



# A CHANGING MINDSET

PtD encompasses all of the efforts to anticipate and design out hazards to workers in facilities, work methods and operations, processes, equipment, tools, products, new technologies, and the organization of work. The focus of PtD is on workers who execute the designs or have to work with the products of the design. The initiative has been developed to support designing out hazards, the most reliable and effective type of prevention.

**Wednesday, March 18, 2020**  
**New York University**  
**370 Jay Street, Brooklyn, NY 11201**



# PREVENTION THROUGH DESIGN (PtD) A CHANGING MINDSET

Wednesday, March 18, 2020  
NYU, 370 Jay Street, Brooklyn, N.Y. 11201

## AGENDA

**Registration & Breakfast** ..... 7:30 a.m. - 8:30 a.m.

**Welcome/Opening Remarks** ..... 8:30 a.m. - 8:45 a.m.

**Prevention through Design – A NIOSH Gamechanger** ..... 8:45 a.m. - 9:45 a.m.  
*Jonathan Bach – NIOSH*

**Key components for a successful safety in design initiative** ..... 9:45 a.m. - 10:45 a.m.  
*Anne Ruzek – NYC DEP*

**BREAK | 10:45 a.m. - 11:00 a.m.**

**PtD...What’s in this for me?** ..... 11:00 a.m. - 12:00 p.m.  
*TJ Lyons, Total Facility Solutions*

**LUNCH BREAK | 12:00 p.m. - 1:00 p.m.**

**PtD and the Triple Bottom Line** ..... 1:00 p.m. - 2:00 p.m.  
*Mike Toole, University of Toledo*

**BREAK | 2:00 p.m. - 2:15 p.m.**

**Leveraging Technology in your Design using Lean, LEED and BIM** ..... 2:15 p.m. - 3:15 p.m.  
*Matt Bell, Total Facility Solutions & Amphone Sananikone, Exyte*

**Final Panel Discussion and Questions** ..... 3:15 p.m. – 4:00 p.m.

**Approved for 5.0 PDH’s, 4.0 AIA LUs and 2.0 CM-LEAN CE Hours.**

# PROGRAM DESCRIPTIONS

## **PREVENTION THROUGH DESIGN – A NIOSH GAMECHANGER – JONATHAN BACH | 8:45 A.M. - 9:45 A.M.**

Though Prevention through Design, PtD, has gone by other names, the goal is the same – to design out hazards ahead of time. The result is safer work, less “management” of hazards later, with schedule and cost advantages common. This presentation will provide a short but relevant history of PtD, highlight work by NIOSH and others, provide no-cost PtD educational modules covering key Construction features and trades, and summarize both the “Priority” and the “Process” of PtD. A streamlined version of Systems Safety and collaborative design reviews will be presented. Methods for changing your business culture to prevention will be summarized. Finally, by comparing hard numbers, the presentation will show the powerful advantages of PtD methods that can greatly amplify your impact as a construction professional.

- What is PtD?
- PtD in History, and Lessons Lost
- Tools to help you
- Doing the PtD Process
- Changing your Culture

**1.0 PDH, 1 AIA LU  
1 CM-LEAN CE**

## **KEY COMPONENTS FOR A SUCCESSFUL SAFETY IN DESIGN INITIATIVE– ANNE RUZEK | 9:45 A.M. - 10:45 A.M.**

Projects come in all shapes and sizes. A project’s design can be completed in a matter of days or sometimes years. Too often, the safety of end-users is an afterthought during a project’s design window -- with greater emphasis placed on a project’s initial cost and code compliance. Designers are most interested in a facility’s operational functionality. And while the installed equipment can function properly; those who operate it may have their own challenges upon turnover of the project to them for actual operation, and then for maintenance. Failing to account for end-user safety and efficiency can lead to costly re-design or “add-on” projects years after substantial completion; worse, it can lead to serious injury or damage to the asset.

Whether a design professional, contractor, owner, or craft employee, all stakeholders can benefit from delivering a safer end product. This session will provoke thought into how your organization can improve safety throughout the project lifecycle, with emphasis placed on end-user engagement during project design.

