Welcome to the 2014 WEPAN Change Leader Forum! This year’s event marks the 25th annual conference for WEPAN. Engineering a Culture that Drives Innovation promises to engage change leaders, at all levels within higher education, corporations, non-profit organizations, and other partners. The Forum will expand our knowledge and provide opportunities to share best practices and create systemic changes as we pursue our WEPAN goal of 50/50 by 2050.

This year’s Change Leader Forum builds upon the strong tradition of the WEPAN conference, while also incorporating many new and exciting session formats aimed at increasing the opportunities for participants to engage in meaningful discussions.

Nationally renowned keynotes and plenaries:

• Opening Keynote, Scott Page, will set the stage for why diversity and inclusion in engineering matters for everyone.

• Interactive Plenary Session, Michelle Camacho and Susan Lord, will highlight key structural problems in engineering, including issues with microaggressions, and offer some solutions.

• Plenary Session, Jeff Barth, will provide evidence on how engaging men in gender initiatives has led to significant results for corporations.

This year’s program is built around the Four Frames for Creating Gender Inclusive Organizations:

• Frame 1: Equip the Women
• Frame 2: Create Equal Opportunity
• Frame 3: Value Difference
• Frame 4: Re-Vision Engineering Culture

Historically many efforts to increase the representation of women in engineering have focused on the first two frames. As you participate in the Forum, I challenge you to reflect upon what your institution or corporation is doing not only in Frames 1 and 2, but also in Frames 3 and 4. It is only when we have all four frames in place that systemic change to fully engage women in engineering will be realized.

For most of Monday and Tuesday, all attendees will be in keynotes and plenaries together. These days will also include facilitated discussions – so participants can delve deeper into the session content, to understand how individually and collectively we can build upon our knowledge base to accelerate progress toward the full inclusion of women in engineering.

The Tuesday night “Engineering Deans’ Showcase and 25th Anniversary Celebration” provides an opportunity for universities and corporations to share their progress and commitment in increasing the representation of women in engineering. The event will also include a celebration that kicks off WEPAN’s 25th year. Wednesday includes numerous concurrent sessions, the WEPAN Awards Luncheon, along with some new sessions, such as the fast-paced Hi-Fives for Change.

The Forum Planning Committee has excelled at revamping the Forum into the new format. A special thank you to all of the Forum committee members, Laura Bistrek, 2014 Forum Chair, and Elizabeth Litzler, WEPAN Board Liaison to the committee, for their leadership.

To all participants, you are the Change Leaders who are addressing the critical national issue of fully engaging women in engineering. WEPAN is proud to be your partner in this effort!

Karen Zunkel, Ph.D.
WEPAN President
Director, Undergraduate Programs and Academic Quality
Office of the Senior Vice President and Provost, Iowa State University
Thank you to our 2014 Corporate, University and 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.

Visionary Partners

Change Agent

Activator

Advocator

Engineering Deans’ Showcase University Partners

IOWA STATE UNIVERSITY
College of Engineering
Program for Women in Science and Engineering

THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

A. JAMES CLARK
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University of California · Irvine
About WEPAN

For twenty-five years, WEPAN has been 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 1,047 + members are from more than 150 engineering schools, small and large companies, government agencies and not-for-profit organizations. WEPAN’s engineering school members reach over 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.

The WEPAN National Conference / Change Leader Forum

This flagship event is an important annual forum for sharing ideas and engaging in conversations among women in engineering leaders, corporate advocates, researchers, academic leaders, non-profit partners, and government officers. The content at the 2014 Change Leader Forum supports transformation of engineering culture to recognize, value, engage, and leverage difference to support advanced innovation and business performance. The Forum provides the opportunity to:

• Gain access to current research and best practices on advancing culture for women in engineering.

• Engage in critical dialogue with national change leaders and forum participants on the issues and change strategies needed to increase the representation of women in engineering.

• Network with individuals across many sectors (academia, corporations, non-profits) who are leading change, providing programs, and researching effective strategies to create a gender-inclusive engineering culture.

• Recognize excellence by honoring change leaders: key individuals, programs, and corporations for accomplishments aligned with WEPAN’s mission.
2014 WEPAN Change Leader Forum Committee

Change Leader Forum Chair
Laura Kozuh Bistrek
Director, Minority and Women Engineering Programs
University of Dayton

Program Committee
Jennifer Groh, Program Committee Co-Chair
Associate Director, Women in Engineering Program
Purdue University

Cynthia Simpson, Program Committee Co-Chair
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Association for Women in Science

Bria Barry
Assistant Director, Women in Engineering Program
University of Maryland

Morgan Fedorchak
Research Assistant Professor,
Chemical and Petroleum Engineering
Research Assistant Professor, Ophthalmology
University of Pittsburgh

La'Tonia Stiner-Jones, Session Coordinator Chair
Graduate Program Manager, College of Engineering
The Ohio State University

Jada Lewis, Showcase Chair
Assistant Dean,
College of Engineering Office for Diversity Programs
Louisiana State University

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Director, Women in Engineering Program
Northeastern University

Proceedings Committee
Elizabeth Litzler, Chair
Director for Research, Center for Workforce Development
Affiliate Assistant Professor, Sociology
University of Washington

Newcomers Committee
Meltem Erol, Chair
Director of Graduate Outreach, College of Engineering
University of California, Berkeley

Ann Gordon-Ross
Associate Professor, Electrical and Computer Engineering
University of Florida

Thank You
The Forum committee would also like to give special thanks to Ana Dison, Jenna Carpenter, Karen Zunkel, and Paige Smith for their assistance in planning this Forum. We would also like to thank Jackie Bui for creating the Forum signage.
2014 WEPAN Board of Directors, Committee Chairs and Staff

