



Create Breakthrough Innovation the X Prize Way

**Monday, March 8, 2010
1:30 - 2:45 p.m.**

**Peter O'Neil, CAE, executive director, American
Industrial Hygiene Association**

Marsha Rhea, CAE, president, Signature i, LLC

**2010 Great Ideas Conference
Colorado Springs, CO**

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www.asaecenter.org

Connecting Great Ideas and Great People

Session Objectives

- Introduce prize competitions and how nonprofits and associations can use them
- Practice framing statements of opportunity, guiding principles and focal areas
- Brainstorm ways to use prize competitions in nonprofits and associations




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Snapshot of the X Prize Foundation

- Mission: Creating and managing prizes that drive innovators to solve some of the greatest challenges
- Founder: Peter Diamandis, Aerospace engineer, entrepreneur, MD & Foundation chair
- Foundation Initiatives:
 - First private space flight, SpaceShipOne
 - Genomics sequencing—pending prize
 - Fuel efficient autos—pending prize
 - Lunar landing—pending prize
- Resources: \$10 Million + awards, sponsor underwritten




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What are prize competitions?

- Incentivize teams to solve problems and win “something”
- Designed to spur innovation where people are stuck
- Clear definition of success/what winning means
- Sponsor underwritten, or not
- Prize ≠ large, does = meaningful



How prizes help associations innovate

- Teamwork
- Competitiveness
- Peer recognition
- Solving a knotty profession/trade related problem



Why did AIHA develop its “X’ Prize?

- Refer to slide 3...!
- Get money’s worth from a hefty Diamandis speaking fee
- Be forward thinking
- Channel complainers, “Chicken Little’s”



Structuring a Prize Competition

Purpose/Your *Why* and *What*?

- Frame the opportunity
- Set your guiding principles
- Identify focal areas with breakthrough potential

Logistics/3 More *Ws* and the *H*

- Who: participants, advisors and judges
- Where: live or virtual
- When: In prime time
- How: project management, facilitation & PR



Frame the Opportunity

- Search for challenges ripe for innovation and change
- Use experts/thought leaders to frame the opportunity—watch for bias for the solutions
- Keep the opportunity open—use questions to drive the competition
- Go for significance, a real breakthrough



AIHA Opportunity Statement: Global Competencies

How can the worldwide demand for competent occupational hygiene professionals be addressed, particularly in developing countries where the rate of industrialization and risk to the population outpaces the supply of OH professionals?



Set the Guiding Principles

- Have a clear definition of success/what constitutes winning the prize—describe the expected outcome
- Innovations can be:
 - Incremental - if widely adopted would be significant
 - Disruptive - alternative approach that changes the game
 - Transformative - changes the system's paradigm and practices
- If you have goals or constraints, state them



AIHA Guiding Principles: Global Competency

- Improvement of worker health and safety globally
- Global recognition of core competency requirements
- Universally accessible and locally adapted options for training
- Short-term solutions to address a long-term and systemic challenge
- Leverages AIHA's capacities as catalyst, convener, and leader



Identify the Focal Areas

- Define your priority interests
- Point to the possibilities for breakthrough
- Match the targets to your stakeholders—what would excite them?
- Limit the number of focal areas



AIHA Focal Areas: Global Competency

- Creating demand for global occupational health through a socioeconomic framework
- Internationally recognized qualifications and competency standards for professional practice
- Platforms and methods for global training, mentoring, and recruitment



Your Turn: Structuring a Prize Competition Purpose

Your Case: Social Responsibility and/or Diversity

1. Frame the Opportunity
2. Identify the focal areas for breakthrough potential
3. Set the Guiding Principles

1. Organize your group: facilitator and recorder/reporter
2. Choose your case
3. Frame the opportunity
4. Identify the focal areas
5. Set the guiding principles
6. We'll share your work with ASAE
7. We'll debrief the experience





Questions & Observations



Brainstorm: Ways to Use Prize Competitions

Purpose/ Why & What?

