Getting to the Heart of it All:

Connecting Gender Research, WIE Programs, Faculty & Corporate Partners

2012 WEPAN National Conference | June 25 - 27, 2012 | Columbus, Ohio
Getting to the Heart of it All
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2012 Conference | June 25-27, 2012 | Columbus, Ohio

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President’s Welcome

Welcome to the 2012 WEPAN National Conference! I’m thrilled to host you here in Columbus, the heart of Ohio. This year’s conference presents a unique opportunity for women in engineering program administrators, faculty, corporate partners and those involved in gender research to explore and expand synergies. Working together we will propel WEPAN’s Core Purpose to advance higher education increasing the number and prominence of diverse communities of women in engineering.

The 2012 Conference Committee has done an outstanding job organizing an exciting program that includes the following themes:

1. Women in Engineering Program Contributions
2. Results and New Ideas from the ADVANCE Community
3. Corporate Policy, Practice and Influence
4. Building the Feedback-Loop from Practice to Research

Through the NUCOR and Ohio State tours, plenary keynotes, breakout sessions, showcase, and receptions/dinners, you’ll find inspiration to redouble your efforts in support of WEPAN’s mission. You’ll have opportunities to explore implementation of new best practices at your workplace, join a WEPAN task force or committee, create research collaborations with fellow WEPAN members, or even support our new individual giving campaign. I encourage you to take advantage of the conference to learn, grow and contribute.

WEPAN would not be where it is today without the dedication and enthusiasm of the WEPAN staff and volunteers. Thank you to all who give to the organization in so many ways. I want to extend a special thanks to this year’s Conference Committee!

On behalf of the WEPAN Board of Directors, welcome to Columbus and the 2012 WEPAN National Conference! Enjoy!

Glenda P. La Rue, P.E.
WEPAN President

Look for the following conference theme symbols throughout the program:
Thank you to our 2012 Corporate and University/Community Partners

Annual contributions from corporate partners enable WEPAN to build resources and lead change to develop a highly prepared, diverse engineering workforce. In addition to seeking financial support, WEPAN relies on the thoughtful leadership and creative energy of our corporate partners. To that end, WEPAN’s Corporate Advisory Council (CAC) links our efforts in the higher education arena with corporate interests in bringing more women into engineering.
About WEPAN

WEPAN is the nation’s leading organization and catalyst for transforming culture in engineering education to promote the inclusion and success of diverse communities of women.

WEPAN’s 700 members are based in 140 engineering schools as well as corporations, government agencies and not-for-profit organizations. WEPAN’s engineering school members reach 43,900 or 60% of U.S. women engineering students each year with a range of retention-focused programming. WEPAN Institutional members average 15% higher enrollment of women in engineering than non-member schools.

WEPAN’s Core Purpose

To propel higher education to increase the number and advance the prominence of diverse communities of women in engineering.

WEPAN’s Values

Knowledge of research, statistics, pedagogy, and practice relevant to women in engineering and STEM is a way to drive change.

Collaboration draws on strengths from many sectors and is key to advancing women in engineering.

Diversity and inclusion of diverse communities of women improves the field of engineering itself.

Developing and influencing leadership is pivotal to advancing the success of women in engineering.

Visit www.wepan.org to read more on WEPAN’s strategic plan.

The WEPAN National Conference

This flagship event is an important annual forum for ideas and a venue for conversations among women in engineering leaders, corporate advocates, researchers, academic leaders, and government officers to:

• Gain access to current research, statistics, and best practices on women in engineering.
• Build corporate-campus networks with WIE professionals from across the country.
• Recognize excellence by honoring key individuals, programs, and corporations for accomplishments aligned with WEPAN’s mission. Each year at the conference WEPAN awards serve to continuously raise the bar for extraordinary service, significant achievement, model programs, notable achievement in research, and exceptional work environments that augment the success of women engineers.
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Our people are what make us great, and when they succeed, Nucor succeeds.
Keynote Session — Are We Willing to Value Diversity in STEM?
Tuesday, June 26th — 8:30 a.m.-9:45 a.m.—Governor’s Ballroom

Karan Watson, Ph.D., Texas A&M University, Provost and Executive Vice President for Academic Affairs

Dr. Karan Watson is continually asking if we are willing “to appropriately change our educational and professional systems and cultures so it does value diversity.” Dr. Watson is featured in the March 2012 issue of Diverse: Issues In Higher Education magazine as one of the nation’s top 25 extraordinary women leaders who are “making a difference” in higher education and beyond. The editors wrote that they “hope these women will provide encouragement to their colleagues as well as those who will follow in their esteemed footsteps.” Texas A&M President R. Bowen Loftin says, “she is, indeed, providing inspired leadership in moving our institution forward in all areas of diversity, in addition to having a major role in helping enhance our academic programs, which is key to our quest in attaining our Vision 2020 goals and being recognized as a top-10 public university.” Dr. Watson has been a member of WEPAN since it was founded in 1990, and has served on WEPAN’s board of directors. Dr. Watson is a wonderful story teller, and we look forward to Dr. Watson’s experiences with changes that value diversity and her guidance about how WEPAN members and friends can build upon her successes.

Plenary Luncheon Session — Celebrating NSF Leadership in Advancing Women in STEM
Tuesday, June 26th — 12:30 p.m.-1:45 p.m.—Governor’s Ballroom

Jolene Jesse, Ph.D., Program Director for Cross Directorate Activities in the Directorate for Social, Behavioral and Economic (SBE) Sciences at the National Science Foundation.

Dr. Jesse oversees programs to promote education and to increase the numbers of women and minorities in the SBE fields. Dr. Jesse was a Senior Program Associate in the American Association for the Advancement of Science’s Directorate for Education and Human Resources Programs, where she conducted research on science, technology, engineering and math education and policy issues, with special emphasis on the representation of women and underrepresented minorities in those fields. She received her Ph.D. in political science from the University of Wisconsin Milwaukee, and a M.A. from The American University in Washington, DC.

Amy Rogers Ph.D., Program Director for the ADVANCE program at the National Science Foundation (NSF) and Associate Professor of Psychology at Delaware State University

Dr. Rogers received her bachelor’s degree in Psychology from Eastern Illinois University, her master’s degree in Social Psychology from Arizona State University, and her Ph.D. in Applied Social Psychology from Southern Illinois University - Carbondale. Dr. Rogers served as Chairperson of the Psychology Department at Delaware State University as well as on her University’s Institutional Self-Study and Program Review boards. She has led NSF projects including a Major Research Instrumentation grant and her University’s ADVANCE-Start grant. Dr. Rogers’ research has focused primarily on issues of social justice, including factors influencing power arrangements in marriage and more recently the etiology and content of skin-shade bias among people of color. Dr. Rogers serves as the data manager and statistical consultant of Dover’s Caring Community Coalition- Communities that Care. She has conducted a comprehensive review and needs assessment for all substance abuse and mental health services for the Delaware Mental Health Commission as well as assessed city-wide, racially-based attitudes for the City of Dover’s Human Relations Commission.

Jan Rinehart, Executive Director of the National Science Foundation funded ADVANCE Program at Northeastern University

Jan Rinehart is Executive Director of the National Science Foundation funded ADVANCE Program at Northeastern University. The goals of the ADVANCE program are to increase the number of women faculty in science, engineering, and mathematics at all levels of leadership, and change the institutional climate. She has over twenty years in higher education with most of her work focused on diversity in STEM fields. Prior to assuming the ADVANCE position, she served as the Executive Director of the ADVANCE program at Rice University, the Deputy Director of the Space Engineering Institute for two years and the Director of Engineering Student Programs at Texas A&M University. She initiated the Women in Engineering program in 1994 and served as WEPAN (Women in Engineering Programs and Advocates Network) President from 2002-2003. She received her M.S. in Higher Education Administration from Texas A&M University and a B.S. in secondary education from Abilene Christian University.
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Locked Martin is a proud partner of the 2012 Women in Engineering ProActive Network Conference.

Best wishes on a successful event!

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– Woman Engineer Magazine

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– Universum Undergraduate Survey, 2011
Keynote Speakers

Plenary Session—What Plans do Leaders on President Obama’s Jobs Council Have for Advancing Gender Diversity in Engineering as They Graduate and Employ More Engineers?