- Identify key touch-points for integrating safety into the design process
- Highlight the benefits of implementing a safety in design initiative for all project stakeholders
- Share best practices for end-user engagement and safety risk reduction
- Review prevalent operational issues as a result of lapses in design
- Emphasize the importance of early safety risk mitigation to support a successful project turnover

**1.0 PDH, 1 AIA LU**

## **PtD...WHAT’S IN THIS FOR ME? – TJ LYONS | 11:00 A.M. - 12:00 P.M.**

A blunt discussion on the need for PtD on our worksites and in the things we build. A review of current and archaic practices where continual risk is installed in new construction. Practical approaches during conceptualization of a building that eliminate hazards before breaking ground. Prevention opportunities as we build to protect our sons and daughters doing the work. What the speaker calls design interventions.

- Confirmation that PtD will guide construction firms and building owners from Risk Management to Risk elimination.
- Specific examples of PtD intervention that will save profits and save lives during construction and later for occupants.
- A compilation of PtD interventions, opportunities and cases where adopting PtD principle can garner LEED points and new clients
- Simple steps to use PtD to eliminate what he calls “killing conditions” from your worksite and your buildings the day after the conference.

**1.0 PDH**

## **PROGRAM DESCRIPTIONS**

### **PtD AND THE TRIPLE BOTTOM LINE - T. MICHAEL TOOLE | 1:00 P.M. - 2:00 P.M.**

Prevention through Design (PtD) is an emerging safety management technique in which the safety of construction and maintenance workers is explicitly considered during the design of a project. Also called designing for construction safety and safety by design, PtD is a clear application of social sustainability principles that corporations and society are increasingly embracing. PtD is also an application of Integrated Lifecycle Design in that design professionals must consider design feedback from individuals who will implement the design (i.e., create the finished product or facility) as well as from those who will operate and maintain the finished product or facility over its service life. Effective PtD often requires changes from traditional design review processes, which may require change in the types of contracts used, the project delivery method used, and the characteristics of the firms that can best help achieve safety goals. This presentation will summarize the PtD, Triple Bottom Line, and Integrated Lifecycle Design concepts, provide examples, discuss processes and tools needed to enable PtD, and suggest ways PtD can be implemented.

- Provide definitions of Prevention through Design, Social Sustainability, the Triple Bottom Line, and Integrated Lifecycle Design
- Provide examples of PtD in building construction, infrastructure and process construction
- Summarize processes and tools needed to implement PtD

**1.0 PDH, 1 AIA LU**

### **LEVERAGING TECHNOLOGY IN YOUR DESIGN USING LEAN, LEED AND BIM – MATT BELL, AMPHONE SANANIKONE | 2:15 P.M. - 3:15 P.M.**

Matt and Amphone will share their experiences in using these new design tools and models. Sharing his focus on design that is helping reduce or eliminate the opportunities for our sons and daughters to get hurt while increasing the quality and efficiency of the work.

- Attendees will understand the value side of our Lean efforts
- Get a summary of the most recent tools to manage our risks and help our clients
- Specific examples where Lean design is eliminating hazards from our worksites
- Opportunities for even the smallest of firms to adopt Lean principles in design and planning

**1.0 PDH, 1 AIA LU  
1 CM-LEAN CE**

**Approved for 5.0 PDH's, 4.0 AIA LUs and 2.0 CM-LEAN CE Hours.**

## ABOUT OUR PRESENTERS



**JONATHAN A. BACH, PE, CSP, CIH** is a Safety Engineer with the CDC/NIOSH. Mr. Bach is a professional engineer serving at the National Institute for Occupational Safety and Health, NIOSH, as the coordinator for the Prevention through Design (PtD) program. He is certified in industrial hygiene and safety. After gaining his engineering degree at Syracuse University, Mr. Bach served as an active duty Bioenvironmental Engineering officer with the U.S. Air Force in Colorado, Turkey, Italy, and Pennsylvania. In 2002 he became a regional industrial hygiene manager for Naval Healthcare New England. In 2004 Mr. Bach moved to Germany to serve with the U.S. Army Corps of Engineers as an environmental project manager and the industrial hygienist for European operations. In 2007 Mr. Bach became the overall Health and Safety Manager for the Army Corps of Engineers in Europe, until 2014 when he moved his family to Cincinnati Ohio to focus on PtD with NIOSH.



**MATT BELL** is President and Managing Director of Total Facility Solutions working out of their Texas office. Matt has over 18 years of experience and oversees a wide-range of US projects in the pharmaceutical commercial and semi-conductor world. His passion is finding Lean links between the people doing our work and the technology now available to make that work more efficient, safer and of the highest quality.