- Opportunities
- Outcomes

Logistics/Who, When, Where & How

- Tweaking this great idea for associations
- Creating engagement
- Sustaining the impact



Wrapping Up this Great Idea

- Tips & Insights to file for future use
- Additional resources
- Keep us posted if you try this idea



Additional Resources

- AIHA Breakthrough Prize Competition materials, see handout appendix.
- Bays, Jonathan, Tony Goland, and Joe Newsum. Using Prizes to Spur Innovation. McKinsey Quarterly, July 2009.
- Jouret, Guido. Inside Cisco's Search for the Next Big Idea, Harvard Business Review, Sept. 2009.
- X Prize Foundation, xprize.org



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Create Breakthrough Innovation the X Prize Way

Appendix

American Industrial Hygiene Association Breakthrough Prize

Example Materials

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Preconference Promotion Explanation

AIHA Breakthrough Prize Frequently Asked Questions

What is the purpose of the AIHA Breakthrough Innovation Prize?

This new initiative is designed to pursue innovative solutions and strategies for persistent challenges. We have chosen two: regulatory environment in North America and the global IH practices for protecting worker health and safety.

You know how we have addressed these challenges in the past—often too slow, too bureaucratic, and too ineffective. What if we saw these challenges as opportunities for real breakthrough thinking? What if we tried something that is definitely not business as usual—where we break free of the limitations of our current system and approaches?

AIHA is basing this breakthrough innovation prize on the work of Peter Diamandis, our AIHce opening session speaker, and his X Prize Foundation. The X Prize is designed to spur innovation and breakthrough achievements in areas that are rich with opportunity and yet stuck in current thinking and approaches. The most successful X Prize was awarded for commercial human spaceflight.

Who should compete?

You don't have to be an expert in the subject. Anyone who can think in different ways to get surprising results should compete. Expertise could actually limit your creativity and boldness. You will be competing as part of a team. You are welcome to recruit your teammates in advance or just come to the session and pick-up a team there.

When do we compete?

You have one of two opportunities at AIHce to compete:

Monday, June 1, 2-5 pm: Regulatory Environment in North America

Wednesday, June 3, 1-4 pm: Global IH Practices for Protecting Worker Health and Safety

How do we compete?

Teams will collaborate in a professionally facilitated 3-hour session. Each session will begin with a brief overview of the breakthrough innovation opportunity and an orientation to our innovation work process. Most of the session will be interactive teamwork to foster breakthrough thinking, including processes for brainstorming possibilities, challenging assumptions, designing and planning innovative solutions and strategies and pitching your innovation to our panel of expert judges. Even if you are not the winning team, you will experience a process and tools to help your own work teams be more innovative and successful.

What Is the Prize?

Bragging rights among your peers for your innovative thinking. Professional recognition in AIHA publications. An expenses-paid opportunity to present your innovation to the AIHA Board of Directors at its July retreat.

The ultimate reward could be securing the board's approval for a new signature initiative to execute your proposal. You could secure a significant and successful breakthrough for the IH profession.

Program Description Breakthrough Innovation Challenge 1

IH Regulatory Environment in the US

2:00 p.m. – 5:00 p.m.

The Prize. AIHA Breakthrough Thinking Prize seeks innovative solutions to OEHS challenges! Opening Session speaker, Peter Diamandis of the X-Prize Foundation described how inspired competition can spur breakthrough achievements.

AIHA is providing a similar competitive and collaborative approach to OEHS challenges. A Breakthrough Prize will be offered to spur innovative thinking in two areas of opportunity during two special sessions. The winning team will achieve recognition within AIHA channels as well as an expenses paid trip for the winning team's rep to present its breakthrough opportunity to the AIHA Board of Directors at their July, 2009 board strategic planning session.

Opportunity Statement. What innovative alternatives to the US regulatory approach could create breakthroughs in worker health and safety? The greatest opportunity for breakthrough innovation is in illness prevention, especially long-term physical and chemical exposure.