Wednesday, June 27th — 8:30 a.m.-9:45 a.m.—Governor’s Ballroom

Leah Jamieson, Dean of Engineering, Purdue University

Dr. Jamieson served as 2007 President and CEO of the IEEE. She is co-founder and past director of the EPICS – Engineering Projects in Community Service – Program. Dr. Jamieson has been recognized for her achievements in education, research, and service. She was an inaugural recipient of the National Science Foundation Director’s Award for Distinguished Teaching Scholars and has been recognized with the 1997 Chester F. Carlson Award for Innovation in Education Engineering from the American Society for Engineering Education, the IEEE Education Society’s 2000 Harriet B. Rigas “Outstanding Woman Educator” Award, the Anita Borg Institute’s 2007 “Women of Vision Award for Social Impact,” and was named 2002 Indiana Professor of the Year by the Carnegie Foundation. She was elected to the U.S. National Academy of Engineering for “innovations in integrating engineering education and community service” and was elected a Fellow of the IEEE for her research on parallel processing algorithms. She is a member of the American Academy of Arts & Sciences, a Fellow of the American Society of Engineering Education and the International Engineering Consortium, an Eminent Member of the Electrical and Computer Engineering Honorary Society, IEEE-Eta Kappa Nu, and an Honorary Member of the Engineering Honorary Society, Tau Beta Pi. Jamieson’s research has focused on speech analysis and recognition; the design and analysis of parallel processing algorithms; and the application of parallel processing to digital speech, image, and signal processing. She has authored over 175 journal papers, conference papers, and book chapters and has co-edited books on Algorithmically Specialized Parallel Computers and The Characteristics of Parallel Algorithms. Dr. Jamieson currently chairs the Board of Trustees of the Anita Borg Institute for Women and Technology, serves on the Executive Committee of the Science and Math Teacher Imperative of the Association of Public and Land-Grant Universities, and is an elected member of the ASEE Engineering Deans’ Council. Jamieson has an S.B. in Mathematics from M.I.T. and a Ph.D. in Electrical Engineering and Computer Science from Princeton University. She joined the faculty of Purdue in 1976.

Gary May, Dean of College of Engineering, Georgia Tech

Gary S. May is the dean of the College of Engineering at the Georgia Institute of Technology, ranked number 4 in U.S. News & World Report’s annual list of the best American graduate engineering programs. From May 2005-June 2011, he served as the Steve W. Chaddick School Chair of the School of Electrical and Computer Engineering, and prior to that, he was the executive assistant to Georgia Tech President G. Wayne Clough from 2002-2005. Dr. May joined the ECE faculty in 1991 as a member of the School’s microelectronics group. His research is in the field of computer-aided manufacturing of integrated circuits. He was a National Science Foundation “National Young Investigator” (1993-98) and was Editor-in-Chief of IEEE Transactions on Semiconductor Manufacturing (1997-2001). He has authored over 200 articles and technical presentations in the area of IC computer-aided manufacturing. In 2001, he was named Motorola Foundation Professor, and was appointed associate chair for Faculty Development. Dr. May is the founder of Georgia Tech’s Summer Undergraduate Research in Engineering/Science (SURE) program, a summer research program designed to attract talented minority students into graduate school. He also is the founder and director of Facilitating Academic Careers in Engineering and Science program (FACES), a program designed to encourage minority engagement in engineering and science careers. Dr. May was a National Science Foundation and an AT&T Bell Laboratories graduate fellow, and has worked as a member of the technical staff at AT&T Bell Laboratories in Murray Hill, N.J. He is a member of the National Advisory Board of the National Society of Black Engineers (NSBE). Dr. May is a native of St. Louis, Missouri. He received the B.E.E. degree in electrical engineering from the Georgia Institute of Technology in 1985 and the M.S. and Ph.D. degrees in electrical engineering and computer science from the University of California at Berkeley in 1987 and 1991, respectively.

Sharon Brogdon, Manager of Diversity, Intel

Sharon Brogdon is the Manager of Diversity at Intel Corporation. In this role she oversees the company’s strategic approach to the retention and development of its underrepresented minority and Veteran talent, creates pipeline strategies to address gaps, and drives the efforts of senior diverse councils and strategic employee groups to support the attraction and integration of diverse talent. Externally, she creates and maintains strategic relationships with key thought and opinion leaders focused on championing a diverse pipeline of technical talent. A 17-year veteran of Intel, Sharon has held positions in strategic marketing, business analysis, and account management.

Prior to joining Intel, Sharon spent twelve years as a commissioned officer in the United States Navy in Undersea Surveillance and Data Communications. During her Naval service, Sharon achieved the rank of Lieutenant Commander, earned warfare qualifications, and directly supported the fleet in the European Theater during Operation Desert Storm. Sharon is a Cornell University Certified Diversity Professional, a Tuck School of Business Fellow and holds a Bachelor of Science degree in Biology from Purdue University. She is a recipient of the Navy Achievement Medal and the Navy Achievement Medal.

Gayle Gibson, Corporate Operations, DuPont

Gayle is the chief of staff for the Chair of the Board and CEO of DuPont. She assists the CEO with managing processes for the top 7, top 27, top 66, and top 1200 leaders. This includes working across businesses, functions, and regions for alignment and clarity on priorities, advancing core values, and resolving issues in line with the company’s mission and strategic objectives. Prior to this role, Gayle was responsible for best practices in supply chain to improve customer service, cash flow and reduce cost for a $3 billion set of businesses in DuPont. This included driving lean Six Sigma in operations across these businesses. Gayle has held a variety of other roles in her 29 years at DuPont ranging from business management, revitalizing growth across a $1.5 billion revenue global business, business strategy and market development, product development, supply chain management, manufacturing supervision, R&D, and process engineering. She has led business process improvement efforts in Europe and the U.S. in a variety of functional areas. Gayle has an MBA and a B.S. in chemical engineering.
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The Women in Engineering Program
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U.Ed. ENG 12-44

www.engineering.mtu.edu

Michigan Tech is a proud supporter of the Women in Engineering ProActive Network.

Adrienne Minerick
medical microdevices

Zhi (Gerry) Tian
wireless sensor networks

Elena Semouchkina
emmettophysical metamaterials

Tess Ahlborn
ultra-high performance concrete

“The gap in academic leadership training and support is especially wide for women in STEM. ELATE at Drexel fills that gap.”

Susan Ambrose, D.A.
Associate Provost, Education
Carnegie Mellon University

ELATE at Drexel is an innovative, one year, part-time fellowship designed to enhance the leadership and innovation capacity of senior women faculty in academic science, technology, engineering, math (STEM), and related fields.


Learn more at www.drexel.edu/engineering/ELATE.

“Institutional excellence in the 21st century requires a diverse and inclusive climate.”

—Michigan Tech Climate Study

Michigan Tech is an ADVANCE institution, committed to increasing the participation and advancement of women in STEM fields.

Michigan Technological University is an equal opportunity educational institution/equal opportunity employer.

www.engineering.mtu.edu
The Center for Human Factors in Advanced Aeronautics Technologies (CHAAT), a NASA Group 5 University Research Center at California State University, Long Beach (CSULB), performs research to measure human performance in complex systems, such as the Next Generation Airspace Transportation System (NextGen), and trains undergraduate and graduate students in human factors and related disciplines. Working toward greater parity for women in engineering, CHAAT partner’s with CSULB’s Women-in-Engineering Outreach Program. It funds the "Engineering Girls Internship" program for academically-advanced middle-school girls; this project-based residential program broadens girls' knowledge of various aspects of engineering and introduces them to the field of human factors. It incorporates NASA educational content related to the critical work of engineers and scientists in space exploration, air traffic safety, and scientific research. Through research and educational development, CHAAT aims to increase the number of degrees awarded to women and minorities in the field of aeronautics. For more information, please see website: http://chaat.cla.csulb.edu/

...is an exciting new tool for accessing cataloged and fully cited research on topics such as:

• Recruitment
• Retention
• Gender differences in learning
• And more!

...is a WIE community-wide effort to pool our collective knowledge about available resources and make them more highly visible.

...includes a digital Professional Community that will help you expand your network, collaborate with others, find subject matters experts, and share information.

...is easy to learn and use with video tours and FAQs.