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Keynote Speaker


Scott E. Page, Ph.D. – Professor, University of Michigan

Scott Page is director of the Center for the Study of Complex Systems at the University of Michigan, where he serves as Leonid Hurwicz Collegiate Professor of Complex Systems, Economics, and Political Science and teaches two courses, Understanding Complexity and The Hidden Factor: Why Thinking Differently Is Your Greatest Asset (found on The Great Courses website). Dr. Page’s research areas include how diversity improves performance and decision making, and describes ‘diversity’ as NOT what we look like on the outside, rather what we look like within – the tools and abilities that make each of us unique. Related to diversity, Dr. Page has authored two books: The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies and Diversity and Complexity. He is also the author of Complex Adaptive Systems and is on the external faculty of the Santa Fe Institute. Dr. Page received a 2013 Guggenheim Fellowship in Social Sciences/Political Science. He consults with corporations and nonprofits on market and organizational performance.

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With record enrollment, increased faculty and expanding research capabilities – opportunities abound in the Iowa State University College of Engineering.
Borderlands of Education: Moving Towards a More Enlightened Engineering Culture, Tuesday, June 10, 2014

Michelle Madsen Camacho, Ph.D. – Professor and Chair, Sociology Department, University of San Diego

Michelle Madsen Camacho is Professor and Chair of Sociology at the University of San Diego. She also serves as affiliated faculty to the Ethnic Studies and Women’s and Gender Studies programs. Her Ph.D. is interdisciplinary in Cultural Anthropology and Sociology from the University of California, Irvine. She is a former faculty fellow in Ethnic Studies and postdoctoral scholar at the Center for U.S. Mexican Studies, both at University of California, San Diego. Funded by the National Science Foundation, her research investigates inequities in higher education, specifically as they relate to the low numbers of women and minorities in STEM. In 2013, she co-authored a book with Susan Lord titled The Borderlands of Education, co-edited a volume called “Mentoring Faculty of Color,” and published a paper with Dr. Lord in Latino Studies. Recent awards include: 2014-15 Advancing Culture in Engineering (ACE) Fellow, 2014 University Professor Award, 2013 WEPAN Betty Vetter Award for Research, 2012 Wickenden Award for best paper in the Journal of Engineering Education, 2011 USD Innovation in Experiential Education Award, and 2011 USD McNair Mentor of the Year Award.

Susan M. Lord, Ph.D. – Chair of Electrical Engineering, University of San Diego

Susan M. Lord is Professor and Chair of Electrical Engineering at the University of San Diego. She received a B.S. from Cornell University and M.S. and Ph.D. from Stanford University. Her research focuses on the study and promotion of diversity in engineering including student pathways, diverse populations including Latinos and military veterans, and cross-cultural studies with non U.S. students. Her research has been sponsored by the National Science Foundation. Dr. Lord is a fellow of the American Society of Engineering Education and is active in the engineering education community including serving as President of the IEEE Education Society, General Co-Chair of the 2006 Frontiers in Education Conference, and as an Associate Editor of the IEEE Transactions on Education. She and her research team were awarded the 2013 WEPAN Betty Vetter Award for Research, the 2011 Wickenden Award for best paper in the Journal of Engineering Education, and the 2011 Best Paper Award for the IEEE Transactions on Education. Dr. Lord and Michelle Madsen Camacho are among the first to study Latinos in engineering and co-authored the 2013 book The Borderlands of Education: Latinas in Engineering.
Mary Juhas, Ph.D. – Associate Vice President, The Ohio State University

Mary C. Juhas (Panel Moderator) is Associate Vice President for gender initiatives in STEMM (Science, Technology, Engineering, Mathematics and Medicine) at The Ohio State University. She also holds the appointment of Clinical Professor in the Department of Materials Science and Engineering. Juhas earned a B.S. in Chemistry from Seton Hill University, a Master’s degree in Materials Science and Engineering from Carnegie Mellon University, and a Ph.D. in Materials Science and Engineering from The Ohio State University. She was a Chateaubriand postdoctoral fellow at the University of Paris, France. Juhas has also held engineering research and leadership positions at Lawrence Livermore National Laboratory and Edison Welding Institute. In her current administrative role, she facilitates the recruitment, retention and advancement of women faculty from diverse populations in STEMM disciplines with a goal to increase their presence and develop women research leaders. Dr. Juhas is recognized for her work nationally and internationally (wires.womenandtechnology.eu) in this regard. Juhas is co-principal investigator for Project CEOS (Comprehensive Equity at Ohio State, ceos.osu.edu), an ADVANCE program funded by the National Science Foundation; and past chair of the President & Provost’s Council on Women at Ohio State. Juhas served a two-year IPA (intergovernmental personnel act) leave as the inaugural program director for Diversity and Outreach in the Directorate for Engineering at the National Science Foundation during 2006-2008. She is a WEPAN board member; the past chair of the Women in Materials Science and Engineering Committee of the Minerals, Metals, and Materials Society (TMS); and an ABET board member.

