Scientists, technologists, engineers and mathematicians are workers driving innovation, coveted by companies around the globe. Their ranks are growing. In the last decade STEM jobs in the US grew by 7.9 percent to 7.6 million – three times the rate of other fields according to the U.S. Department of Commerce’s Economics and Statistics Administration. STEM jobs are expected to grow by 17 percent through 2018, compared with 9.8 percent for other jobs.

STEM workers have also been less affected by the economic downturn; in 2010 workers with STEM jobs had a 5.3 percent unemployment rate while non-STEM workers experienced an almost 10 percent unemployment rate. STEM workers earn 25 percent more than individuals in non-STEM fields. Their skills should be in even higher demand as the economy picks up and technically skilled Baby Boomers decide to retire.

Many U.S. business leaders worry that there is a coming STEM talent shortage and are working with academia to build their future talent pipeline. Increasing interest in STEM careers at the K-12 level and improving levels of engagement with minority, female and lower income students will be crucial if there is to be a higher supply of STEM grads. There’s also the matter of follow through at the collegiate level – studies have found that roughly “40 percent of students planning engineering and science majors end up switching to other subjects or failing to get any degree.” Keeping STEM collegians on track must become a national priority. The President has also emphasized the critical role of community colleges, envisioning a system where they become “community career centers – places that teach people skills that local businesses are looking for right now, from data management to high-tech manufacturing.”

The US is at a competitive disadvantage in terms of its ability to generate homegrown STEM talent - only a third of bachelor’s degrees earned in the US are in a STEM field, compared with 53 percent of first degrees in China and 63 percent in Japan. Furthermore, a large number of US STEM degrees are being awarded to foreign students who are choosing to return home. Foreign nationals in the US now earn 70 percent of the doctorates awarded in electrical engineering and half of the master’s degrees. In 2006 NSF data revealed that foreign students earned 36.2 percent of the doctorate degrees in the sciences and 63.6 percent of the doctorates in engineering. Many talented graduates intend to leave the US; a recent Kauffman Foundation study found that only six percent of Indian, ten percent of Chinese, and 15 percent of European students would like to stay in the U.S. permanently. A cumbersome visa system is not the only factor in their decision – only seven percent of Chinese students, nine percent of European students and 25 percent of Indian students felt that the best days of the U.S. economy lie ahead.

STEM talent is indeed global and skills must be sourced worldwide. Companies will need visibility into where skills are located and access to them to overcome location mismatch, the challenge of STEM talent not residing where it is needed. Utilizing both traditional labor market intermediaries (staffing agencies, job boards) and emerging intermediaries to reach talent will be vital. This conference will focus on how organizations can recruit, develop and retain the STEM talent needed to excel in the 21st century. Representatives of industry, higher education and government are encouraged to attend and set a course for aligning our nation’s workforce with the needs of employers.
SPEAKERS

ELIZABETH CHARNOCK
CEO, Cataphora

DARYL E. CHUBIN
Director, Center for Advancing Science & Engineering Capacity, American Association for the Advancement of Science (AAAS)

CINDA-SUE DAVIS
Director, Women in Science and Engineering Program, University of Michigan

MARTHA R.A. FIELDS
Director, Quality of Work Life, Diversity and Inclusion, MITRE

FRANK FLORES
Vice President, Engineering, Northrop Grumman

DR. LISA FREHILL
Principal Analyst, Contract Support, Energetics Technology Center; Former Director of Research, Evaluation and Policy, National Action Council for Minorities in Engineering

BILL HARPER
VP, Talent Management & Chief Diversity Officer, Pacific Gas & Electric Co.