**TJ LYONS** is the Regional EHS Manager for Total Facility Solutions a company of the Exyte Group. He supports US field teams and operations from Malta, New York. He has been advocating the philosophy of Prevention through Design here in the US and overseas since 2011. He speaks on the topic often and recently helped created the ANSI/ASSP A-10 Prevention through Design - A Life Cycle Approach to Safety and Health in the Construction Industry. Board certified as an Occupational Health and Safety Technologist and Certified Safety Professional, he is proud to have taken some of these skills to his local community. A past EMT and assistant chief he sees the need to bring safety from the field to the home as often as possible. In 2018, Mr. Lyons was honored with the IRMI Words of Wisdom (WOW) Award. The WOW Award recognizes a speaker who has made an outstanding contribution to the IRMI Construction Risk Conference as well as demonstrating exceptional presentation skills and freely sharing practical tips and strategies. Mr. Lyons was a past chapter writer for the American Society of Testing of Materials and for the recent American Society of Safety Engineers' Construction Safety Management and Engineering, vol. 1 and vol. 2. He is past president of the Hudson River Valley Chapter of the American Society of Safety Professional.

## ABOUT OUR PRESENTERS



**ANNE M. RUZEK, M.S., C.S.P., A.I.C.M.**, is the EHS Regional Manager with the NYC DEP Bureau of Engineering, Design & Construction. Ms. Ruzek currently gives oversight and management for approximately 25+ NYC Department of Environmental Protection (DEP) design and construction projects. Ms. Ruzek wrote the NYC DEP Bureau of Engineering, Design and Construction (BEDC) EHS Safe Design Guides manual for the NYC DEP BEDC, and carried out Safe Design inspections for dozens of DEP projects in compliance with OSHA 1910 rules, NEC criteria, and State and Local laws under this program. Data compiled from these efforts helped to form the Safe Design Guides manual; and the turnover of improved and safer construction to the various Operational Bureaus.



**AMPHONE SANANIKONE, ASSOCIATE AIA** brings more than 27-years of architectural design experience, including 25-years working in the semiconductor industry with some of the world's most prominent semiconductor manufacturers. His project experience also encompasses design for science & research technology buildings for government and university systems. Amphone has designed & Built projects ranging from 300mm conversions, to shell buildings, additions, and greenfield fabrication facilities for various ISO Class cleanrooms, including cleanroom support spaces, among many others.



**T. MICHAEL TOOLE, PhD, P.E.** became the Dean of the College of Engineering at the University of Toledo in August 2017. He came to UToledo after spending 18 years at Bucknell University, including as an Associate Dean of Engineering, a Professor of Civil and Environmental Engineering, the Director of the Grand Challenges Scholars Program, and the Director of the Institute for Leadership in Technology and Management. Mike received his B.S. from Bucknell and his Masters and Ph.D. from M.I.T. A professional civil engineer registered in Pennsylvania and a Fellow in the American Society of Civil Engineers, he initiated and maintains [www.designforconstructionsafety.org](http://www.designforconstructionsafety.org). His professional employment includes the U.S. Navy Civil Engineer Corps, a publicly traded homebuilder, a multidisciplinary engineering firm and three start ups. He has published on construction safety (especially designing for construction safety), construction innovation, and project management. He has been participated in PtD initiatives with OSHA, NIOSH, ASCE, ASSP and ANSI, and many private firms.



# THANK YOU

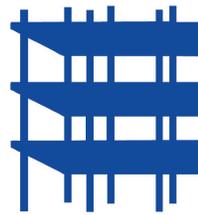
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# REGISTRATION FORM

## SPACE IS LIMITED TO 150

7:30 a.m. - 8:30 a.m. registration and breakfast  
8:30 a.m. - 4:00 p.m. program

### **Early Registration - DEADLINE FEBRUARY 28**

\$225 for AGC NYS and Supporting Sponsor Members | \$300 for Non-Members  
(Includes breakfast, lunch and handouts)

### **STANDARD REGISTRATION - DEADLINE MARCH 13**

\$250 for AGC NYS and Supporting Sponsor Members | \$325 for Non-Members  
(Includes breakfast, lunch and handouts)

**Approved for 5.0 PDH's, 4.0 AIA LUs and 2.0 CM-LEAN CE Hours.**

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**Cancellation Policy:** Refunds will be given only if your reservation is cancelled 48 hours in advance.

**E-mail form to :** Bryanna Kiselauskas, [bryanna@agcnys.org](mailto:bryanna@agcnys.org) or Fax to: 518-456-1198

**Mail form to:** AGC NYS, 10 Airline Drive, Suite 203, Albany, NY 12205