Michele Wheatly, Ph.D. – Provost and Vice President, West Virginia University

Michele Wheatly is Provost and Vice President for Academic Affairs at West Virginia University. Dr. Wheatly was previously Dean of the College of Science and Mathematics and a professor of Biological Sciences at Wright State University. Wheatly earned B.S. and Ph.D. degrees in Biological Sciences and Comparative Physiology, respectively, from Birmingham University, United Kingdom. As the Provost of West Virginia University, Dr. Wheatly is the Chief Academic Officer responsible for the administration of all academic policies, programs, facilities, and budgetary matters except for programs reporting through the Chancellor of the Health Sciences Center. Dr. Wheatly chairs the internal advisory board for the University’s NSF ADVANCE grant, which aims to increase the number of women faculty in STEM fields. With Maryanne Reed, Dr. Wheatly founded the Women’s Leadership Initiative at WVU. Dr. Wheatly is an active presence in the national academic community. She serves on the Executive Committee for both the Association for Public and Land-grant Universities (APLU) Council on Academic Affairs and the APLU’s Science Science & Math Teacher Imperative, and is a charter member of the ACE Association of Chief Academic Officers. She co-chaired a mini-conference for presidents and provosts of universities with ADVANCE grants at the AWIS Annual Meeting in March. In April she participated in a nationally-webcast APLU panel: Rating the Alternatives to Ratings – How Can We Better Ensure Federal Aid & Student Tuition Dollars Go to Schools that Serve Their Students Well?
Plenary Panel Speakers

**Ruth Dyer, Ph.D. – Senior Vice Provost and Professor, Kansas State University**

Ruth Dyer is Senior Vice Provost for Academic Affairs and Professor of Electrical and Computer Engineering at Kansas State University (K-State). Dr. Dyer earned her Ph.D. in mechanical engineering from the University of Kentucky and her B.S. and M.S. degrees in biochemistry from K-State. Dr. Dyer has secured and administered numerous grants for research and outreach projects. In 1999, she obtained a National Science Foundation grant to develop outreach activities for girls in middle school. The resulting program, Girls Researching Our World (GROW), continues today, providing intensive hands-on experiences in science and engineering. From 2003 to 2010, she served as the PI on a $3.5 million NSF ADVANCE Institutional Transformation grant to enhance opportunities for women faculty members in science and engineering disciplines. In her administrative role, Dr. Dyer coordinates initiatives related to university academic policies; oversees the Office of Academic Personnel; directs the K-State Advancement of Women in Science and Engineering Office, which provides networking and support programs to women students and faculty members; and directs the K-State Dual Career Networking Program. Dr. Dyer is a fellow of the IEEE and currently serves as the Executive Vice President of the IEEE Instrumentation and Measurement Society (IMS). She received the 2011 IEEE IMS Distinguished Service Award. Additional awards include selection as an American Council on Education Fellow, as an Association of Women in Sciences Fellow, and induction into the University of Kentucky College of Engineering Hall of Distinction. She currently serves on the University of Kentucky College of Engineering Dean’s Advisory Council.

**Thomas Peterson, Ph.D. – Vice Chancellor and Provost, University of California, Merced**

Thomas W. Peterson is executive vice chancellor and provost of the University of California, Merced, having joined the university in December 2012. He began his academic career as assistant professor of chemical engineering at the University of Arizona in 1977. He was named head of the Chemical Engineering Department in 1990, and in that capacity, he oversaw the merger of the Chemical and Environmental Engineering departments into a single unit and initiated named graduate-degree programs (MS and Ph. D.) in environmental engineering. Beginning in 1998, Peterson served for 11 years as dean of the University of Arizona’s College of Engineering, where he oversaw 15 graduate and 18 undergraduate programs, 13 of which were ABET accredited. In 2009 he was asked to lead the Directorate for Engineering at the National Science Foundation, a $7 billion federal agency that invests in the nation’s research and education activities in the fields of science and engineering. After completing a 4 year term in the fall of 2012, he joined UC Merced. Peterson holds a bachelor’s degree from Tufts University, a master’s degree from the University of Arizona and a doctoral degree from the California Institute of Technology, all in the field of chemical engineering. He was awarded a Doctor of Philosophy, Honoris Causa, by the University of Arkansas, Little Rock, in 2010; was named a fellow of the American Institute of Chemical Engineers in 2004; and was the recipient of the Kenneth Whitby Award from the American Association for Aerosol Research in 1986.
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Plenary Panel Speakers

Managing Culture, the Business Case for Change, and Improving Engagement in Change Initiatives, Tuesday, June 10, 2014

Jeff Barth – Program Manager, Catalyst

Jeff Barth is the Program Manager of MARC (Men Advocating Real Change), an online learning community created especially for professional men who are committed to building inclusive workplaces. In this role he is principally responsible for the development, implementation, and marketing of MARC’s strategy and initiatives aimed at empowering individuals to become inclusive leaders and powerful forces for change in the workplace. As an expert on engaging men, Mr. Barth also provides external training, does speaking engagements, and takes part in creating and expanding Catalyst’s engaging men programs. He currently sits on Catalyst’s Diversity and Inclusion Advisory Council and has served on the Catalyst Canada Honours evaluation committee. Prior to his current role, Mr. Barth was the European Marketing Manager and prior to that he was an Associate in the organization’s Public Affairs department. Before joining Catalyst, Mr. Barth managed political campaigns for candidates running for federal and local office in Utah. He also taught English in Tianjin, China. Mr. Barth received a joint Bachelor’s degree in political science and sociology from Utah Valley University and is currently studying Mandarin.

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To learn more about DuPont Science, visit www.dupont.com
Schedule At-A-Glance – Sunday, June 8 and Monday, June 9

Sunday, June 8, 2014
8:00 a.m. – 6:00 p.m. Board of Directors Meeting – Soo Line

Monday, June 9, 2014
8:00 a.m. – 6:00 p.m. – Registration Open

9:00 a.m. – 11:00 a.m. – Change Leader Workshop – Charles S. Frost (See Page 20 for Details)
Frame 3: Value Difference – Empowering Women and Allies and Challenging Biased Cultural “Norms” through Academic Coaching

11:00 a.m. – 3:00 p.m. – Corporate Advisory Council Meeting – Soo Line

11:30 a.m. – 12:30 p.m. – Change Leader Panel – Charles S. Frost (See Page 20 for Details)
Frame 2: Create Equal Opportunity – Does Gender Equity Make a Difference in Stemming the Tide? A Comparative Analysis of Female and Male Engineers' Intentions to Leave