...actively seeks your participation and feedback!

www.wepan.org
## Schedule at a Glance

### Sunday, June 24, 2012

**Board of Directors Meeting** — 9:00 a.m.-4:00 p.m. — The Ohio State University

### Monday, June 25, 2012

**Registration Open** — 10:30 a.m.-9:00 p.m. — Prefunction area outside Judicial  
**Tour: Nucor Steel Marion** — 11:15 a.m.-3:00 p.m. — Meet at foyer outside of Congressional Ballroom  
**Tour: OSU Engineering Education Innovation Center** — 12:15 p.m.-4:00 p.m. — Foyer outside of Congressional Ballroom  
**Newcomers Session** — 4:00 p.m.-5:30 p.m. — Congressional Room  
**Dinner Discussions** — 6:00 p.m.-7:45 p.m. — Located in Designated Restaurants — Groups meet in hotel lobby  
**Corporate Advisory Council Meeting** — 5:45 p.m.-7:45 p.m. — Executive Room A & B  
**Welcome Dessert Opening Reception** — 8:00 p.m.-9:30 p.m. — Ohio Statehouse

### Tuesday, June 26, 2012

**Registration Open** — 8:00 a.m.-6:30 p.m. — Prefunction area outside Judicial  
**Conference Welcome & Kick-off Keynote** — 8:30 a.m.-9:45 a.m. — Governor’s Ballroom  

**Karan Watson**, Provost, Texas A&M University *Are We Willing to Value Diversity in STEM?*

### Tuesday Session 1 (T1): 10:00 a.m.-11:00 a.m.

**Legislative A** — **Executive** — **Senate** — **Judicial** — **Legislative B** —  
**Theme 1: Women in Engineering Program Contributions**  
**Papers: K-12 Outreach**  
**Theme 4: Building the Feedback Loop**  
**Workshop (2 hrs): Negotiation Basics**  
**Panel: Practicalities of Research to Practice**  
**Workshop (2 hrs): Research to Practice**  
**Theme 2: Results & New Ideas from the Advance Community**  
**Papers: Faculty Collaboration**  

### Tuesday Session 2 (T2): 11:15 a.m.-12:15 p.m.

**Legislative A** — **Executive** — **Senate** — **Judicial** — **Legislative B** —  
**Theme 1: Women in Engineering Program Contributions**  
**Papers: Undergraduate Interventions**  
**Theme 4: Building the Feedback Loop**  
**Workshop (cont’d)**  
**Panel: Program Assessment**  
**Workshop (cont’d)**  
**Panel: ADVANCE Peer Mentoring Summit**

### Plenary Luncheon Panel — 12:30 p.m.-1:45 p.m. — Governor’s Ballroom

**Jolene Jesse** Program Director, Gender in Science and Engineering National Science Foundation; **Amy Rogers**, Program Director ADVANCE, National Science Foundation; **Jan Rinehart**, Executive Director NU ADVANCE, Northeastern University *Celebrating NSF Leadership in Advancing Women in STEM*

### Tuesday Session 3 (T3): 2:00 p.m.-3:00 p.m.

**Legislative A** — **Executive** — **Senate** — **Judicial** —  
**Theme 1: Women in Engineering Program Contributions**  
**Panel: Systems Approach to Drive Engineering Inclusion**  
**Theme 4: Building the Feedback Loop**  
**Workshop (1hr): Useful Research Results**  
**Papers: ADVANCE**  
**Panel: ADVANCE & WIE/WISE Research**

### Coffee Break & Showcase Set-Up — 3:00 p.m.-3:30 p.m. — Congressional Room

### Tuesday Session 4 (T4): 3:30 p.m.-4:30 p.m.

**Legislative A** — **Executive** — **Senate** — **Judicial** —  
**Theme 1: Women in Engineering Program Contributions**  
**Papers: Mentoring**  
**Theme 4: Building the Feedback Loop**  
**Workshop (1hr)**  
**Panel: Building Academic & Corporate Partnerships**  
**Panel: Assessing K-12 Outreach**
**SHOWCASE: Best and Emerging Practices — 4:45 p.m.-6:15 p.m — Congressional Room**  
Featuring Mini-Presentations & Discussions  
Poster Presentations, Corporate Partners & WEPAN Committee Opportunities

**Awards Banquet — 7:00 p.m.-9:00 p.m — Governor’s Ballroom**

### Wednesday, June 27, 2012

**Registration Open— 8:00 a.m.-4:00 p.m.—Prefunction area outside Judicial**

**Plenary Panel— 8:30 a.m.-9:45 a.m.—Governor’s Ballroom**

Leah Jamieson, Dean of Engineering, Purdue; Gary May, Dean, College of Engineering, Georgia Tech; Sharon Brogdon, Multicultural Initiative Manager, Global Diversity, Education and External Relations, Intel; and Gayle Gibson, Corporate Operations, DuPont

**What Plans do Leaders on President Obama’s Jobs Council Have for Advancing Gender Diversity in Engineering as They Graduate and Employ More Engineers?**

**Wednesday Session 1 (W1): 10:00 a.m.-11:00 a.m.**

**Legislative A**

- Theme 1: Women in Engineering Program Contributions
  - Papers: Recruitment & Retention

**Executive**

- Theme 2: Results & Now Ideas from the Advance Community
  - Workshop (1hr): Career Planning

**Senate**

- Theme 3: Corporate Policy, Practice & Influence
  - Papers: Corporate Leadership

**Judicial**

- Theme 4: Building the Feedback Loop
  - Workshop (1hr): Recruitment and Retention

**Wednesday Session 2 (W2): 11:15 a.m.-12:15 p.m.**

**Legislative A**

- Theme 2: Results & New Ideas from the Advance Community
  - Papers: Recruitment & Retention

**Executive**

- Theme 1: Women in Engineering Program Contributions
  - Workshop (1hr): Retention

**Senate**

- Theme 4: Building the Feedback Loop
  - Workshop: WIE Program Assessment

**Judicial**

- Theme 2: Results & New Ideas from the Advance Community
  - Workshop (1hr): Gender Equity

**Legislative B**

- Theme 1: WIE Contributions & Theme 3: Corporate Policy, Practice & Influence
  - Panel: Singing in Harmony

**Plenary Luncheon — 12:30 p.m.-1:45 p.m. — Governor’s Ballroom**

Theresa A. Maldonado, Ph.D., P.E., Division Director, Engineering Education and Centers Division Directorate for Engineering National Science Foundation

**Impact of the NSF Engineering Research Centers Program on Gender and Diversity**

**Wednesday Session 3 (W3): 2:00 p.m.-3:00 p.m.**

**Legislative A**

- Theme 1: Women in Engineering Program Contributions
  - Papers

**Executive**

- Theme 2: Results & Now Ideas from the Advance Community
  - Workshop (2hr): Recruitment & Retention

**Senate**

- Theme 3: Corporate Policy, Practice & Influence
  - Panel: Technical to Management

**Judicial**

- Theme 1: Women in Engineering Program Contributions
  - Panel: Improving Faculty-Student Interaction

**Dessert Break— 3:00 p.m.-3:30 p.m.**

**Wednesday Session 4 (W4): 3:30 p.m.-4:30 p.m.**

**Legislative A**

- Theme 2: Results & New Ideas from the Advance Community
  - Panel: Results and New Ideas from ADVANCE

**Executive**

- Theme 2: Results & New Ideas from the Advance Community
  - Workshop (cont’d)

**Senate**

- Theme 2: Results & New Ideas from the Advance Community
  - Panel: A Dialogical Change Process

**Judicial**

- Theme 3: Corporate Policy, Practice & Influence
  - Panel: Yin & Yang of Fundraising

**Dinner Discussion Groups — 5:30 p.m.-8:00 p.m. — Located in Designated Restaurants — Groups meet in hotel lobby**

Have a lively discussion on a featured topic with other conference attendees
Monday, June 25, 2012

10:30 a.m.– Registration Open
9:00 p.m. Prefunction area outside Judicial

11:15 a.m.– Pre-Conference Tour Nucor Steel Marion
3:00 p.m. Pre-registration required.

Foyer outside Congressional Ballroom
Participants will meet at 11:15am in the foyer area outside of the Congressional Ballroom at the Sheraton to pick up their complimentary box lunch. The bus will board at the south end of the hotel on Town Street. Nucor Corporation is the largest producer of steel in the United States, and is the world’s foremost steel recycler. As you tour the Nucor Steele Marion Facility you will be able to see the entire process of producing steel, from melting of scrap steel all the way through the milling of new products. Nucor Steel Marion joined the Nucor family in June 2005. This facility dates back to the early 1900’s. The facility is located in the heart of Ohio. The bar mill is in close proximity to 60% of the steel consumption in the United States.

Tour requirements:
• Must be at least 18 years of age
• Photo ID required
• Must be physically able to walk up and down numerous stairs
• Required to wear long pants & sturdy shoes with socks (no open toes, no heels)
• Hard hats, safety glasses, hearing protection and over jackets will be provided for all attendees.

Participants will pick up boxed lunches in front of the Congressional Ballroom at 11:15 a.m. on Monday, June 25, 2012 and will return to the hotel at approximately 3:00 p.m. The duration of the tour will be one and a half hours.

About Nucor
Headquartered in Charlotte, North Carolina, Nucor Corporation is one of the largest manufacturer of steel products in North America and is made up of over 22,000 teammates. Our family of approximately 200 operating facilities, including our wholly owned subsidiaries of Harris Steel and The David J. Joseph Company produce products for thousands of applications. Products include: carbon and alloy steel - in bars, beams, sheet and plate; steel joists and joist girders; steel deck; fabricated concrete reinforcing steel; cold finished steel; steel fasteners; metal building systems; light gauge steel framing; steel grating and expanded metal; and wire and wire mesh. Nucor, through The David J. Joseph Company, also brokers ferrous ferro-alloys; and processes ferrous and nonferrous scrap. Nucor is also North America’s largest recycler.