Focal areas with Breakthrough potential are: Standard-setting, Enforcement (Inspections and Penalty Structure), Compliance Assistance, and Collaborative Activities.

Guiding Principles for Breakthrough Solutions: Effective in achieving worker health; Efficient in developing and administering coherent regulations and practices, Transparent and accountable to workers, employers and society; and Leverages AIHA's capacities as catalyst, convener and leader.

Session Format. This will not be your typical session! The room will be set in rounds to accommodate team formation. A team of experts will kick off the session with a quick overview of the opportunities and also be available to consult with teams during the session. A professional facilitator will coach the teams through a series of innovative processes and practices. Come to the session with an organized team through your committee, local section, or colleagues, or show up at the session and select a team. There will not be space in the room for "observers." Bring an open mind, positive energy, your ideas, and solution-oriented thinking. You, and/or your team may be the winner of the AIHA X-PRIZE!

Expert Panel: J. Henshaw, Henshaw and Associates, Inc., Sanibel, FL; F. Mirer, Hunter Urban Public Health Program, New York, NY; F. White, Organization Resources Counselors, Inc., Washington DC.

Facilitator: M. Rhea, Signature i, LLC, Alexandria, VA.

Program Description Breakthrough Innovation Challenge 2

The Practice of Global Occupational Hygiene

1:00 p.m. - 4:00 p.m.

The Prize. AIHA Breakthrough Thinking Prize seeks innovative solutions to OEHS challenges! Opening Session speaker Peter Diamandis of the X-Prize Foundation described how inspired competition can spur breakthrough achievements. AIHA is providing a similar competitive and collaborative approach to OEHS challenges. A Breakthrough Prize will be offered to spur innovative thinking in two areas of opportunity during two special sessions. The winning team will achieve recognition within AIHA channels as well as an expenses paid trip for the winning team's rep to present its breakthrough opportunity to the AIHA Board of Directors at their July, 2009 board strategic planning session.

Opportunity Statement. How can the worldwide demand for competent occupational hygiene professionals be addressed, particularly in developing countries where the rate of industrialization and risk to the population outpaces the supply of OH professionals?

Focal areas with Breakthrough potential: Internationally recognized qualifications; Competency standards for professional practice; Platforms and methods for training, mentoring, and recruitment; and Measuring competencies.

Guiding Principles for Breakthrough Solutions: Global recognition of minimum competency requirements; Fundamental skills training that address core competencies; Universally accessible and locally adapted options for training; Improvement of worker health and safety globally; Leverages AIHA's capacities as catalyst, convener and leader.

Session Format. This will not be your typical session! The room will be set in rounds to accommodate team formation. A panel of experts will kick off the session with a quick overview of the opportunities and also be available to consult with teams during the session. A professional facilitator will coach the teams through a series of innovative processes and practices. Come to the session with an organized team through your committee, local section, or colleagues, or show up at the session and select a team. There will not be space in the room for "observers." Bring an open mind, positive energy, your ideas and solution-oriented thinking. You, and/or your team may be the winner of the AIHA X-PRIZE!

Expert Panel: R. Alesbury, British Petroleum, Sunbury on Thames, UK; S. Bailey, British Occupational Hygiene Society; UK; S. Johnson, Australian Institute of Occupational Hygienists, Australia; G. McCluskey, Academy of Industrial Hygiene, USA. Facilitator: M. Rhea, Signature i, Alexandria, VA.