1:00 p.m. – 3:00 p.m. – Change Leader Workshop – Charles S. Frost (See Page 20 for Details)
Frame 4: Re-Vision Engineering Culture – Developing a Research-Based Action Plan for Your Work with Girls and Women in Engineering

3:15 p.m. – 4:15 p.m. – Newcomers Session – Hiawatha 1 & 2

4:30 p.m. – 6:00 p.m. – Forum Welcome & Kickoff Keynote Session – Great Hall (See Page 20 for Details)
Improving Collective Decision Making and Performance through Diversity
Scott E. Page, Professor, University of Michigan

6:15 p.m. – 8:15 p.m. – Dinner Discussions – Located in Designated Restaurants – Groups meet in Winter Garden to depart
# Schedule At-A-Glance – Tuesday, June 10 and Wednesday, June 11

## Tuesday, June 10, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00 a.m. – 6:00 p.m.</td>
<td>Registration Open</td>
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<tr>
<td>8:00 a.m. – 9:00 a.m.</td>
<td>YOU at the Table: WEPAN Volunteer Engagement Breakfast – Charles S. Frost (See Page 21 for Details)</td>
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<tr>
<td>9:00 a.m. – 10:00 a.m.</td>
<td>Welcome and Change Leader Forum Overview – Great Hall (See Page 21 for Details)</td>
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<td></td>
<td>A Helpful Framework for Improving Gender Diversity in Engineering (a.k.a. the Four Frames)</td>
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<td>Karen Zunkel, Director of Undergraduate Programs and Academic Quality, Iowa State University; Beth M. Holloway, Assistant Dean, Undergraduate Education &amp; Director, Women in Engineering Program, Purdue University</td>
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<tr>
<td>10:00 a.m. – 11:30 a.m.</td>
<td>Morning Plenary – Great Hall (See Page 21 for Details)</td>
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<td>Borderlands of Education: Moving Towards a More Enlightened Engineering Culture</td>
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<td>Michelle Madsen Camacho, Professor and Chair, Sociology Department, University of San Diego; Susan M. Lord, Chair of Electrical Engineering, University of San Diego</td>
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<tr>
<td>12:00 p.m. – 2:00 p.m.</td>
<td>Plenary Luncheon Panel – Great Hall (See Page 21 for Details)</td>
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<td>Advancing Culture in Engineering (ACE) Initiative &amp; Institutional Leader Panel Discussion on Culture Change</td>
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<td>Mary C. Juhas, Associate Vice President for Gender Initiatives in STEM, The Ohio State University; Michele Whealty, Provost and Vice President for Academic Affairs, West Virginia University; Ruth Dyer, Senior Vice Provost for Academic Affairs, Kansas State University; Thomas Peterson, Vice Chancellor and Provost, University of California, Merced</td>
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<tr>
<td>2:30 p.m. – 3:45 p.m.</td>
<td>Afternoon Plenary – Hiawatha 1/2/3 (See Page 21 for Details)</td>
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<td>Managing Culture, the Business Case for Change, and Improving Engagement in Change Initiatives</td>
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<td>Jeff Barth, Program Manager, Catalyst</td>
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<tr>
<td>3:45 p.m. – 5:00 p.m.</td>
<td>Hi-Fives for Change Talks – Hiawatha 1/2/3 (See Page 22 for Details)</td>
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<td>Frame 2: Create Equal Opportunity – Building Partnerships and Processes to Support Dual Career Hiring</td>
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<td>Frame 2: Create Equal Opportunity – Partnering with Librarians – Cultural Change Through an Untapped Resource</td>
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<td>Frame 3: Value Difference – Engaging Engineering Freshmen in Valuing Diversity</td>
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<td>Frame 3: Value Difference – Pre-College Model for Engaging URM Girls in STEM</td>
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<td>Frame 3: Value Difference – Leading From Where You Are</td>
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<td>Frame 4: Re-Vision Engineering Culture – Men as Advocates in the Quest for Gender Parity in the Technical Workplace</td>
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<td>Frame 4: Re-Vision Engineering Culture – The Role of Nucor in Changing Engineering Culture</td>
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<tr>
<td>5:00 p.m. – 7:30 p.m.</td>
<td>Engineering Deans’ Showcase and 25th Anniversary Celebration – Winter Garden and Great Hall (See Page 18 and Page 23 for Details)</td>
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## Wednesday, June 11, 2014

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00 a.m.-6:00 p.m.</td>
<td>Registration Open</td>
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<tr>
<td>8:00 a.m.-9:15 a.m.</td>
<td>Hi-Fives for Change Talks – Great Hall (See Page 23-24 for Details)</td>
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<td>Frame 2: Create Equal Opportunity – WISE Choices in Diversifying Faculty Searches</td>
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<td>Frame 2: Create Equal Opportunity – Leveling the Playing Field for Promotion to Professor</td>
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<td>Frame 3: Value Difference – Understanding STEM from a Global Perspective</td>
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<td>Frame 3: Value Difference – The BOLD Center’s Tutoring Model to Drive Inclusion</td>
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<td>Frame 4: Re-Vision Engineering Culture – University Students’ Gendered Attitudes Towards Equity in Higher Education</td>
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<td>Frame 4: Re-Vision Engineering Culture – Access Engineering: Re-Visioning Summer Opportunities for Pre-college Outreach</td>
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<td>Frame 4: Re-Vision Engineering Culture – Cornerstones of Leadership Program Evaluation – the ELATE Experience</td>
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Schedule At-A-Glance – Wednesday, June 11 – continued

9:30 a.m.-11:00 a.m. – Morning Workshops (See Pages 24-26 for Details)

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<tr>
<th>Rock Island</th>
<th>Charles S. Frost</th>
<th>A.J. Earling</th>
<th>Soo Line</th>
<th>W.J. Quinn</th>
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11:15 a.m.-12:15 p.m. – Morning Panels and Workshop (See Pages 25-26 for Details)