CINDI HARPER
Greater Americas Staffing Manager, Intel

ARTHUR C. HEINRICHER
Dean of Undergraduate Studies, Worcester Polytechnic Institute

ROSALIND HUDNELL
Chief Diversity Officer and Global Director of Education & External Relations, Intel

LEA HYKE
Talent Acquisition Director, Granite Ventures

GINA BURNS
Vice President, Workforce Strategy & Talent Acquisition, Lockheed Martin; AIA Workforce Committee Chair

PETER KILPATRICK
Professor and Dean of the College of Engineering, University of Notre Dame

TOM PERRAULT
Vice President of Human Resources, Meebo

DR. KIMBERLÉE SHAUMAN
Associate Professor, UC Davis

EDWARD SWALLOW
Vice President, Business Development, Civil Systems, Northrop Grumman Information Systems; Chairman, STEM Workforce Division, National Defense Industrial Association

ERIC D. FINGERHUT
Vice President for Education and STEM Learning, Battelle Memorial Institute

ANDRES CASTAÑEDA
Director of Recruiting, Idealab

COURTNEY COOK
Senior Vice President of Global Business Practices, Pinstripe

SANJA LICINA
Senior Director, Talent Intelligence & Consulting, CareerBuilder

FRANK MCKAY
Recruiting and University Relations Consultant, Hess

WILLIAM URANGA
Director of Recruiting, Ooyala

MELISSA HARPER
Vice President, Global Talent Acquisition and
SPEAKERS, CONT.

Diversity, Monsanto

ANJUL BHAMBHRI
Vice President, Big Data, IBM Silicon Valley Lab

TRISH MILLINES DZIKO
Executive Director, Technology Access Foundation

KIMBERLY ADMIRE
Vice President, Diversity, Inclusion, and Equal Opportunity Programs, Lockheed Martin

DR. KAMLAL MODI
Research and Outreach Analyst, Girl Scout Research Institute, Girl Scouts of the USA

NANCY GESSLER
Director, EMC Education Services

JAMES STOFAN
Deputy Associate Administrator for Program Integration, NASA

SHERI MILLER
Vice President, SkillSurvey, Inc.

STEPHANIE HIPOLITO
Associate Vice President, Talent Acquisition and Progression, Bridgepoint Education, Inc.

ML KRAKAUER
Executive Vice President, Human Resources, EMC Corporation

DR. CARLIO PARRAVANO
Executive Director, Merck Institute for Science Education

DAN YOO
Senior Director, Business Operations and Business Analytics, LinkedIn

BRENDAN BROWNE
Director, Global Talent Acquisition, LinkedIn

VIRGIL GRIFFIN
Director, Government Operations, Boeing

SHANNON CALLAHAN
Partner, Talent Services, Andreessen Horowitz

MORGAN MISSEN
Head of Talent, foursquare

FERNANDO PAULO
Vice President, Engineering, GREE International, Inc.

ANGELA SHEFFIELD
Head of Strategic Planning, Applied Materials

BONNY SIMI
Vice President, Talent, JetBlue Airways

DR. CARA BARTEK
Director, Employee Development, National Oilwell Varco

LAURIE JACKSON
Senior HR Manager, SAS

DAMON BERKHAUG
Senior Director, Global Staffing, Cisco

JASON GRIFFIN
Vice President, Technology & Shared Services Recruiting Manager, Wells Fargo Technology & Operations Group

RICHARD CHO
Recruiting Manager - Product, Growth and Mobile, Facebook

DANTAYA WILLIAMS
Director, Workforce Diversity, United Technologies Corporation
## Keynote: Defining the Data Science Discipline

As cloud computing and Big Data become more and more prevalent enablers of the digital economy as well as future research and innovations in countless fields and industries, there is a growing shortage of the skills required to seize these emerging opportunities. The role of a “data scientist” has emerged to describe those rare and highly valued individuals who have sufficient subject matter expertise, analytical skills, and information technology know-how to work effectively with Big Data. Big Data holds answers to today’s problems, but we need people who can ask the right questions. STEM education serves as the foundation for this new generation of Data Science professionals. Just as Computer Science emerged as a new discipline a generation ago, and Business Intelligence emerged a decade or so after that, Data Science is emerging as a critical discipline and profession just as the age of Big Data has arrived.