12:45 p.m.– Pre-Conference Tour OSU Engineering Education Innovation Center
4:00 p.m. Foyer outside Congressional Ballroom
Pre-registration required.

Ohio State’s engineering program is ranked first among all Ohio universities and 17th nationally among public universities in the U.S. News & World Report 2011 listing. Join us for a tour of engineering labs, engineering classrooms and an overview of programs that Ohio State’s College of Engineering offers. The Engineering Education Innovation Center, a highlight of the College of Engineering, was established in 2007 with a mission to enrich the student experience and strengthen the academic credentials of undergraduates. Come and learn about the First-Year Engineering and Capstone programs, both of which are nationally recognized as hands-on approaches to engineering. A bus will leave the south end of the Sheraton off Town Street (by Congressional Ballroom) at 12:45 PM on Monday, June 25th and will return to the hotel no later than 4:00 PM.

4:00 p.m.– Newcomer’s Session
5:30 p.m. Congressional Room
Sponsored by UNIVERSITY OF DAYTON

6:00 p.m.– Dinner Discussion Groups
7:45 p.m. Groups leaving hotel lobby to walk to designated restaurants at 6pm.

5:45 p.m.– Corporate Advisory Council Meeting
7:45 p.m. Executive Room A & B

8:00 p.m.– Ohio Statehouse Welcome Dessert Reception
9:30 p.m. Sponsored by COLLEGE OF ENGINEERING

Make new friends and reconnect with old ones at the Ohio Statehouse opening dessert reception and welcoming ceremonies. Meet WEPAN leaders and hear about conference highlights and events. The evening will include drinks, dessert and special tours of The Statehouse. The Ohio Statehouse was completed in 1861 and one of the oldest working statehouses in the United States. The Statehouse includes a museum shop, a café and current and historical information about Ohio and the Statehouse.
Tuesday, Session 1 —

10:00 a.m.—11:00 a.m.

**Legislative A**  
**Theme 1: Women in Engineering Program Contributions**

**Paper — A Model Healthcare and Engineering Outreach Program for Middle School Students**

Julia Wiener, Ann Rundell, and Jennifer L Groh, Purdue University

Innovation to Reality (I2R) is an after-school outreach program developed by the Women in Engineering Program (WIEP) at Purdue University. The “Engineering for Diabetes and Healthcare” session is presented and described as a model that practitioners can easily replicate and/or adapt for implementation in similar programs.

10:00 a.m.—11:00 a.m.

**Executive Theme 4: Building the Feedback Loop: From Research to Practice**

**Workshop (2 hrs.) — Negotiation Basics and Tips from the Trenches**

Jenna Price Carpenter, Louisiana Tech University; B.A. Watford, Virginia Tech; Cindy Pederson, US Nuclear Regulatory Commission; Laura Bottomley, North Carolina State University; and Linda Snow-Solum, Rockwell Collins

Women often avoid negotiation, resulting in lower salaries, fewer promotions and less influence at work. This workshop focuses on research-based strategies for improving negotiation skills (becoming aware of the issues, learning about the negotiation process, and practicing negotiation), followed by a panel from academia and industry to share their successes.

8:30 a.m.–9:45 a.m.

**Conference Welcome & Kick-off Keynote Session —**

Karan Watson, Provost, Texas A&M University  
*Are We Willing to Value Diversity in STEM?*

Karan Watson is continually asking if we are willing to appropriately change our educational and professional systems and cultures so they do value diversity. Dr. Watson is featured in the March 2012 issue of Diverse: Issues In Higher Education magazine as one of the nation’s top 25 extraordinary women leaders who are “making a difference” in higher education and beyond.

The editors wrote that they “hope these women will provide encouragement to their colleagues as well as those who will follow in their esteemed footsteps.”

Texas A&M President R. Bowen Loftin says, “she is, indeed, providing inspired leadership in moving our institution forward in all areas of diversity, in addition to having a major role in helping enhance our academic programs, which is key to our quest in attaining our Vision 2020 goals and being recognized as a top-10 public university.”

Dr. Watson has served on the WEPAN board of directors and is a wonderful storyteller. Karan will offer her experiences with changes that value diversity and guidance about how WEPAN members and friends can build upon her successes.

Dr. Watson is an extraordinary, inspired, higher education leader. A wonderful storyteller, Dr. Watson’s experience, observations and guidance will inspire and challenge all. Dr. Watson is a charismatic advocate for moving forward in all areas of diversity and improving academic programs. Hear her thoughts, build on the successes, learn from her experiences!

Paper — Welding Bird Feeders: A Comprehensive Community Service Mini-project for 8th Grade Students

Shawna Fletcher and Jennifer Conrad, The Ohio State University; Kimberly Rygielski, Gretchen White, Elizabeth Thomas, The Scotts Miracle-Gro Company, and Christopher Lowe, Franklin Park Conservatory and Botanical Garden

Community service mini-projects that connect multiple components can enhance summer program activities and excite young students. For young female students, an ability to participate in a community-oriented project provides a depth of understanding of how engineers can positively impact the world. A discussion of the welding engineering program, industry partnership, and community service mini-project will be presented as it relates to engineering outreach and recruitment into non-traditional engineering career areas.

Paper — Welding Bird Feeders: A Comprehensive Community Service Mini-project for 8th Grade Students

Shawna Fletcher and Jennifer Conrad, The Ohio State University; Kimberly Rygielski, Gretchen White, Elizabeth Thomas, The Scotts Miracle-Gro Company, and Christopher Lowe, Franklin Park Conservatory and Botanical Garden

Paper — Engineering Global Solutions to Water Scarcity: A Model Outreach Program for Middle School Students

Rebecca Logsdon, Kasey Faust, Julia Wiener, Jennifer Groh, Purdue University

“Engineering a Solution to Water Scarcity” is part of an after-school outreach program for middle school students called Innovation to Reality (I2R). The Water Scarcity session is presented (design, development, activities, global components, and outcomes) as a model that practitioners can replicate and/or adapt for implementation in similar outreach programs.


Jeri Countryman and Dara Olmsted, Iridescent Learning

Iridescent’s Technovation Challenge brings hands-on, project-based programming and entrepreneurship to high school girls. In ten weeks, high school girls learn the basics of programming and entrepreneurship by creating a mobile phone app, prototyping a business plan and “pitching” their plan to a panel of venture capitalists at a “Pitch Night”.

10:00 a.m.—12:15 p.m.

**Workshop (2 hrs.) — Negotiation Basics and Tips from the Trenches**

Jenna Price Carpenter, Louisiana Tech University; B.A. Watford, Virginia Tech; Cindy Pederson, US Nuclear Regulatory Commission; Laura Bottomley, North Carolina State University; and Linda Snow-Solum, Rockwell Collins

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Tuesday, June 26, continued

10:00 a.m.– 11:00 a.m.  Senate  
Theme 4: Building the Feedback Loop: From Research to Practice

Panel—The Practicalities of Putting Research into Practice: Evidence from the Project to Assess Climate in Engineering

Elizabeth Litzler, University of Washington; Laura Bottomley, North Carolina State University; Paige Smith, University of Maryland

This panel will show how research can inform practice at the institutional level. Audience discussion and interaction will be encouraged, especially around the topics of a) the decision making process that helped research be put into practice, b) questions about the panelists’ programs, and c) the context of successfully implementing practices based on research results.

10:00 a.m.– 12:15 p.m.  Judicial  
Theme 4: Building the Feedback Loop: From Research to Practice

Workshop (2 hrs.)—From Research to Practice and Back Again

Elizabeth Cady, National Academy of Engineering; Barbara Bogue, Pennsylvania State University and the AWE Project; Betty Shanahan, Society of Women Engineers; Jennifer Scott, Society of Women Engineers; Jacquelyn Sullivan, University of Colorado at Boulder; Beverly Louie, University of Colorado at Boulder

This 2-hour interactive workshop will help education and outreach practitioners integrate research findings into real-world activities. We will explore current research about girls and women in STEM, provide practical research-based tips on engaging their skills, interests, and life experiences, and provide examples of programs that successfully integrated research into practice.

10:00 a.m.– 11:00 a.m.  Legislative B  
Theme 2: Results & New Ideas from the Advance Community

Paper—Diversity Catalysts: Educating the STEM Community

Klod Kokini, Patrice Buzzanell, Clint Chapple, Andrew Hirsch, and Kathleen Howell, Purdue University

As part of the Purdue-ADVANCE project, the paper will present the journey of the Diversity Catalysts, highly successful faculty, and of the entire team and how it has had an impact in various venues to move towards institutional transformation at Purdue.

Paper—Cross-Sector and Interdisciplinary Research Collaborations as Paths for Career Success for Women in Academic Science and Engineering

Marie Garland, Sharon Alestalo, and Shobha Bhatia, Syracuse University

Literature on the potential positive impact of cross-sector and interdisciplinary collaborations on women STEM faculty’s career advancement and retention is reviewed. Methodological hurdles in identifying, defining and analyzing data is presented with results summarized. Programs designed to increase women STEM faculty’s participation in collaborative research initiatives are also presented.