Breakthrough Innovation Session Agenda

IH Regulatory Environment in the US

Monday, June 1, 2-5 pm

AIHA Breakthrough Innovation Prize

2:00 pm

Welcome and Orientation—Marsha Rhea, Facilitator and President, Signature i, LLC

A. Objectives

- Offer an interactive experience in innovative thinking, problem solving and team collaboration
- Identify innovative solutions to persistent challenges that AIHA can champion
- Empower members to engage with this challenge beyond the annual conference experience

B. Our Breakthrough Innovation Work Process

- **Explore** current challenges, future assumptions and strategic opportunities.
- **Define** the problem you want to overcome.
- **Design** an innovative solution or strategy. Your innovation can be:
 - Incremental—if widely adopted would be significant
 - Disruptive—alternative approach that changes the game
 - Transformative—changes the system's paradigm and practices
- **Plan** action steps the profession, AIHA or other leaders might take to execute this solution or strategy.
- **Identify** critical factors for success, such as financial resources, professional competencies, key leaders and stakeholders, technologies, political power
- **Brand** your innovation to attract attention and support.

C. Guiding Principles—How Your Breakthrough Will Be Judged

- Effective in achieving worker health
- Efficient in developing and administering coherent regulations and practices, and
- Transparent and accountable to workers, employers and society
- Leverages AIHA's capacities as catalyst, convener and leader

D. Introduction of Our Expert Panel

- J. Henshaw, Henshaw and Associates, Inc., Sanibel, FL;
- F. Mirer, Hunter Urban Public Health Program, New York, NY;
- F. White, Organization Resources Counselors, Inc., Washington DC.

Statement of Opportunity and Areas with Potential for Breakthrough

*What innovative alternatives to the US regulatory approach could create breakthroughs in worker health and safety?
The greatest opportunity for breakthrough innovation is in illness prevention, especially long-term physical and*

chemical exposure. The current regulatory environment is challenged to keep pace with a changing American workplace: many regulations are out of date while other risks and hazards are not even addressed.

FOCAL AREAS WITH BREAKTHROUGH POTENTIAL

- *Standard-setting*
- *Enforcement (Inspections and Penalty Structure)*
- *Compliance Assistance*
- *Collaborative Activities*

2:30 pm

Teams Explore Current Challenges, Future Assumptions and Strategic Opportunities

2:50 pm

Teams Brainstorm Possible Breakthrough Innovations

Follow our process to select the innovation your team will develop.

3:10 pm

Teams Design Breakthrough Innovation

1. **Plan** the action steps the profession, AIHA or other leaders might take to execute this solution or strategy.
2. **Identify** critical factors for success, such as financial resources, professional competencies, key leaders and stakeholders, technologies, political power
3. **Brand** your innovation to attract attention and support. Plan how to pitch your innovation.

3:50 pm

Teams Present Innovations for Judging

Each team will get 3 minutes to present. Judges may ask follow-up questions as time permits.

3:30 pm

Great Insights and Possibilities—Group Dialogue

Let's reflect on the power to use breakthrough innovation to get to new possibilities.

3:45 pm

Announcing the Prize Finalist—Our Experts

What is the most promising innovation for AIHA to pursue? What other great ideas deserve more discussion and development?

Breakthrough Innovation Team Work Process Instructions

Breakthrough Innovation Work Process

Your team will be working through these steps. Your facilitator will help you stay on time and track for a successful outcome.

1. **Explore** current challenges, future assumptions and strategic opportunities.
2. **Define** the problem you want to overcome.
3. **Design** an innovative solution or strategy. Your innovation can be:
 - a. Incremental—if widely adopted would be significant
 - b. Disruptive—alternative approach that changes the game
 - c. Transformative—changes the system's paradigm and practices
4. **Plan** action steps the profession, AIHA or other leaders might take to execute this solution or strategy.
5. **Identify** critical factors for success, such as financial resources, professional competencies, key leaders and stakeholders, technologies, political power
6. **Brand** your innovation to attract attention and support within AIHA and beyond.

1. Explore & 2. Define (20 minutes)

Please select 1 team member to facilitate and flip chart your discussion. Feel free to choose another team member to facilitate and flip chart at any point in this work process.

Begin by having each team member jot down 2-3 possible innovations to develop. Share these quickly around the table. Limit your explanations. Just scout out the focal areas and possible innovations that have the greatest interest to your group.