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<tr>
<th>Rock Island</th>
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12:30 p.m.-1:45 p.m. – WEPAN Awards Luncheon – Great Hall (See Page 28 for Details)

2:00 p.m.-3:00 p.m. – Afternoon Panels (See Page 26 for Details)

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3:15 p.m.-4:45 p.m. – Afternoon Workshops (See Page 27 for Details)

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5:15 p.m.-9:00 p.m. – Optional Outing to Mall of America – Group meets in Winter Garden to depart
Showcase Celebration: Engineering Deans’ Showcase & 25th Anniversary Celebration

Tuesday, June 10, 2014 (5:00 – 7:30 p.m.)
Winter Garden and Great Hall

Sponsored By:
Iowa State University
Purdue University
The Ohio State University
University of California, Irvine
University of Maryland

The Showcase is a convivial celebration of WEPAN’s broad community, allowing for networking amongst engineering colleges and workplaces, gaining strategies for advancing diverse communities of women in engineering, and making contacts for future opportunities. The Showcase Reception features posters, exhibits and mini presentations of best practices in research and programs designed to equip the women in engineering.

Cool Engineering
Anika Sharin, Santa Clara University
This showcase will focus on the creation of a super-engineer -woman character and how implementing some fun project demonstrations can help young children, and especially young girls, become more interested in science and engineering.

Developing Revolutionary Engineers and Mentors
Bria Barry, University of Maryland
The Women in Engineering (WIE) DREAM Conference at the University of Maryland is six years running and history in the making. An unprecedented 29 percent of the Clark School’s fall 2013 first-year students are women thanks to efforts like this signature event. Get tips for DREAMing in your local area!

ELATE at Drexel – Drawing the Pipeline of Talent Upward
Diane Magrane, Drexel University; Keri Hornbuckle, University of Iowa; Diana Marculescu, Carnegie Mellon University; Janice Naegle, Wesleyan University
ELATE at Drexel® is a one-year part time Fellowship for women faculty leaders. The exhibit of posters about program outcomes as well as resources for career development will highlight how ELATE advances culture change through individual leadership lessons that address organizational change and build a national community of practice.

Leadership Development for Women in Engineering
Michelle Somerday, Neo Strategic
How can women engineers best prepare themselves to be effective leaders? In this interactive showcase presentation, a leadership framework is proposed that reconciles the range of existing guidance, is based on established leadership models and practices, and provides simplified, concrete guidance to aspiring and current female leaders in engineering.

Moving between Technical and Management Roles
Jessica Eidem, Dan Gateno, IBM
Learn about transitioning between technical and management roles. Based on experiences shared, attendees should better be able to decide if management is a good fit. Moving back and forth between management and technical will also be covered. This showcase is recommended for technical attendees and those who mentor/advise technical women.

Programs for Advancing Women Faculty
Canan Bilen-Green, Elizabeth Birmingham, Karen Froelich, Sandra Holbrook, North Dakota State University
In this showcase we will share programs specifically developed and implemented to help advance women faculty. Programs include networking, mentoring, promotion to professor, leadership development and grant programs for new and mid-career women faculty.

A Successful Living and Learning Community at the University of Maryland
Candice L. Staples, Paige E. Smith, University of Maryland
Flexus: the Marilyn Berman Pollans Women in Engineering Living and Learning Community at the University of Maryland has successfully graduated engineers since 2007. Flexus women have access to academic and social support to help them navigate college life. Visit our poster to learn how we prepare our women for success.

Technovation: Empowering Women and Girls through Technology and Entrepreneurship
Jenna Blanton, Maggie Jaris, Samantha Quist, Iridescent
Technovation is a global program designed to empower women and girls through technology and entrepreneurship. Through a hands-on paper prototyping activity, experience tech entrepreneurship first-hand and engage in a discussion about combining programming skills, entrepreneurial attitudes and strong women mentors to inspire girls to be the next generation of innovators.
Undergraduate Peer-Mentoring for Women: Effects on Retention and Graduation in STEM
Sana Ahmed, Veronica I. Arreola,
University of Illinois at Chicago (UIC)
The UIC Women in Science and Engineering (WISE) program objectively analyzed the success of a peer mentoring initiative on graduation rates and grade point average. Results from four successive cohorts of students attest to the success of the program, which involves near-peer mentoring and a dedicated dorm area.

Women in Engineering and Science Luncheons
Jenna Price Carpenter, Terri Murray,
Louisiana Tech University
The quarterly Women in Engineering and Science Luncheons provide focused professional development for women faculty and graduate students, while also providing a platform for peer-to-peer and student-to-faculty networking. This showcase will discuss the structure of the luncheons, the professional development training, the interactive activities, networking, and present assessment findings.
**Detailed Schedule**