**Keynote Speaker:** ML Krakauer, *Executive Vice President, Human Resources, EMC Corporation*

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## Addressing Talent/Location Mismatch: Global Sourcing of STEM Talent

Is there a STEM talent shortage or is it a mere matter of talent/location mismatch? Research from the Accenture Institute for High Performance suggests that talent is available but not always in the place where it is needed. STEM talent acquisition has to be approached globally but not all companies are prepared. This panel will address methods for identifying and accessing skills with a focus on:

- Getting the right boots on the ground to attract talent in high growth markets (Brazil, India, China)
- What are the best platforms for reaching candidates in various markets?
- What factors besides compensation matter to candidates? Identifying what candidates are looking for in their work (exciting projects, opportunities to advance & grow within an organization)
- Positioning your company to recruit and retain on a global scale
- Building the right employment brand

**Moderator:** Courtney Cook, *Senior Vice President of Global Business Practices, Pinstripe*

**Panelists:** Brendan Browne, *Director, Global Talent Acquisition, LinkedIn*

Damon Berkhaug, *Senior Director, Global Staffing, Cisco*

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**EVENT ORGANIZER**

Whether you are looking to build your own event or trying to decide which industry event will give you the best ROI, Your Event Strategy (YES), LLC can help you with your event strategy. YES is a network of senior event professionals with international experience in event contract negotiation, logistics, program management and sales & marketing. We have developed events in North America, South America, Asia, Africa and Europe. No matter what industry or topic, we have specialists that can handle the project. [www.youreventstrategy.com](http://www.youreventstrategy.com)
### Panel: K-12 Outreach: Building Interest in STEM Careers and Providing Foundational Knowledge
Many companies have realized that they cannot just engage talent at the college level – to have a sufficient talent pool and remain competitive in the future they must build excitement about STEM careers at the K-12 level. By encouraging employee visits to the classroom, setting up competitions and establishing apprenticeship programs, organizations are helping to build their future STEM workforce. Colleges have been instrumental in this effort, increasing student interest by hosting summer camps, training teachers, organizing science fairs and field trips. Success in K-12 STEM education will be vital in developing the future STEM workforce. This panel session will address:

- The emergence of STEM-focused schools: Which models work?
- Enhancing the capacity of K-12 teachers
- Bringing working STEM professionals & university students into classrooms to serve as mentors and content experts, classroom presenters
- The necessity of discussing STEM careers and encouraging students to pursue these disciplines

**Moderator:** Trish Millines Dziko, *Executive Director, Technology Access Foundation*

**Panelists:**
- Eric Fingerhut, *VP, Education & STEM Learning, Battelle Memorial Institute*
- Dr. Kamla Modi, *Research and Outreach Analyst, Girl Scout Research Institute, Girl Scouts of the USA*
- James Stofan, *Deputy Associate Administrator for Program Integration, NASA*
- Dr. Carlo Parravano, *Executive Director, Merck Institute for Science Education*

### 10:20 Networking Break

### Panel: Keeping STEM Talent Engaged at the College Level
About 40 percent of students who start in engineering and science majors end up switching to other subjects or not even earning a degree. For the K-12 educators who put so much time and energy into building student enthusiasm for STEM careers this is an especially bitter pill to swallow. Why is such a large pool of STEM talent being lost at the collegiate level? Are more interactive teaching techniques needed? Is the fear of low grades in introductory math and science courses leading students to the humanities and social sciences? Does a heavy helping of theory need to be balanced out with project-based learning to keep students engaged? This panel will focus on ways in which educators and companies can collaborate to keep STEM collegians on track.