Then use these questions to define the problem you want to overcome:

- Which focal area and problem do we want to solve? What current challenge interests us most?
- What are our future assumptions? What new events, developments or capabilities could change the game?
- What is the strategic opportunity? What conditions are ripe for innovation?

3. Design (15 minutes)

Use these questions to design your innovation:

- a. What is your desired outcome?
- b. What type of innovation will you need? Incremental, Disruptive, Transformative?
- c. Which breakthrough from your exploratory phase seems most promising? Do you now see other promising options?

Choose the breakthrough innovation you want to propose and plan.

4. Plan and 5. Identify (15 minutes)

Answer these questions to plan your breakthrough innovation. Don't panic. You don't need all the answers today to win. What we value most in this session are the great ideas that will come from collaborative and innovative thinking. We just need sufficient planning to show how we might move from idea to proof of concept.

- a. What are the action steps the profession will need to take to execute this strategy or solution?
- b. Who are the change leaders who must be on board to make this happen?
- c. Who must be influenced to support this innovation?
- d. What resources would be needed?
- e. What professional competencies and capabilities are needed?
- f. What technological capabilities are necessary?
- g. Are there any other critical requirements and conditions for success?

6. Brand (10 minutes)

In the branding phase, you have two important objectives:

- *Branding your innovation for wide appeal and excitement with the profession, other key stakeholders, even the general public. Create the excitement to make your idea a reality.*
- *Organizing your proposal presentation to compete for the prize. Clarity and creativity are important.*

You will only have three minutes to make your presentation. Plan carefully who and how you will do this.

AIHA Breakthrough Prize Summary Report

AIHA Breakthrough Prize for Innovations in Industrial Hygiene

The AIHA Breakthrough Prize identifies innovative solutions to persistent challenges in industrial hygiene. The prize was the centerpiece of AIHce 2009 breakthrough learning experiences on two challenge areas: IH regulatory environment in the US and the practice of global occupational hygiene.

AIHce 2009 opening session speaker Peter Diamandis, creator of the X Prize Foundation, described how inspired competition can spur breakthrough achievements in areas rich with opportunity and yet stuck in current thinking and approaches. The most successful X Prize was awarded for commercial human spaceflight. The X Prize Foundation's innovative approach has these features which AIHA adapted to its purposes:

- A clear statement of the opportunity, guiding principles, focal areas with breakthrough potential and defined outcomes for winning the prize. (Included for both challenge areas in this report.)
- An emphasis on team building and collaboration as well as competition and recognition for achieving winning results.
- A vehicle for generating greater public understanding of why an opportunity merits breakthrough solutions.

People could form their teams in advance or organize a team on site. Four teams competed in the regulatory environment challenge and three teams competed in the global occupational hygiene challenge. A team of experts kicked off each session with a quick overview of the opportunities and then judged the presentations to select a finalist. Marsha Rhea, CAE, president of Signature i, LLC, facilitated the teams through a process to choose a breakthrough opportunity, propose innovative strategies or solutions, and describe the steps for execution. The teams gave oral presentations. The two finalist teams submitted more detailed descriptions after the competition.

The AIHA Executive Committee will review the two finalist proposals and select one winner. The winning team's representative will receive an expenses-paid trip to present its breakthrough opportunity to the AIHA Board of Directors at its July 2009 strategic planning meeting in Denver. The ultimate prize will be securing board approval for a new signature initiative to develop and implement the team's breakthrough. AIHA expects to harvest new ideas and thinking from all the competing teams beyond the prize-winning idea. Many of these ideas are potentially complementary and incorporate similar approaches to managing risk, educating and empowering workers, and using technologies to collaborate.

This initiative helps spur member engagement and open source innovation for the association beyond the AIHce conference. In the action learning debrief for the two sessions, participants said they liked this type of collaborative learning experience and would like to see it continued.

This report describes the two challenge areas in more detail and includes the two finalist proposals as well as a recap of what the other competing teams proposed.