Paper—Leveraging Social Network Data to Support Faculty Mentoring: Best Practices from NJIT ADVANCE

Nancy Steffen-Fluhr, Regina Collins, Katia Passerini, Mingzhu Zhu, Roxanne Hiltz, Mingzhu Zhu, and Brook Wu, New Jersey Institute of Technology; and Anatoliy Gruzd, Dalhousie University

Women STEM faculty are frequently relegated to the periphery of collegial information networks, and their lower network “centrality” makes for difficulty in P&T. NJIT ADVANCE researchers discuss how they have addressed this issue by developing predictive models of faculty career success as part of a network approach to faculty mentoring.

Paper—Organisational Culture and Successful Women Leadership in SET in Academia

Felizitas Sagebiel, University of Wuppertal; Victoria Showunmi, University of London

On basis of two empirical projects (Germany and UK), the paper will present some results about success conditions of women leaders in science, engineering and education. Focuses are gendered working styles, balance of work and private life, gender stereotypes, use of women’s and men’s networks, barriers by old boys’ networks.

Tuesday, Session 2—

11:15 a.m.– 12:15 p.m.  Legislative A  
Theme 1: Women in Engineering Program Contributions

Paper—A Women in Engineering Seminar Course for First-Year Engineering Students

Jennifer Groh and Beth Holloway, Purdue University

This paper provides an overview of the Purdue Women in Engineering seminar course for first-year undergraduates, including course goals, format, and assessment. The seminar features alumnae speakers in different career stages and from diverse backgrounds. In addition to serving as professional role models, speakers showcase the versatility of engineering degrees.

Paper—A Focus Group Evaluation of an Academic Success Program and Support System for Transfer Students

Mary Ruth Anderson-Rowland, Armando Rodriguez, Lenay Dunn, and Stefanie Leite, Arizona State University

An Academic Success Program leveraged by four funded NSF grants is described. A focus group in-depth evaluation with first-year transfer students describes the students’ interest in engineering, their transfer process, their experience with the program, and their future plans. Lessons learned are given that apply to academic success programs, as well as women in engineering programs.

Paper—Using Outreach Programs to Increase Interest in Computing Majors

Alka Harriger and Weiwei Cao, Purdue University

Session description: What is the best strategy to increase female and minority interest in computing? We will share specific, hands-on activities that have been successful in raising awareness and in increasing interest in computing. Participants will leave with ready-to-use materials to offer similar sessions and sample survey instruments to gauge their success.
Tuesday, Session 3 —

2:00 p.m.–
3:00 p.m.

Executive
Theme 4: Building the Feedback Loop: From Research to Practice

Workshop (1 hr.) — Making Research Results Useful and Usable: A Workshop/Conversation For All
Patricia Campbell, Campbell-Kibler Associates, Inc.; Kimberly Douglas-Mankin, Kansas State University; Susan Metz, Stevens Institute of Technology; and Amy Rogers, National Science Foundation

Campbell, Douglas-Mankin, Metz and Rogers will lead a discussion on facilitating communication between WISE/WIE practitioners and broadening-participation researchers for the benefit of both! Also discussed will be formats to provide research results to practitioners. Recommendations for increasing access to useful/usable research will be generated and shared with the broader community.

2:00 p.m.–
3:00 p.m.

Senate
Theme 2: Results & New Ideas from the Advance Community

Paper—Effecting Institutional Transformation to Improve Climate for Women STEM Faculty: the UIC NSF ADVANCE IT Experience
Mo-Yin Tam, Panorama Khare, and Jana Wichelecki, University of Illinois at Chicago

This presentation describes successes of UIC’s NSF ADVANCE program in removing structural barriers to women’s participation in academic STEM and analyzes the factors enabling changes through Sturm’s Architecture of Inclusion framework. This presentation provides a conceptual framework for other institutions to optimize their efforts to improve climate for STEM women.

Paper—Institutional Transformation: Changing Ideas to Change Behavior, or Changing Behavior to Change Ideas?
Karen Froelich and Canan Bilgen-Green, North Dakota State University

Funded through an NSF-ADVANCE grant to transform the institution to one with improved gender balance throughout faculty and administrative ranks, one university reflects on its progress. We explore the progress of initiating change through direct behavioral mandates and visible actions compared to changing individual and collective ideas, goals, and values.

Paper—Institutions Developing Excellence in Academic Leadership: Regional Cooperation, Regional Progress
Diana Bilimoria, Lynn Singer, and Amanda Shaffer, Case Western Reserve University

Institutions Developing Excellence in Academic Leadership (IDEAL) is a three-year NSF ADVANCE PAID project to seed gender equity transformation at five regional public institutions of higher education in northern Ohio and CWIU. This paper highlights the institutional transformation undertaken by change leader teams at each of the partner universities.

Paper—Opting into Leadership: Finding a Parsimonious Model
Heidi Grappendorf and Mary Wyer, North Carolina State University

Role congruity theory (RCT) and social cognitive career theory (SCCT) have both been utilized to examine the underrepresentation of women in the STEM disciplines (though RCT has been recently). This study sought to explore the degree to which the combination of theoretical approaches has more explanatory power than either alone.
Tuesday, June 26, continued

2:00 p.m.– 3:00 p.m.  Judicial  Theme 4: Building the Feedback Loop: From Research to Practice

Panel— Synergy on campus: ADVANCE, WIE/WISE and the Research Agenda
Sheila Edwards Lange, University of Washington; Peggy Layne, Virginia Polytechnic Institute and State University; and Jennifer Sheridan, University of Wisconsin, Madison

The production of knowledge about the factors that promote the inclusion and success of women in science, technology, engineering and mathematics (STEM) has been enriched by women in engineering programs (WIE), ADVANCE institutions and faculty researchers. Four campuses that were early recipients of ADVANCE institutional transformation awards will reflect on the progress made since their grants ended, and how the research from ADVANCE and other research projects have informed practices that might influence women in science and engineering programs and other institutional transformation initiatives. Panelists will reflect on synergy between ADVANCE, WIE programs and gender equity research and propose best practices for strengthening the relationship between ADVANCE, research programs and efforts to broaden participation in engineering.

3:00 p.m.– 3:30 p.m.  Congressional Room  Coffee Break & Showcase Set-Up

Tuesday, Session 4—

3:30 p.m.– 4:30 p.m.  Legislative A  Theme 1: Women in Engineering Program Contributions

Paper— Peer Mentoring: A New and Intentional Look at an Old Favorite
Susan Martin, University of Maryland Baltimore County

This presentation describes the ten-year evolution of a peer mentoring program established for undergraduate students at UMBC, including lessons learned and recent outcomes data. The current model and materials are shared so others may use them to develop or modify their own sustainable peer mentoring program for undergraduates.

Paper— Implementation of a Group Mentoring Program for Undergraduate Women in Engineering
Jennifer Groh, Purdue University

The evolution of Purdue’s undergraduate Group Mentoring Program is discussed, with objectives that distinguish it further from the traditional Pair Program and better meet participant needs/expectations within constraints of a group mentoring format. Program goals, organization, assessment, and examples of successful group activities designed to meet program objectives are presented.

Paper— The “NASA Learning Experience for Elementary School Girls” – Offering Professional Development that Incorporates an Advocacy Model for K-12 Educators
Lily Gossage, Kim Vu, Panadda Marayong, California State University, Long Beach

Incorporating advocacy as a practice within K-12 outreach/ professional development magnifies the impact of the outreach and strengthens the voices of K-12 educators. In gaining a more complete understanding of the gender gap in engineering, educators are able to transcend the educator role and become advocates for their own students.

3:30 p.m.– 4:30 p.m.  Executive  Theme 4: Building the Feedback Loop: From Research to Practice

Workshop (1hr.)— A Toolkit for Defining and Achieving Work/Life Satisfaction for Women in STEM
Joan Herbers, The Ohio State University and Cynthia Simpson, Association for Women in Science

The presenters will discuss research on work/life satisfaction that led to the development and refinement of didactic tools for women in STEM fields. Participants will acquire an experiential understanding of how the program facilitates examination of one’s own work/life satisfaction and how action plans can be immediately put in place.

3:30 p.m.– 4:30 p.m.  Senate  Theme 3: Corporate Policy, Practice & Influence

Panel— Building Academic and Corporate Partnerships to Increase Diversity in Engineering
Aileen Walter, National Action Council for Minorities in Engineering; J. Adin Mann, Emerson Process Management; Lenell Allen, California Institute of Technology; and David Siegfried, Institute for Broadening Participation

This panel will focus on strategies and tactics for engaging academic and corporate partners to broaden participation in engineering. While highlighting successful tools and approaches, the panelists will emphasize aspects of a broader strategic framework for collaboration among academic institutions, non-profits and corporations that enhances the impacts of individual efforts.