**Panelists:**
- Cinda-Sue Davis, *Director, Women in Science and Engineering (WISE) Program, University of Michigan*
- Peter Kilpatrick, *Professor and Dean of the College of Engineering, University of Notre Dame*
- Arthur C. Heinricher, *Dean of Undergraduate Studies, Worcester Polytechnic Institute*
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<th>Time</th>
<th>Session Title</th>
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<tr>
<td>11:30</td>
<td><strong>Utilizing Your Internship Program as an Effective Recruitment Platform</strong></td>
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<td>A company’s intern pool is an important pipeline for full-time roles, consisting of candidates who are already familiar with the company’s mission and culture and have in some cases excelled during a trial period. Hiring your best interns is often a better proposition than entry-level recruiting and far less costly – during the economic downturn internship recruiting has indeed become more prominent. Most companies now recognize internships as one of their most effective recruiting tools, an audition for both the employer and would be employee. This session will address how companies can develop effective STEM internship programs which lead to full time employment.</td>
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<td>- Providing mentorship</td>
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<td>- The necessities: Housing and transportation assistance</td>
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<td>- Avoiding a summer of making photocopies: The need for meaningful work that will make interns want to come back</td>
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<td>Panelists:</td>
<td>Frank McKay, Recruiting and University Relations Consultant, Hess Corporation</td>
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<td>Gina Burns, Vice President, Workforce Strategy &amp; Talent Acquisition, Lockheed Martin; AIA Workforce Committee Chair</td>
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<td>Bonny Simi, VP, Talent, JetBlue Airways</td>
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<td>12:10</td>
<td>Lunch</td>
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<td>1:10</td>
<td><strong>How to Improve Quality-of-Hire with Reference-Checking</strong></td>
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<td>Research from the Society for Human Resource Management shows that 96 percent of HR professionals conduct reference-checks, yet less than 25 percent of those checks are able to produce adequate information beyond employment verification. To better equip human resources practitioners with the best practices that close this gap, this session will explain how to obtain 360-degree behavioral feedback about potential candidates that predicts their long-term success and performance on-the-job. Research will also be shared showing the newest results from industrial organizational psychologists that support the reliability, compliance and validity of modern-day reference-checking. Best practices will also be shared from case studies of practitioners, including Bridgepoint Education, who tracked how reference-checking has influenced their hiring processes and programs.</td>
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<td></td>
<td>Stephanie Hipolito, Associate Vice President, Talent Acquisition and Progression, Bridgepoint Education, Inc.</td>
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<td>Sheri Miller, Vice President, SkillSurvey, Inc.</td>
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**THE TMA DIFFERENCE**

TMA strictly enforces an attendance policy to guarantee the best possible experience for our speakers and attendees. TMA maintains a 70/30 split between practitioners from end user companies and vendors that provide talent management and recruitment solutions.

www.the-tma.org
1:50 | **Panel: The Imperative of STEM Diversity: Increasing Engagement with Minority, Female and Low Income Students**

Low engagement with minority, female and lower-income students is a serious concern as the nation seeks to grow its STEM workforce. Minorities are greatly underrepresented among STEM graduates. This is not just a workforce supply issue but also a productivity challenge -- industry executives increasingly acknowledge that a diverse set of experiences, perspectives and backgrounds are critical for innovation. It’s especially true in STEM fields where workers must often collaborate and think about a problem in new and different ways to achieve a solution. A diverse and inclusive workforce also serves as a major draw as companies compete for talent. This panel session will address:

- Supporting high-need school districts where science facilities are in poor condition and there are few STEM role models
- What changes need to be made at all levels to produce the diverse pool of scientists and engineers that we need to remain competitive?
- Engaging, developing and retaining a diverse STEM workforce

**Moderator:** Daryl E. Chubin, *Director, Center for Advancing Science & Engineering Capacity, American Association for the Advancement of Science (AAAS)*

**Panelists:**
- Martha R.A. Fields, *Director, Quality of Work Life, Diversity and Inclusion, MITRE*
- Rosalind Hudnell, *Chief Diversity Officer and Global Director of Education & External Relations, Intel*
- Kimberly Admire, *Vice President, Diversity, Inclusion, and Equal Opportunity Programs, Lockheed Martin*

2:30 | Networking Break

3:00 | **STEM at the Crossroads: Diversity, Opportunity and Growth**

There are numerous studies that continue to show the impact of the recent recession on STEM hiring, perceived opportunity in those fields, and the overall state of employment in the country. There is plenty of data to support prognostications of doom or zoom. What is clear from years of study in the aerospace & defense market, and the larger STEM workforce, is the inexorable need for innovation, creativity and scientific expertise to fuel the economic growth needed to make our country more secure, both economically and politically. Edward Swallow will share data from over eight years of research demonstrating there is plenty of opportunity, that retirements will significantly influence the make-up of the industry and that these trends can be extrapolated to many other industries.