**Monday, June 9, 2014**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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| 9:00 a.m. – 11:00 a.m. | Empowering Women and Allies and Challenging Biased Cultural “Norms” through Academic Coaching  
Charles S. Frost  
Change Leader Workshop  
Frame 3: Value Difference  
Jennifer Groh, Purdue University; Suzanne Zurn-Birkhimer, St. Joseph's College  
Learn how to empower yourself/others to challenge biased cultural “norms”. Inherent in the structure of academic coaching is the engineering design process: identify the underlying problem, explore solutions, create timeline/action items, along with accountability and sharing of results (and revisiting the coaching process, if needed). |
| 11:00 a.m. – 3:00 p.m. | Corporate Advisory Council Meeting |
| 11:30 a.m. – 12:30 p.m. | Does Gender Equity Make a Difference in Stemming the Tide?  
Charles S. Frost  
Change Leader Panel  
Frame 2: Create  
Equal Opportunity  
Nadya A. Fouad, University of Wisconsin – Milwaukee; Romila Singh, University of Wisconsin – Milwaukee  
Using powerful vignettes created from experiences shared by female and male engineers, the audience will engage in brainstorming strategies for creating gender equitable climates in engineering organizations. The researchers will complement the audience generated best practices with their study results (Stemming the Tide, 2012) and highlight additional strategies to transform organizational cultures. |
| 1:00 p.m. – 3:00 p.m. | Developing a Research-Based Action Plan for Your Work With Girls and Women in Engineering  
Charles S. Frost  
Change Leader Workshop  
Frame 4: Re-Vision  
Engineering Culture  
Julie P. Martin, Clemson University; Tricia Berry, University of Texas at Austin  
Wish you knew more about the theoretical frameworks researchers use to study students' enrollment, persistence, and career decisions in engineering, and how they relate to your own work? As a workshop participant, you will learn about relevant research/theories and develop a plan for incorporating them into your own practice. |
| 3:15 p.m. – 4:15 p.m. | Newcomers Session |
| 4:30 p.m. – 6:00 p.m. | Improving Collective Decision Making and Performance through Diversity  
Scott E. Page, Professor, University of Michigan; External Faculty, Santa Fe Institute; Author of Diversity and Complexity and The Difference  
Scott Page's book, The Difference, shows that diverse groups of problem solvers outperform groups of the “best individuals.” Diverse groups make more accurate predictions and solve problems more effectively than groups of “experts.” Page's work is directly applicable to corporations and engineering colleges aiming to increase diversity in engineering. The take-away: why diversity matters to ALL OF US.  
Scott Page is the Director of the Center for the Study of Complex Systems at the University of Michigan where he serves as the Leonid Hurwicz Collegiate Professor of Complex Systems, Economics, and Political Science. Scott's research areas include how diversity improves performance and decision making, and describes 'diversity' as NOT what we look like on the outside, rather what we look like within—the tools and abilities that make each of us unique. Related to diversity, Scott has authored two books: The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies and Diversity and Complexity. |
| 6:15 p.m. – 8:15 p.m. | Dinner Discussions  
Located in Designated Restaurants – Groups meet in Winter Garden to depart. |
Detailed Schedule

Tuesday, June 10, 2014

8:00 a.m. – 9:00 a.m.
Charles S. Frost
YOU at the Table: WEPAN Volunteer Engagement Breakfast
Attend the WEPAN Volunteer Engagement Breakfast to learn about opportunities for you to get involved!
Getting involved with WEPAN is a great way to build your own community of support, network for future opportunities, and expand your personal professional development. See page 29 of the program to learn more about volunteering with WEPAN. A continental breakfast will be provided.

9:00 am – 10:00 am
Great Hall
Welcome and Change Leader Forum Overview
A Helpful Framework for Improving Gender Diversity in Engineering (a.k.a the Four Frames)
Karen Zunkel, Director for Undergraduate Programs and Academic Quality, Iowa State University;
Beth M. Holloway, Assistant Dean, Undergraduate Education and Director, Women in Engineering Program, Purdue University
Working toward an elusive but ideal state, engineering organizations and supporters have implemented programs and activities to increase the representation of women but without significant and sustained success. This discussion will take a systems view of frameworks for achieving equity, with suggestions for how organizations can progress toward gender equity and institutionalize changes.

10:00 am – 11:30 am
Great Hall
Morning Plenary
Borderlands of Education: Moving Towards a More Enlightened Engineering Culture
Michelle Madsen Camacho, Professor and Chair, Sociology Department, University of San Diego;
Susan M. Lord, Chair of Electrical Engineering, University of San Diego
Michelle Madsen Camacho and Susan M. Lord will lead an INTERACTIVE session highlighting key structural problems in engineering education and suggesting creative solutions. This session will explore structures of inequity in engineering culture, illuminate and debunk common myths, and offer strategies to avoid these biases. Camacho and Lord will use a novel “interactive theatre” approach. Why sit in your seats and listen? You can participate by identifying “microaggressions”, referencing ideas from their book The Borderlands of Education: Latinas in Engineering.

12:00 p.m. – 2:00 p.m
Great Hall
Plenary Luncheon
Advancing Culture in Engineering (ACE) Initiative & Institutional Leader Panel Discussion of Culture Change
Mary Juhas, Director of Strategic Partnerships and Associate Dean Diversity & Outreach, The Ohio State University (Moderator);
Michele Wheatly, Provost and Vice President for Academic Affairs, West Virginia University; Ruth Dyer, Kansas State University;
Thomas Peterson, Vice Chancellor and Provost, University of California, Merced
WEPAN has developed a new initiative – a national pilot to reshape those aspects of engineering culture that cause women to “vote with their feet” and opt-out of engineering from engineering college through mid-career. Proven gender equity strategies will be selected and translated for active implementation by both universities and companies. The overarching goal is to build a sustainable engineering culture that retains and advances the pool of talented women engineers within engineering colleges and companies. The panel of institutional leaders with a wealth of academic experience will reflect on how ACE can help transform engineering, the relationships that will need to be cultivated between companies and universities to make this successful, and the need for culture change in their organizations.