3:30 p.m.– 4:30 p.m.  Judicial  Theme 1: Women in Engineering Program Contributions

Panel— Assessing K-12 Outreach Activities
Tricia Berry, The University of Texas at Austin; Barbara Bogue, AWE Project and Penn State University; Martha Cyr, Worcester Polytechnic Institute; and Cindy Waters, North Carolina A&T State University

This panel session will feature speakers with expertise in assessment and evaluation of K-12 outreach. Best practices and resources will be highlighted. The panel will consist of short presentations followed by a question and answer session.
Showcase 2012: Best and Emerging Practices

Congressional Room  SHOWCASE RECEPTION—  4:45 p.m. — 6:15 p.m.

Best and Emerging Practices

Sponsored by

The Showcase Reception features posters, exhibits and mini-presentations of best practices in research and programs. Enjoy delicious refreshments and network with your colleagues as you learn about our Corporate Partners’ initiatives and WEPAN Committee opportunities.

Strategic Use of Multiple Data Sources & Evaluation Processes to Facilitate Institutional Change

Jodi Linley, Theodore Curry, Paulette Granberry Russell, Tiffeny Jimenez, Clare Luz, Melissa McDaniels, Estella McGroarty, Tamara Reid Bush, Mark Roehling, Rene Stewart O’Neal Michigan State University

The MSU ADVANCE project is utilizing data to evaluate the impact of our interventions, to inform the project of the need for additional changes to policy and practice, and to contribute to the broader research literature on organizational change and inclusiveness in higher education.

ADVANCE: Advancing Women Faculty at North Dakota State University

Canan Bilen-Green, Karen Froelich, Rebecca Hayes, Ann Burnett, and Sandra Holbrook, North Dakota State University

In this poster we will share how participation of women in all academic ranks at NDSU increased since receiving an ADVANCE award. We will highlight our unique programs, share tips and insight we gained through implementation of our programs, discuss formal and informal strategies employed, and report on our progress with regards to goals we seek to achieve.

Case Study: IBM and CD Fulkes Middle School - An In-Depth Look at a Middle School Effort Created with the Purpose of Growing the Pipeline of Female Students Studying Engineering in College

Audrey Romanosky, Jennifer Vargas, and Carlie Bower, IBM; Lora Alaniz, Girls Empowerment Network Austin

IBM and CDFMS have introduced many female students to STEM careers, encouraging them to pursue engineering in college. This showcase explores the activities used in collaboration of IBM volunteers and GENaustin: Girls Empowerment Network and provides a model for others to use to improve or start their own programs.

Career Theory Connections to Women’s STEM Career Choices

Ceal Craig, Druai Education

Learn about prior research and understand how career theory might suggest what influences women’s career choices, what interventions might target those influences, and understand the research gaps. Plans for future research will be shared and comments gathered from participants.

Enrollment of Girls in Engineering up from 14.5% to 23% in Maine in 2011

Sheila Pendse, University of Maine

Girls Engineer Maine (GEM) is a statewide educational outreach program designed to increase the number of women studying engineering in Maine. GEM aims at starting early exposure to engineering for girls, especially from rural Maine by bringing them to campus and showcasing engineering labs with hands on activities.

ADVANCE at Washington State University’s External Mentoring: A Promising Program

Gretal Leibnitz and Rebecca Craft, Washington State University

Survey results indicate that external mentoring is of interest to academic institutions. Washington State University’s (WSU) External Mentor program demonstrates preliminary promise. Through WSU’s External Mentor program STEM faculty women extend their network, showcase their research, and create collaborative opportunity for publications, presentations, grant proposal submissions and graduate student exchange.

Sharing Significant Stories: Dissemination of the Women’s History In Michigan Science and Engineering Oral Histories

Dejah Rubel and Debbie Taylor, University of Michigan

Sharing the Women’s History In Michigan Science and Engineering oral histories is paramount to bridging the gap between our foremothers and the next generation. To facilitate dissemination to the most diverse audience, UM WISE has chosen several platforms including traditional and digital media.

Leadership Obstacles for Women Engineering Students at a Midwest University: A Qualitative Pilot Study

David Williams, Gina Matkin, University of Nebraska-Lincoln

Women can face many challenges when they decide that they want to pursue an engineering degree and with leadership roles. The purpose of this qualitative pilot study is to explore the perceived leadership obstacles of women engineering students at a Midwest University through semi-structured narrative interviews.

Exploring the Experiences of Women Engineering Students in Leadership Roles: A Literature Review

David Williams, Gina Matkin, University of Nebraska-Lincoln

What is the experience of women taking on leadership roles in a male-dominated environment? The purpose of this literature review is to explore the topics of the impact of self-efficacy and educational climate on the experiences of women engineering students in leadership roles.

WIE Initiative: Recruiting Women to Engineering

Sandra Woods, Colorado State University

Colorado State University’s College of Engineering launched a sophisticated undergraduate recruiting program focused on increasing the representation of women in existing majors. Within four years, the number of women in the freshman class doubled and total female enrollments increased by 63%.

Showcase Reception — 6:15 p.m.

Research will be shared and comments gathered from participants.

What influences women’s career choices, what interventions might target those influences, and understand the research gaps. Plans for future research will be shared and comments gathered from participants.

IBM and CDFMS have introduced many female students to STEM careers, encouraging them to pursue engineering in college. This showcase explores the activities used in collaboration of IBM volunteers and GENaustin: Girls Empowerment Network and provides a model for others to use to improve or start their own programs.

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Join a WEPAN Committee

WEPAN Awards Committee
Rachelle Reisberg, Northeastern University
Members of the WEPAN Awards Committee manage WEPAN’s awards strategy to honor and recognize outstanding corporations, educational institutions, programs and individuals working to advance WEPAN’s mission.

WEPAN Communications Committee
Carlie Bower, IBM
Members of the WEPAN Communications Committee will have the opportunity to help shape WEPAN’s strategy in key areas such as maintaining brand integrity, marketing, and leveraging effective communications vehicles with special focus on tools ranging from digital/print media to social media. This work is critical in a time when quickly-evolving technology is constantly changing the way we collaborate as a society - and the way WEPAN interacts with its membership, stakeholders, and the broader engineering education community.

WEPAN Conference Committee
Carol Heaverlo, Iowa State University
The 2013 Conference Committee seeks volunteers to assist with leading, planning and executing WEPAN’s annual conference, to be held June 18-20, 2013 in Atlanta, GA. Opportunities for the 2013 conference include developing the program, recruiting abstract reviewers and session moderators, planning newcomer and networking events, planning local events, publishing the conference program, marketing the conference and publishing the conference proceedings. Taking advantage of being colocated with the American Society of Engineering Education’s (ASEE) Conference, the Conference Committee has an exciting collaboration planned with the ASEE Women in Engineering Division (WIED) on Saturday, June 22nd.

WEPAN Diversity Advancement Committee
Lily Gossage, University of California Long Beach and DiOnetta Jones, Massachusetts Institute of Technology
Interested in fostering alliances/partnerships that advance diversity? Please contact the WEPAN Diversity Advancement Committee. The Committee is charged with developing/implementing strategies to advance WEPAN diversity; this includes, but is not limited to, the recruitment, retention, and engagement of a diverse membership and identification of speakers who reflect the organization’s diversity. Lily Gossage, Chair, WEPAN Diversity Advancement Committee

WEPAN Finance Committee
Marca Lam, Rochester Institute of Technology and Sara Hernández, Cornell University
The WEPAN Finance Committee is critical managing WEPAN’s assets and audits. The committee supports and advises the WEPAN treasurer financial matters and helps develop clear communication with the WEPAN Board.

WEPAN Membership Committee
Suzie Laurich-McIntyre, Carnegie Mellon University
In an effort to align WEPAN’s membership structure with WEPAN’s mission of “transforming culture in engineering education to promote the success of all women,” members of the Membership Committee work together to make recommendations to identify and attract constituencies who are committed to transforming engineering education. The committee explores who could benefit from WEPAN, how WEPAN can best meet the needs of its current and potential members and reviews membership options and categories.

WEPAN Professional Development Committee
Jenna Carpenter, Louisiana Tech University
The Professional Development Committee develops and implements strategies for developing WEPAN members professionally. Webinars have become a signature offering of this committee. The Committee has also developed and sponsored several professional development workshops at the annual conference.

WEPAN Knowledge Center Committee
Elizabeth Litzler, University of Washington and Bev Louie, University of Colorado, Boulder
The WEPAN Knowledge Center Committee publishes a quarterly e-newsletter including interviews with thought leaders and information about new resources. In alignment with the WEPAN strategic plan and mission, the committee targets increased WKC usage and provides an avenue to make publication-quality content available. Come see what we are up to!

