided details within each of the buckets to help them objectively plan where they should exert more positive influence or capitalize upon internal and external relationships; a planning/review guide will be provided,
- And, we will end with the need to transform knowledge, skills and capabilities in regards to Workers' Compensation management, and
- Recognizing that leadership is the capstone to success- whether active or passive. Additional detail on leadership attributes and perhaps those that should be developed will be included.

**BIO:**

Mr. Hopwood holds a Bachelor of Science - Health Sciences with an emphasis in Industrial Safety from San Diego State University and holds a Masters degree in Public Health from San Diego University with an Occupational Health Concentration.

He is currently an Assistant Vice President/Safety and Health Manager at Zenith Insurance where he is responsible for safety and health consulting and technical services provided by a team of 6 consultants for policyholders throughout Southern California and other strategic US locations.

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**Session 21****Presentation: *Using Project Management and Consulting Tools*****Chris Ross, CSP, CPLP****Abstract:**

Safety professionals are all really consultants. This means that rather than employing a management technique of direct control, safety professionals should apply the principles of project management and consulting when working with their clients (whether internal or external). This shifts the roles substantially and places safety back in a consultative role, rather than an impossible position of being responsible for results without the authority to get it done.

In a consultative role, there is always a client, which for most internal safety professionals is usually a senior manager. Regardless of who the client is, however, the safety professional needs a set of tools and techniques in order to successfully communicate.

Project management uses many of the same skills as a focused consulting contract- a very useful tool for loss control professionals and others. The ability to organize and lead projects effectively is of vital importance to the organization, good project managers can substantially increase organizational return-on-investment (ROI) by reducing time, being more efficient and communicating effectively with project stakeholders.

This session focuses on building some key consulting skills used by loss control professionals. We'll cover some elements of the consulting "contract" with clients and superiors, using Project Management as a model for

consulting work.

**Learning outcomes:**

Participants will:

- Demonstrate how the project aligns with the organization's mission, values, goals, and objectives
- Describe the role of communications and human relations in the project management process
- Identify the expectations of key stakeholders
- Define critical elements of work breakdown structure (WBS)
- Describe how project management techniques can help the loss control professional

**BIO: See Session # 9 for Chris' Biography.**

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**Session 22**

**Presentation: *Introduction to "Systems Safety" Tools & Techniques***

**Jerry Davis, PhD, CPE, CSP**

Associate Professor, OS&E Program Director Department of Industrial and Systems Engineering Auburn University

**Abstract:**

This presentation will provide attendees with a brief history of Systems Safety, why it was developed, how it is structured, and its routine use in highly hazardous environments and applications. Attendees will also be introduced to many of the more commonly used tools and techniques including 'Pro's & Cons' associated with the use of select tools.

**Learning outcomes:**

- Ability to identify and describe basic system safety tools and techniques.
- Ability to identify 'Life Cycle' phases and understand where various system safety techniques are used in this context.
- Gain an appreciation for the structure and rigor associated with quantitative risk assessment.

**BIO: See Session # 7 for Jeff's Biography.**