IH Regulatory Environment in the US

June 1, 2009, 4 competing teams

Statement of Opportunity and Areas with Potential for Breakthrough

What innovative alternatives to the US regulatory approach could create breakthroughs in worker health and safety? The greatest opportunity for breakthrough innovation is in illness prevention, especially long-term physical and chemical exposure. The current regulatory environment is challenged to keep pace with a changing American workplace: many regulations are out of date while other risks and hazards are not even addressed.

FOCAL AREAS WITH BREAKTHROUGH POTENTIAL

- *Standard-setting*
- *Enforcement (Inspections and Penalty Structure)*
- *Compliance Assistance*
- *Collaborative Activities*

Expert Panel and Judges:

John Henshaw, CIH, Henshaw and Associates, Inc., Sanibel, FL
Frank Mirer, Ph.D., CIH, Hunter Urban Public Health Program, New York, NY
Frank White, Organization Resources Counselors, Inc., Washington DC

AIHA Breakthrough Innovation Prize Finalist: Risk Assessment Methods

AIHA could take the lead in developing risk assessment methods that are science based and adopted through consensus processes.

The Problem:

OSHA was a major driver of H&S progress early in its implementation; however, due to its underlying legislative basis and other political factors, it has not been able to keep up with new developments in H&S standard practice. Most OSHA standards, including its list of Permissible Exposure Limits (PEL's) are decades old and seriously, even perhaps dangerously, out of date. While some (mostly large) organizations have moved voluntarily to adopt Occupational Exposure Limits (OEL's) based on research from several consensus standards groups, many others have not and still rely on the old OSHA standards. Likewise, almost all the other OSHA safety standards are seriously out of date, many based on consensus standards from the 1960's and 1970's. There do not appear to be any legislative solutions that are politically viable at this time, even with a change in administration.

Meanwhile, other countries, particularly the European Union (EU) have moved forward with a different regulatory scheme, based on a requirement for employers to conduct risk assessments in their operations. Based on the results of the risk assessment, risk reductions are required where excess risk exists. While there are some specific regulations that companies must maintain in compliance, to a large extent they are free to use industry and consensus standards in determining the most effective risk management tools. The regulatory bodies work cooperatively with the employers to identify options for improvement; however they have substantial powers to deal

with recalcitrant companies if needed. Transparency in the risk assessment process is aided by mandating that employees be directly involved. Experience of many U.S. companies with sites in the E.U. has shown that these sites are often far ahead of their U.S. counterparts in making progress in employee health and safety.

The Proposed Solution:

We propose that OSHA focus on the development of a performance standard that would require employers to review their operations and conduct risk assessments to identify areas where improvements would be necessary. The model provided in ANSI Z-10 could be used as the risk assessment basis. In addition, OSHA's Standard 1910.119, "Process safety management of highly hazardous chemicals" could provide ideas for the structure of the standard, for example, requiring employee participation. Employers would be required, as now, to comply with existing OSHA regulations. However, in implementing corrective actions to reduce excess risk, employers should be explicitly allowed to adopt national consensus standards where available without being exposed to fines or penalties.

Of course, the requirements for completion of risk assessments would need to be phased in over time, and would need to address the challenges faced by small businesses in conducting the risk assessments. However, assisting employers in the risk assessment process in a cooperative manner would be a good utilization of OSHA's resources. Trade and professional associations could also be a valuable source for assistance, technical advice, and development of industry-specific risk assessment guidelines.

With this change in focus, OSHA could reallocate its resources away from the often futile process of developing and promulgating standards to providing more direct assistance to employers who want and need it. We also believe that OSHA should be given more ability to focus enforcement activity on those organizations who do not implement the risk assessment process and whose injury/illness experience is adverse. The penalty structure should be changed to allow fines that would have significant economic consequences for those who choose not to implement the risk assessment program and improvements based on the risk assessment.