**Speaker:** Edward Swallow, *Vice President, Business Development, Civil Systems, Northrop Grumman Information Systems; Chairman, STEM Workforce Division, National Defense Industrial Association*
Panel: Retaining Women in Science & Engineering

More than 20% of engineering school graduates are women but only 11% of practicing engineers. Among women surveyed by the Center for the Study of the Workplace at UW-Milwaukee, nearly half said they left engineering jobs because of negative work conditions, too much travel, lack of advancement or low salary. One in three left because they did not like the workplace climate, their boss or the culture. Among women who did not enter engineering after graduating, one third cited perceptions of the field as being inflexible or a workplace culture that was non-supportive of women.

In an earlier study, the Center for Work-Life Policy provided five primary reasons why women leave science, engineering and technology careers:

- Hostility of the workplace culture
- The isolation that comes when a woman is the only female on her team or at her rank
- A disconnect between women’s preferred work rhythms and “the risky ‘diving catch’ and ‘firefighting’ behavior that is recognized and rewarded in these male-dominated fields.”
- Extreme jobs with long workweeks and punishing travel schedules, which cannot be sustained by women with families
- Mystery around career advancement. “Isolated and lacking sponsors, they cannot discern the pathway that will allow them to make steady progress upward. The result is that women tend to find themselves shunted into roles as executors or helpers ... while men occupy the more illustrious creator and producer roles.”

How are companies breaking this cycle and creating a climate which allows them to retain talented women, providing them with a peer network, mentoring, skills-based training & professional development opportunities and a transparent career path? Beyond flexible work options, what steps should your company take to bolster retention? If your organization is already using surveys of job satisfaction and exit interviews to identify problems, what action steps are being taken to reduce attrition?

This session will also address how you can engage women - including working mothers - in STEM fields. National Oilwell Varco’s Dr. Cara Bartek will address how progressive maternity leave practices, child care support or onsite-care and flexible working arrangements such as telecommuting, job-sharing or flextime attract working mothers to an organization. Engaging and retaining working mothers is accomplished as part of greater development practices such as executive sponsorship, career pathing and tracking, talent management, and transparent promotion practices.

Panelists: Dr. Lisa Frehill, Principal Analyst, Contract Support, Energetics Technology Inter; Former Director of Research, Evaluation and Policy, National Action Council for Minorities in Engineering
Dr. Kimberlee Shauman, Associate Professor, UC Davis
Dr. Cara Bartek, Director, Employee Development, National Oilwell Varco
Keynote: The Effects of Globalization on Talent Acquisition
A number of significant global trends are affecting what it takes to compete for talent in today’s marketplace. Among those are globalization, technology and speed of change. These are among the trends that affect how today’s workforce looks for jobs and their concept of what makes a great workplace. This discussion will take a look at some of these effects on talent acquisition, particularly:

- Internal team structures and capabilities: What are some of those roles today and in the future that will be differentiators for talent acquisition departments?
- Technology: Social media, mobile, and getting the most ROI out of applicant tracking systems
- Employer branding: One of the most innovative and powerful recruiting tools
- Candidate demands and trends: How they look for jobs, operating proactively, and leveraging the candidate experience

Melissa Harper, Vice President, Global Talent Acquisition and Diversity, Monsanto
### 8:45

**Panel: Winning the Talent War: Attracting and Retaining Software Engineers**

Competition for talented software engineers – particularly those skilled in dynamic languages like Python and Ruby - has heated up, leaving job candidates in the driver’s seat. Many software engineers want to start their own companies rather than joining another firm. Some tech CEOs have arranged for the perfect compromise, hiring these talents while promising to help them start their own companies and pairing them with interested venture capitalists. These methods of recruitment are no doubt unorthodox but hardly unprecedented. Companies like Google, Facebook, Apple and Yahoo, as well as a plethora of smaller firms, are pulling out all stops to attract employees. Free meals, on-site gourmet chefs, massage chairs, in house physicians, dry cleaning services, financial assistance for adoption – work campuses and benefit packages have indeed been tailored with coveted talent in mind. Hear from HR executives and recruiting directors who have succeeded in wooing – and keeping – top talent. How are they reaching candidates (i.e. social media, video interviewing)? What other factors – beyond compensation and perks – weigh into a candidate’s decision?