WEPAN Awards Committee
Rachelle Reisberg, Northeastern University
Members of the WEPAN Awards Committee manage WEPAN’s awards strategy to honor and recognize outstanding corporations, educational institutions, programs and individuals working to advance WEPAN’s mission.

WEPAN Communications Committee
Carlie Bower, IBM
Members of the WEPAN Communications Committee will have the opportunity to help shape WEPAN’s strategy in key areas such as maintaining brand integrity, marketing, and leveraging effective communications vehicles with special focus on tools ranging from digital/print media to social media. This work is critical in a time when quickly-evolving technology is constantly changing the way we collaborate as a society - and the way WEPAN interacts with its membership, stakeholders, and the broader engineering education community.

WEPAN Conference Committee
Carol Heaverlo, Iowa State University
The 2013 Conference Committee seeks volunteers to assist with leading, planning and executing WEPAN’s annual conference, to be held June 18-20, 2013 in Atlanta, GA. Opportunities for the 2013 conference include developing the program, recruiting abstract reviewers and session moderators, planning newcomer and networking events, planning local events, publishing the conference program, marketing the conference and publishing the conference proceedings. Taking advantage of being colocated with the American Society of Engineering Education’s (ASEE) Conference, the Conference Committee has an exciting collaboration planned with the ASEE Women in Engineering Division (WIED) on Saturday, June 22nd.

WEPAN Diversity Advancement Committee
Lily Gossage, University of California Long Beach and DiOnetta Jones, Massachusetts Institute of Technology
Interested in fostering alliances/partnerships that advance diversity? Please contact the WEPAN Diversity Advancement Committee. The Committee is charged with developing/implementing strategies to advance WEPAN diversity; this includes, but is not limited to, the recruitment, retention, and engagement of a diverse membership and identification of speakers who reflect the organization’s diversity. Lily Gossage, Chair, WEPAN Diversity Advancement Committee

WEPAN Finance Committee
Marca Lam, Rochester Institute of Technology and Sara Hernández, Cornell University
The WEPAN Finance Committee is critical managing WEPAN’s assets and audits. The committee supports and advises the WEPAN treasurer financial matters and helps develop clear communication with the WEPAN Board.

WEPAN Membership Committee
Suzie Laurich-McIntyre, Carnegie Mellon University
In an effort to align WEPAN’s membership structure with WEPAN’s mission of “transforming culture in engineering education to promote the success of all women,” members of the Membership Committee work together to make recommendations to identify and attract constituencies who are committed to transforming engineering education. The committee explores who could benefit from WEPAN, how WEPAN can best meet the needs of its current and potential members and reviews membership options and categories.

WEPAN Professional Development Committee
Jenna Carpenter, Louisiana Tech University
The Professional Development Committee develops and implements strategies for developing WEPAN members professionally. Webinars have become a signature offering of this committee. The Committee has also developed and sponsored several professional development workshops at the annual conference.

WEPAN Knowledge Center Committee
Elizabeth Litzler, University of Washington and Bev Louie, University of Colorado, Boulder
The WEPAN Knowledge Center Committee publishes a quarterly e-newsletter including interviews with thought leaders and information about new resources. In alignment with the WEPAN strategic plan and mission, the committee targets increased WKC usage and provides an avenue to make publication-quality content available. Come see what we are up to!

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WEPAN Awards Banquet

7:00 p.m.— 9:00 p.m.  Governor’s Ballroom  Awards Banquet—

Sponsored by

The Awards Banquet, sponsored by NUCOR, honors key individuals, programs, and corporations for accomplishments that highlight WEPAN’s mission. Honorees demonstrate extraordinary service, significant achievement, model programs, and exemplary work environments that promote the success of women in engineering.

Welcome Remarks and Introduction of the Keynote Speaker
Presented by: Glenda La Rue, WEPAN President

WEPAN Women in Engineering Program Award
Presented by Glenda La Rue
The WEPAN Women in Engineering Program Award recognizes an outstanding Women in Engineering Program that serves as a model for other institutions.

2012 RECIPIENT: Women in Technology at the Rochester Institute of Technology

RECOGNITION AWARDS

WEPAN Educator’s Award
Presented by Glenda La Rue
The WEPAN Educator Award honors an engineering educator for exceptional achievement in increasing the participation and retention of women in engineering.

2012 RECIPIENT: Mimi Lufkin, Chief Executive Officer, National Alliance for Partnerships in Equity

WEPAN University Change Agent Award
Presented by Glenda La Rue
The WEPAN University Change Agent Award honors an individual who has had a positive impact on their institution with regard to the climate for women in science, technology, engineering, and math fields, with an emphasis on engineering.

2012 RECIPIENT: Dr. L. Pamela Cook, Associate Dean for Faculty Development in the College of Engineering, Professor of Mathematical Sciences and Professor of Chemical and Biomolecular Engineering at the University of Delaware.

RESEARCH AWARD

WEPAN Betty Vetter Award for Research
Presented by Glenda La Rue
The WEPAN Betty Vetter Award for Research recognizes notable achievement in research related to women in engineering. The award is named in memory of Betty M. Vetter, director of the Commission on professionals in Science and Technology, who served as the first treasurer of WEPAN, Inc. and was a founding WEPAN Board member.

2012 AWARD RECIPIENT: Dr. Daryl Chubin, Senior Advisor, American Association for the Advancement of Science (AAAS)

A complete listing of WEPAN Awards and previous Award Recipients is available at www.wepan.org
Wednesday, June 27, 2012

8:00 a.m.–
4:00 p.m.  Registration Open
Prefunction area outside Judicial

8:30 a.m.–
9:45 a.m.  Governor’s Ballroom

Plenary Panel—Leah Jamieson, Dean of Engineering, Purdue University; Gary May, Dean, College of Engineering, Georgia Tech; Sharon Brogdon, Multicultural Initiative Manager, Global Diversity, Education and External Relations, Intel; and Gayle Gibson, Corporate Operations, DuPont

What Plans do Leaders on President Obama’s Jobs Council Have for Advancing Gender Diversity in Engineering as They Graduate and Employ More Engineers?

The President’s Jobs Council has set a goal of at least a 10 percent increase in engineering graduates over the next decade. In February 2012, several engineering deans met with President Obama and Jobs Council industry leaders. With a strong endorsement from President Obama, the ASEE Engineering Deans Council and the President’s Council on Jobs and Competitiveness have launched a partnership to measure, evaluate, and celebrate excellence in retention, graduation, and diversity in engineering education. The effort is intended to further the council’s goal of seeing at least a 10 percent increase in engineering graduates over the next decade. A Seal of Excellence will reward engineering colleges that produce more graduates and provide an incentive to others.

Gary May, engineering dean at Georgia Tech said “We have to think differently as we showcase engineering to our nation’s young.” May, who has played a key role in forging ASEE’s partnership with the Jobs Council, promised that the collaboration “will be groundbreaking in its depth and in its breadth.”

In addition, some 50 industry leaders have committed to double the engineering internships available at their companies in 2012. These commitments are part of a greater Jobs Council effort to help address America’s engineering shortage by graduating 10,000 more engineering students from U.S. colleges and universities each year. These commitments will add approximately 6,300 additional opportunities for hands-on, technical job experience for engineering students.

Such attention at high levels affirms the importance of engineering. What are the plans for this exciting partnership? How can the WEPAN community’s knowledge base and practical experience of the WEPAN community contribute? How will expanded opportunities for new engineers be structured to increase the numbers and advance the prominence of diverse communities of women?
Wednesday, Session 2—
11:15 a.m.–
12:15 p.m.
Legislative A
Theme 2: Results & New Ideas from the Advance Community

Paper—Women STEM Faculty at Ohio State: Resource Allocation and Department Climate
Joan Marie Herbers and Anand Desai, The Ohio State University

We will describe a study on faculty working conditions at Ohio State. No gender disparity was found for salary, startup funds, lab space, or teaching loads. Even so, a gender gap persists for job satisfaction, indicating that reaching gender parity will require understanding of local department culture.

Paper—From Advancing Women in Science and Engineering to Advancing Diversity at Virginia Tech
Peggy Layne, Virginia Tech

The activities implemented by AdvanceVT included review, revision, and expansion of the institution’s policies designed to help faculty balance the demands of career and personal life as well as educating faculty and administrators on unconscious bias in evaluation, increasing transparency in the promotion and tenure process, and providing skill building opportunities for women at various stages of faculty careers.

In this paper the University of Maryland Baltimore County will share best practices from its AGEP Graduate Horizons and ADVANCE Faculty Horizons programs to offer insights on breaking through bottlenecks that have traditionally limited appointments of URM STEM postdoctoral fellows.