These changes would work to remove the roadblocks to effective regulation of health and safety hazards in the U.S. While we have made good progress in the last 35 years in controlling those hazards, there are many challenges ahead, with new technologies being implemented and changes in the workforce. We are losing ground to other countries around the world in an area where the U.S. has always been a leader. We need to free our regulatory structure and our employers from the current constraints and allow both to move forward in the most effective and efficient manner possible.

Team Members: David Downs, Nancy Orr, Jan Rhodes, Glenn Barbi, Bill Heim, and David Albinus

Other Regulatory Environment Breakthrough Innovations

National Monthly Health and Safety Discussion Day. This social innovation encourages school children from kindergarten age and older, families, and CEOs to talk about health and safety on a regular basis. Instilling health and safety concepts in children will be an unstoppable force. As they grow up to be workers and CEOs they will carry that training with them. The team envisioned a collaboration of trade associations, agencies, schools and other networks with Michelle Obama as the national spokesperson. The team envisioned combining health and safety knowledge with participatory learning materials and processes. The campaign would have a very personal focus on people telling stories and caring about one another.

Team Members: James Mair, Michael Sprinker, Dinkar Mokadam, Carol Rice, Dean Lillquist, Bernard Silverstein, Edward Queredo

Business License to Operate. New businesses have to register with the IRS and prove they have workers comp but they never have to prove they have a health and safety program or any type of risk assessment. This approach should fit both small and large businesses. Every company would need a license to operate that includes identification of hazards and controls methods that work (such as chemical control banding and labor management safety programs). Companies would be registered in a database and track occupational injuries to see if their control measures are working. Companies could operate at a basic control level or receive tax incentives to move to a higher level of control. OSHA would consult with companies seeking to operate at higher levels of control.

Team Members: Nancy Pearce, Anne Bracker, Cynthia Holloway, Leah Aleyon, Alan Rogers, Kathy Flannery

Collaborative Outreach Campaign. AIHA could develop the overall strategy to provide information directly to workers about how to protect health and safety. The breakthrough thinking is to make this a collaborative process with all stakeholders (professional societies, NGOs, trade unions, federal agencies). This collaborative outreach campaign would encourage and educate joint health and safety committees and empower them to do job safety analyses to address risks in the workplace. AIHA could train the employees in these risk assessment processes. Among the incentives might be a governors' competition among the states, CM points for individuals giving their time and financial incentives to participating companies.

Team Members: Tom Butler, Jim Hollingsworth, Al Kobylinski, Elizabeth Fraser, Scott Schneider, John Seibert, Penny Goodstein, Jeanne Fallon-Carine

The Practice of Global Occupational Hygiene

June 3, 2009, 3 teams competing (1 proposed 2 innovations)

Statement of Opportunity and Areas with Potential for Breakthrough

How can the worldwide demand for competent occupational hygiene professionals be addressed, particularly in developing countries where the rate of industrialization and risk to the population outpaces the supply of occupational hygiene professionals?

FOCAL AREAS WITH BREAKTHROUGH POTENTIAL

- *Creating demand and awareness for global occupational health through a socioeconomic framework*
- *Internationally recognized qualifications and competency standards for professional practice*
- *Platforms and methods for global training, mentoring, and recruitment*

Expert Panel and Judges:

Roger Alesbury, British Petroleum, Sunbury on Thames, Great Britain
Steve Bailey, President, British Occupational Hygiene Society, Great Britain

Sharann Johnson, President, Australian Institute of Occupational Hygienists, Australia
Gayla McCluskey, Vice-President, Academy of Industrial Hygiene, United States

AIHA Breakthrough Innovation Prize Finalist: Local Hero

Opportunity Statement: How can worldwide demand for competent occupational hygiene professionals be addressed, particularly in developing countries where the rate of industrialization and risk to population outpaces the supply of OH professionals.