2:30 p.m. – 3:45 p.m.
Hiawatha 1, 2, & 3
Afternoon Plenary
Managing Culture, the Business Case for Change, and Improving Engagement in Change Initiatives
Jeff Barth, Program Manager, Catalyst
Jeff Barth, Program Manager, Catalyst, will present research on engaging men in gender initiatives, the benefits of inclusive leadership, and key research findings from Rockwell Automation’s program, “Calling all White Men: Can Training Help Create Inclusive Workplaces?” Attendees will also be introduced to the program MARC (Men Advocating Real Change), launched in 2012 to empower members to engage in candid conversations about gender and its impact in the workplace.
Detailed Schedule

Tuesday, June 10, 2014

3:45 p.m. – 5:00 p.m.
Hiawatha 1, 2, & 3
Frame 2: Create
Equal Opportunity
Hi-Fives for Change Talks 1

Building Partnerships and Processes to Support Dual Career Hiring
Jennifer Heckscher, The Ohio State University
Learn how institutions can address dual-career hiring in order to recruit and retain women faculty in STEM disciplines. This talk will describe a collaborative approach to building a regional HERC, developing partnerships with deans and department chairs and streamlining dual career hiring processes.

Frame 2: Create
Equal Opportunity
Hi-Fives for Change Talks 2

Partnering with Librarians- Cultural Change through an Untapped Resource
Jennifer Groh, Purdue University; Melissa Dragoo, Fischers Branch of the Hamilton East Public Library
Nationally, public library initiatives are starting to focus on enhancing STEM education. Girl-serving programs/allies can create awareness and opportunity to help combat the loss of girls’ interest in math and science by 4th grade through a common childhood activity: engaging with story books (with STEM themes along with companion activities).

Frame 3: Value Difference
Hi-Fives for Change Talks 3

Engaging Engineering Freshman in Valuing Diversity
Jenna Price Carpenter, Louisiana Tech University
This talk focuses on an initiative to engage freshman in valuing diversity. With a required freshman engineering curriculum that includes eight team projects, this initiative sought to educate students about the connections between valuing diversity and effective teams. This talk will outline the motivation, approach, materials, and feedback on impact.

Frame 3: Value Difference
Hi-Fives for Change Talks 4

Pre-College Model for Engaging URM Girls in STEM
Gabriela A. Gonzalez, Intel
This High Five talk describes a new method of collaboration between industry and community colleges to engage at-risk, under-represented girls in STEM. This change talk will highlight the successes of this model’s implementation across two community colleges in Arizona and the effective collaboration with Intel.

Frame 3: Value Difference
Hi-Fives for Change Talks 5

Leading From Where You Are
Marca Lam, Rochester Institute of Technology
Leadership development comes in many forms. You can experience benefits regardless of your current role and stage of your career. Learn from this WEPAN leader how opportunities helped propel her and other WEPAN leaders’ careers and how sometimes these opportunities produce positive outcomes many years later.

Frame 4: Re-Vision
Engineering Culture
Hi-Fives for Change Talks 6

Men as Advocates in the Quest for Gender Parity in the Technical Workplace
Tim Faiella, National Center for Women & Information Technology
Learn about why some men become male advocates for gender reform and what stops others from getting on board. This fast-paced talk shares highlights from original qualitative research with 47 men supervising technical units in 14 different companies. Some of the men in the study were quite activist in gender reform and others still didn’t see that there was a problem. Their range of experiences and perspectives is captured in the research and will be highlighted in this talk.
Detailed Schedule

Tuesday, June 10, 2014

3:45 p.m. – 5:00 p.m.
Hiawatha – Continued
Frame 4: Re-Vision
Engineering Culture
Hi-Fives for Change Talks 7

The Role of Nucor in Changing Engineering Culture

Jose Garcia, Nucor

In this Hi-Five talk, you will learn about Nucor’s practices and programs which changed the way it managed employees and helped employees feel like an integral part of the company by minimizing hierarchies, empowering all teammates and promoting equality for everyone.

5:00 p.m. – 7:30 p.m.
Winter Garden and Great Hall

Engineering Deans’ Showcase and 25th Anniversary Celebration

The 2014 Change Leader Forum sets the stage to celebrate the 25th anniversary of WEPAN Conferences. What an achievement! WEPAN has delivered so much over its 25 years; sharing best practices, networking, and advancing women in engineering with over 700 different organizations that have attended. That includes:

- Universities, colleges and schools: 380+
- Companies (big and small): 190+
- Non-profits, national labs, government, professional associations: 150+

The Showcase is a convivial celebration of WEPAN’s broad community allowing for networking amongst engineering colleges and workplaces, gaining strategies for advancing diverse communities of women in engineering, and making contacts for future opportunities. The Showcase Reception features posters, exhibits and mini presentations of best practices in research and programs designed to equip the women in engineering. And, of course, there will be cupcakes!

Wednesday, June 11, 2014

8:00 a.m. – 9:15 a.m.
Great Hall
Frame 2: Create
Equal Opportunity
Hi-Fives for Change Talks 1

WISE Choices in Diversifying Faculty Searches

Leana Golubchik, University of Southern California
Sarah Fried-Gintis, University of Southern California;

Hiring practices continue to be an influential procedural barrier to increasing the representation of women in tenured and tenure-track STEM faculty positions. “WISE Choices in Diversifying Faculty Searches” explores strategies used by the USC Women in Science and Engineering (WISE) program in casting the net widely and identifying women candidates.

Frame 2: Create
Equal Opportunity
Hi-Fives for Change Talks 2

Leveling the Playing Field for Promotion to Professor

Peggy Layne, Virginia Tech

University- and college-level workshops for associate professors describe the process and criteria for promotion to the rank of (full) professor, level the playing field for female faculty members, and promote a culture of working towards promotion for all faculty.

Frame 3: Value Difference
Hi-Fives for Change Talks 3

Understanding STEM from a Global Perspective

Janice Rae Crow, Iowa State University; Allie Rowe, Iowa State University

This interactive session will introduce a new credit-bearing course with a complementary in-country study abroad program designed to provide undergraduate women in STEM fields a different perspective of how cultural or social norms impact women and their career choices.
Detailed Schedule

Wednesday, June 11, 2014

8:00 a.m. – 9:15 a.m.
Great Hall – Continued
Frame 3: Value Difference
Hi-Fives for Change Talks 4

The BOLD Center’s Tutoring Model to Drive Inclusion
Jonathan Tebbe, University of Colorado Boulder; Beverly Louie, University of Colorado Boulder
This presentation will highlight the role of the BOLD Center’s Student Success Center tutoring program in improving the retention and success of engineering student users from the perspective of the tutors. How the tutors engage with students for academics and at a personal level bolsters inclusion and engagement in engineering.