11:15 a.m.–
12:15 p.m.
Executive
Theme 1: Women in Engineering Program Contributions

Workshop (1 hr.)—WISE Community Connections: Using K-12 Community Outreach as a Retention Device
Veronica Arreola and Sarah Shirk, University of Illinois at Chicago

Slime. Ice Cream. Marshmallow bridges. UIC WISE serves the Chicago community to increase girls’ awareness of STEM careers. At this workshop attendees will learn to implement best practices to combine community outreach with undergraduate retention efforts. Attendees will go away with a menu of low-cost hands-on activities for K-12 outreach.

11:15 a.m.–
12:15 p.m.
Senate
Theme 4: Building the Feedback Loop: From Research to Practice

Workshop—Women in Engineering Program Assessment from A to Z
Karen Zunkel and Carol Heaverlo, Iowa State University

In times of increasing accountability and limited funding, a review of your Women in Engineering Program can help assure administrators, donors, and constituents of its value. This session will guide you step-by-step through the review process: assessment, creating a review team, the self-study document, review team visits, and implementing changes.

It doesn’t matter where we’re from.
IT MATTERS WHERE WE’RE GOING.

We’re 75,000 people from different backgrounds moving toward one destination: global security. On our team, you’ll discover that diversity is more than a written policy: we live and breathe it.

Across our career areas and around the globe, we see the value of our performance every day. We are Northrop Grumman. And freedom is at the heart of what we do.

Northrop Grumman is a proud supporter of the Women in Engineering ProActive Network. For opportunities in Engineering, IT, Assembly, and other career areas, visit careers.northropgrumman.com

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Wednesday, June 27, 2012 Continued

11:15 a.m.—
12:15 p.m. Judicial
Theme 2: Results & New Ideas from the Advance Community

Workshop (1 hr.)—Building a New Bridge for Research and Practice to Advance Gender Equity
Claudia Morrell and Mimi Lufkin, National Alliance for Partnerships in Equity; Corinne Alfeld, National Institute for Work and Learning; FHI 360

The National Alliance for Partnerships in Equity and the National Institute for Work and Learning FHI 360 will host a workshop to develop and document a shared understanding of the unique contributions of gender equity research and practice that together result in a more diverse domestic STEM workforce.

11:15 a.m.—
12:15 p.m. Legislative B
Theme 3: Corporate Policy, Practice & Influence
Panel—Singing in Harmony: Corporate Diversity Programs and Women in Engineering Initiatives—Opportunities for Collaboration
Nicole Cavanagh, Rockwell Collins; Alix Hughes, Amazon; Rane Johnson-Stempson, Microsoft; Sara Xayarath Hernandez, Cornell University and Klod Kokini, Purdue University

At this session, panelists from corporations and universities will share their program goals and activities for recruiting and retaining technical women, including management of culture. Leaders from corporate diversity programs will share how they reach out to young women in both university and pre-college settings. Learn best practices from university and workplace experts and discuss collaborations that advance aspiring women students.

12:30 p.m.—
1:45 p.m. Governor’s Ballroom

Plenary Luncheon—Theresa A. Maldonado, Ph.D., P.E., Division Director, Engineering Education and Centers Division Directorate for Engineering National Science Foundation
Impact of the NSF Engineering Research Centers Program on Gender and Diversity
Sponsored by Rockwell Collins

For over 26 years the National Science Foundation Engineering Research Centers (ERCs) program has impacted the evolution of university-industry-government collaborations in engineered systems research, development, and deployment. In addition, the program has impacted engineering education and human resource development of students, post docs, and the K-12 community. These ERCs have simultaneously altered institutional culture by enhancing gender diversity in the center activities. This talk will highlight how emphasizing diversity in the ERC infrastructure has engendered the conversation about and the change in the recruitment, retention, and success of underrepresented groups, in particular women, in engineering. The ERC program is currently formalizing best practices of its impact on paving pathways towards gender equity in engineering.

Wednesday, Session 3 —
2:00 p.m.—
3:00 p.m. Legislative A
Theme 1: Women in Engineering Program Contributions

Paper—Enhancing Research & Publication Success by Cultivating your Mentoring Network
Melissa McDaniels, Michigan State University

This paper will help faculty, doctoral students, and postdoctoral students who want to identify priorities for their own scholarly development, and develop a plan to take responsibility for energizing and building their mentoring networks in support of these goals.

Paper—The Strategic Oversight Committee: A Best Practice for Faculty Hiring and Diversity
Klod Kokini, Purdue University

This paper describes an approach, the Strategic Oversight Committee, being used in the College of Engineering at Purdue to provide oversight to the faculty hiring process and presents data to show that such an approach can be successful.

Paper—Searching for Excellence: Effective and Efficient Search Practices
Canan Bilen-Green, Karen Froelich and Sandra Holbrook, North Dakota State University

In this paper we will summarize effective search/hiring processes and proactive strategies used by ADVANCE institutions to increase the excellence and diversity of their candidate pools. We will share strategies and tips to reduce unconscious bias, tips for broadening the candidate pool, and attracting and retaining choice candidates.

2:00 p.m.—
3:00 p.m. Executive
Theme 2: Results & New Ideas from the Advance Community

Workshop—(2 hrs.) Stemming Corporate and Academic Tides: Climate and Cultural Impacts and Promising Practices for Recruiting, Retaining and Advancing Women in Science, Technology, Engineering and Mathematics (STEM)
Gretal Leibnitz, ADVANCE at WSU Excellence in Science and Engineering (EXCELInSE) Center; Diana Bilimoria, Case Western University; Jenna Carpenter, Louisiana Tech University; Nadya Foud, University of Wisconsin Milwaukee; Manorama Khare, University of Illinois at Chicago; and Romila Singh, University of Wisconsin Milwaukee

Research on the impact of corporate and academic climate on STEM women will be shared. Promising practices will be discussed regarding successful:
1) strategies to increase awareness and engagement on climate issues, 2) faculty search committee training and 3) external mentoring programming. Large and small group formats will be utilized.

2:00 p.m.—
3:00 p.m. Senate
Theme 3: Corporate Policy, Practice & Influence

Panel—Moving between Technical and Management Roles
Jessica Eidem and Dan Gateno, IBM

Learn about transitioning between technical and management roles. Based on experiences shared, attendees should be able to decide if management is a good fit. Moving back and forth between management and technical will also be covered. This session is recommended for technical attendees and those who mentor/advise technical women.
Student-faculty interaction is critical to student retention, particularly women in engineering. In an ideal academic setting, female students studying engineering and their faculty would interact effectively and comfortably on an ongoing basis, enabling students to gain the academic and career guidance needed for successful completion of their engineering degree. This session will introduce all the Talk to Me and ENGAGE materials, which are available for download on the WEPAN Knowledge Center, at http://wepanknowledgecenter.org as well as experiences from the field, provided by users of the materials.

This summit included over 70 underrepresented minority (URM) middle school girls and mothers attending a day of engineering career exploration while interacting with over 60 URM women engineering professors from around the US at a critical stage in the K-12 pipeline to engineering careers. Presentation reports on assessment and follow-up activities.

The described intervention engages academic departments in a dialogical change process that promotes collective engagement in institutional transformation and the achievement of gender-equity and diversity goals. It links departmental and university strategic planning to attain “purposeful development of a workplace/organizational climate” to “encourage people to contribute to success and retention”.

Whether you are the one asking or giving, fundraising and sponsorship are some of the most important elements of any successful partnership or event. Building strong relationships and mutually beneficial partnerships is going to help to ensure amazing results for the fundraiser and the sponsor.
I AM A
BOILERMAKER

I know that success is best achieved with guidance, support, encouragement, and I believe that women leading the way for other women is paramount. Paying it forward is a best practice. So I listen. Share. Lend a hand. All to make the engineering experience as rich for others — as it was for me. WE ARE PURDUE. WHAT WE MAKE MOVES THE WORLD FORWARD.

REBECCA LOGSDON
WOMEN IN ENGINEERING PROGRAM
GRADUATE STUDENT
What is Sit With Me?

Come find us at the conference and sit to take a stand!

**Monday night, Tuesday, 8 a.m.–7 p.m.**

We invite you to sit in a red chair, share your story, and listen to the stories of others as they sit to validate and recognize the important role women play in creating future technology by taking a small but symbolic action.

_Craig Mundie_,
 chief research and strategy officer,
 Microsoft

_Brought to you in partnership with NCWIT, Microsoft Research and WEPAN._
Thank You

DuPont® for your generous contribution of the program printing for the 2012 WEPAN National Conference.

Sincerely,
WEPAN Board of Directors
WEPAN Conference Planning Committee
2013 WEPAN National Conference
And
Joint ASEE WIED and WEPAN Symposium

Save the Dates!

Wednesday, June 19 – Saturday, June 22, 2013
Atlanta, Georgia
Hyatt Regency Atlanta

Immediately followed by
ASEE Conference
June 23 – 26, 2013
Atlanta, Georgia