Key Barriers Identified:

- Current drivers are stronger for basic safety and security (Maslow's hierarchy of needs)
- Lack of knowledge of actual impacts to individual and family health from occupational exposures
- Occupational Hygienist is not a recognized professional or "symbol of help" (as a local physician would be for example)
- Trained hygienists are non-existent or sparse and often leave for better pay in more developed nations

Vision:

- Hygienists are recognized as someone who will help prevent disease for people and their families.
- Higher level of knowledge of occupational health risks and access preventative measures

Strategy:

A multifaceted social marketing campaign focused on promoting an occupational health risk professional as a "Local Hero".

- Extensive social marketing is done for public health (e.g. water treatment, HIV prevention, birth control, malaria prevention etc.) but little has been done to promote occupational hygiene. Currently there is a need but not demand.
- The goal is to drive demand for hygienists as respected members of the community and as those who can help/save family members
- The symbol of the hygienist will be connected to common hazards, raising general awareness (demand for services) as well as driving demand for hygienists
- Raising the value of hygienists in the community will improve long term retention of trained professionals

Method:

- Develop the image of the local or community hero helping families and loved ones in preventing exposures to hazardous materials
- Design the delivery of the image
 - Via corporate sector (who will benefit from decreased absenteeism and increased public image), policy makers, and community (health organization, NGOs etc.)
 - Context driven multimedia accounting for cultural values and practices
 - Community outreach such as plays and skits

- You tube shorts
- Posters, radio, newspapers
- Deliver with alongside or partnering with public health interventions
- High rates of participation would be the crucial
- Image portrayed of occupational health being tied to good community/family life
- Possibly create an incentive system – Global reporting sustainability index (GR3), X-prize type financial incentives for corporation who penetrate the society outside their industry etc.

Involvement:

- Program would need an owner/overseer such as AIHA in conjunction with IOHA
- An experienced marketing group specializing in social marketing would handle the delivery
- Key partners would include:
 - WHO
 - ILO
 - Various multinational corporations

Team Members – Jason Hoffman, John Mulhausen, Jeanne Fallon, Rob Ferrie

Other Global Occupational Hygiene Breakthrough Innovations

Health and Safety Wikipedia. AIHA could use a wiki to create a global repository of best practices that could lead eventually to voluntary global scientific standards. Global organizations would contribute their information. Individuals could get CM points for contributing. This technology platform could support peer review but additional processes might be needed to resolve conflicts. The goal would be to keep the information simple and easy to translate to support mobile access. The team who developed the World Health and Safety University proposal also submitted this innovation. They believe the innovations could be linked.

World Health and Safety University. This online university and accrediting body would use the resources of AIHA to develop a curriculum that students around the world could use to become certified IH techs. Students would be recruited from the greatest areas of need including China and India where the university-educated populace is large and professional job options are often limited. Funding for this project would primarily funnel from corporate sources. The value for the supporting companies would be in marketing their products with the WHSU insignia. A global safety icon would be developed and placed on products from companies supporting and utilizing WHSU graduates. This symbol would indicate that products had been “manufactured safely.” WHSU would also provide a source of well-trained labor for international companies seeking local health and safety specialists. Finally, WHSU would improve safety and health communication across the world. Students would partner with local industries and train in local factories. Their pictures and anecdotes would become the next day’s virtual classroom discussion. This online learning tool could support an entire world community of budding safety and health professionals while providing companies with affordable, local safety and health resources. (Description provided by Lindsay Grainger)

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Healthy Workers Clearinghouse. This initiative proposes to connect all web efforts now underway like the I-Web to the needs of developing countries. The clearinghouse would profile all projects and coordinate with all in-person programs like the ambassadorship program. Electronic delivery training modules could be part of the clearinghouse. The clearinghouse could reach out to NGOs and universities to identify their needs. If business travelers are interested in giving guest lectures, they could

connect with local institutions and organizations. Another possibility would be to pair local sections with foreign cities much like the Sister Cities Program. The clearinghouse could also assist with vendor equipment donation programs.

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