**Moderator:** Morgan Missen, *Head of Talent, Foursquare*

**Panelists:**
- Cindi Harper, *Greater Americas Staffing Manager, Intel*
- Andres Castañeda, *Director of Recruiting, Idealab*
- William Uranga, *Director of Recruiting, Ooyala*
- Laurie Jackson, *Senior HR Manager, SAS*

### 9:30

**Hire Intelligence: Using Data to Recruit Smarter**

Whether they realize it or not, today’s leaders have access to more data than ever before, providing the opportunity to gain great insight into the habits, preferences and behaviors of their current employees, job candidates and competitors. What gives companies a competitive edge, however, is knowing exactly how to utilize this intelligence to their greatest advantage. This session will review the latest talent intelligence available to leaders today and assess how this data can improve business and hiring decisions to help companies gain a competitive advantage.

**Speakers:**
- Sanja Licina, *Senior Director, Talent Intelligence & Consulting, CareerBuilder*
- Jason Griffin, *Vice President, Technology & Shared Services Recruiting Manager, Wells Fargo Technology & Operations Group*

### 10:15

**Networking Break**
Every solution provider has different goals. With TMA, sponsors can have a package that best fits their budget and aligns with their goals. To discuss custom packages, please contact Audrey Neidlinger at 888-339-9599 x505 or email aneidlinger@the-tma.org. There is also the alternative to choose from a pre-packaged sponsorship menu.

**SPONSORSHIP OPPORTUNITIES**

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10:45  
**Attracting Mobile Application Developers and Gaming Talent**

Mobile application developers are in extremely high demand. On Dice.com job postings for Android and iPhone developers are up 129 and 190 percent respectively in the last year. CIO Magazine reports that “the technology division of staffing firm Robert Half projects starting salaries for mobile application developers to increase 9.1 percent in 2012, to a range of $85,000 to $122,500 a year … Salaries for mobile game developers range from $110,000 to $140,000 per year.” The battle for mobile gaming talent is particularly fierce. 6waves Lolapps recently announced the creation of a $10 million fund to invest in mobile and social game developers, a move designed to help the company find talented developers, fund their games and publish them for social networks like Facebook. Meanwhile, Zynga has been on a talent buying spree, acquiring several mobile game companies including Gamedoctors and Page44 Studios. What’s the best path toward bring talent onboard in this ultracompetitive market?

For further discussion:

Few colleges or technical training schools teach mobile programming languages like Apple’s Objective C and demand for these skills far outstrips supply. In April the Wall Street Journal noted that this is “forcing companies to increase wages, retrain software engineers, outsource work to third-party developers and set up offshore development labs to meet demand.” What path should your company take in closing its mobile development gap? Can you retrain your current software engineers and upgrade their skills? Is there value in partnering with an experienced mobile development firm so as to avoid the hassles associated with recruiting and hiring hard to find mobile development talent?

**Moderator:** Lea Hyke, Talent Acquisition Director, Granite Ventures

**Panelists:** Fernando Paulo, VP, Engineering, GREE International, Inc.  
Morgan Missen, Head of Talent, Foursquare  
Shannon Callahan, Partner, Talent Services, Andreessen Horowitz  
Richard Cho, Recruiting Manager – Product, Growth and Mobile, Facebook
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<td>11:30</td>
<td>Panel: The Rise of Big Data: Attracting the Right Talent to Drive the Revolution</td>
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A multitude of industries are using big data to improve their products and generate new customer insights; biopharmaceutical companies are even using big data during drug discovery and development as it aids with target selection. While universities are increasingly offering degree and certificate programs focused on data mining and data analytics, the supply of talented data scientists is expected to lag behind demand. Technology has advanced more quickly than the required workforce skills. By 2018 the McKinsey Global Institute projects that there will be a shortage of 140,000 to 190,000 people with deep analytical skills (i.e. statistics experts), as well as a shortage of 1.5 million managers and analysts who are capable of analyzing big data. Hiring and keeping these professionals is already extremely difficult given the demand for their services. This session will address:

- The specific skills & qualities big data companies are looking for in candidates
- The importance of mentorship: Having leading practitioners train the next generation
- Building a talent management system for analytical talent: Establishing consistent processes for recruitment, training & development and performance management
- Maintaining employee enthusiasm: Providing exposure to new tools and technologies, rotational assignments and experience with different business units

**Panelists:** Elizabeth Charnock, *CEO, Cataphora*
Anjul Bhambhri, *Vice President, Big Data, IBM Silicon Valley Lab*
Nancy Gessler, *Director, EMC Education Services*
Dan Yoo, *Senior Director, Business Operations and Business Analytics, LinkedIn*

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**HRCI APPROVAL**

This conference has been approved for 10.5 HRCI credits.

The use of this seal is not an endorsement by the HR Certification Institute of the quality of the program. It means that this program has met the HR Certification Institute’s criteria to be pre-approved for recertification credit.
**1:15 Panel: Building the Future Aerospace & Defense Workforce**
The aerospace and defense industry faces a stiff challenge as many of its best are expected to retire over the next few years. The development of domestic STEM talent – capable of obtaining security clearances – is being approached with even great urgency by this industry since government regulations prohibit the use of non-citizens on classified projects. A&D firms are investing heavily in K-12 programs that encourage the pursuit of STEM careers (i.e., FIRST robotics) and are using college internship programs to woo future employees but much work remains to be done. This session will address:

- Efforts to attract millennials to the A&D industry: Are projected defense budget cuts discouraging new entrants into the industry?
- Providing meaningful work for interns and effectively transitioning them to full-time employment
- Keeping younger employees engaged and building a workplace that suits their needs
- Utilizing employees’ networks to obtain referrals

**Panelists:** Frank Flores, *Vice President, Engineering*, Northrop Grumman
Gina Burns, *Vice President, Workforce Strategy & Talent Acquisition*, Lockheed Martin; AIA Workforce Committee Chair
Virgil Griffin, *Director, Government Operations*, Boeing
Dantaya Williams, *Director, Workforce Diversity*, United Technologies Corporation

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**2:00 Panel: Attracting and Retaining Petroleum Engineers**
In December 2010, Bloomberg reported that Andrew Gould, chairman and CEO of Schlumberger Ltd, was worried about “a dwindling pool of engineers and other technical staff needed for exploration and production.” In 2007 CERA estimated that more than half of all oil-field professionals would reach retirement age during the next decade. As older petroleum engineers retire new recruits will be needed in large numbers; unfortunately, many college graduates are choosing managerial positions over engineering jobs and other field assignments. Skilled engineers are in high demand as companies need to drill deeper and face increasingly challenging conditions in oil extraction. This panel session will address:

- The necessity of collaboration with academia to ensure an adequate crop of field engineers
- Ensuring that there are enough university professors in necessary subject areas: The difficulties of retaining qualified faculty (lured away by opportunities in industry) and the possible solution of joint industry-academic appointments
- Building appropriate curricula: Courses in emerging technologies, business intelligence, artificial intelligence & data mining
- Developments in China & India supporting the petroleum engineering workforce: Expansion of petroleum engineering programs at universities
- Early engagement with talent: What’s being done at the K-12 level to drive interest

**Frank McKay, Recruiting and University Relations Consultant, Hess Corporation**

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**2:45 Panel: Attracting and Retaining Life Science Talent**

**3:30 Program Conclusion**
CONFERENCE DETAILS

PRICING INFORMATION

<table>
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<tr>
<th>Options</th>
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<tr>
<td>2 Day Full Conference</td>
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<tr>
<td>Academic Institutions, Govt and Non-Profit 2 day conference</td>
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REGISTRATION INFORMATION

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Attendee Name ____________________________
Title ____________________________
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PAYMENT INFORMATION

Account No. ____________________________
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Reference:
Please fill out & include registration form with payment.

Payment Policy:
Payment is due in full at the time of registration and includes lunches and refreshments. Your registration will not be confirmed until payment is received and may be subject to cancellation. Please go online to: http://bit.ly/pADvji to view our cancellation policy.

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