Frame 4: Re-Vision
Engineering Culture
Hi-Fives for Change Talks 5

University Students’ Gendered Attitudes Towards Equity in Higher Education
Jenna O. Rapai, University of Manitoba
This talk describes online survey results from 600 Canadian undergraduate and graduate students. The responses showed some striking similarities and differences between female and male students on their perceptions of underrepresentation, discrimination, and harassment. Evidence exists that lingering attitudes and biases against female STEM students may be perpetuated by current initiatives to increase diversity.

Frame 4: Re-Vision
Engineering Culture
Hi-Fives for Change Talks 6

Access Engineering: Re-Visioning Summer Opportunities for Pre-College Outreach
Jennifer Groh, Purdue University; Rebecca Scott, Purdue University
Provocative discussion on what happens when we shift summer offerings for pre-college outreach from namely gendered and self-selection-based (i.e., girls with pre-formed interest in engineering choosing all-girl STEM program) to engaging a broader and more diverse audience through partnerships with existing youth programs not necessarily tied to STEM.

Frame 4: Re-Vision
Engineering Culture
Hi-Fives for Change Talks 7

Cornerstones of Leadership Program Evaluation — the ELATE Experience
Diane Magrane, Drexel University; Brenda Seals, Drexel University; Susan Ambrose, Northeastern University; Sharon Dannels, George Washington University; Nily Dan, Drexel University
Through data and images, the Cornerstones of Leadership Program Evaluation project will build a framework of evaluation and improvement for leadership programs and an academic culture that values women’s leadership contributions.

9:30 a.m. – 11:00 a.m.
Charles S. Frost
Frame 3: Value Difference
Workshop

Engaging Outreach: Three Examples
Dough Creatures and Circuit Sculpting to Engage Girls in STEM
Tricia Berry, University of Texas at Austin; Rita Karl, SciGirls- Twin Cities Public Television
Dough Creatures: Get creative and explore best practices and standards-aligned SciGirls curriculum designed to engage girls in STEM. Use conductive and insulating dough to sculpt circuits and light up creatures. Discover the SciGirls Seven strategies to engage girls in STEM and share strategies from your own experiences.

Hermanas Workshop: An Innovative Model for Engaging URM Girls in STEM
Gabriela A. Gonzalez, Intel; Maria Reyes, Maricopa County Community College District
Hermanas Workshop: This workshop illustrates a proven model for engaging the hearts and minds of under-represented minority (URM) girls through STEM and the steps to initiate a productive industry/academia collaboration.

Engineering Too Geeky for Girls? A Fun Engineer Activity for Female Students
Pinfan Lee, IBM Taiwan; Yuwen Yang, IBM Taiwan; Anny Tseng, IBM Taiwan
E-Week School Visits: To increase female high school students’ interests in studying the STEM subjects, IBM Taiwan conducted an Engineering Week (E-Week) program. Thru a half-day volunteering activity with science experiments, teamwork, and games, IBM Taiwan volunteers bring the fun side of STEM to the students.
## Detailed Schedule

### Wednesday, June 11, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Frame</th>
<th>Workshop</th>
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<tbody>
<tr>
<td>9:30 a.m. – 11:00 a.m.</td>
<td>Rock Island</td>
<td>4: Re-Vision</td>
<td>Engineering Culture Workshop Creating a Culture of “Disruptive Innovation” Calls for Women by Bonita Banducci, Santa Clara University; Felicia Mayo, Juniper Networks. Juniper Networks’ culture of Disruptive Innovation retires performance reviews and drives performance with Honest Dialogue and developing Collective Intelligence, Growth Mindset, and Social Networks. Participate in an Honest Dialogue to engender an innovation work culture in which women and men flourish – which calls for hiring and participation of more women.</td>
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<tr>
<td>9:30 a.m. – 11:00 a.m.</td>
<td>Soo Line</td>
<td>2: Create Equal Opportunity Workshop Tools for Change in STEM by Joan C. Williams, University of California, Hastings College of the Law. Two factors have stalled women’s advancement in STEM: implicit bias and lack of family friendly policies. Mary Ann Mason, UC Berkeley and Joan C. Williams, UC Hastings (ADVANCE PAID grant) have determined when and why women drop out of the pipeline and have developed tools to help retain women in STEM.</td>
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<tr>
<td>9:30 a.m. – 11:00 a.m.</td>
<td>A.J. Earling</td>
<td>2: Create Equal Opportunity Workshop Blueprints for Success: Structuring Institutional Support for Mentor Networks by Marie Garland, Syracuse University; Stephanie Goodwin, Wright State University; Sharon Alestalo, Syracuse University. Designed to assist those hoping to develop responsive mentoring programs for faculty, postdocs, and graduate students, workshop participants will use tools developed by the W.K. Kellogg foundation to develop a logic model and program plan that addresses the gender-based mentoring barriers in their own institutions or organizations.</td>
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<tr>
<td>9:30 a.m. – 11:00 a.m.</td>
<td>W.J. Quinn</td>
<td>2: Create Equal Opportunity Workshop Academic Success and Professional Development: Leveling the Playing Ground by Mary Anderson-Rowland, Arizona State University; Armando A. Rodriguez, Arizona State University. This workshop is for anyone interested in “Helping Women Engineering Students Succeed.” The session is for program directors and college faculty and staff interested in the success of potential and actual STEM students, both transfers and non-transfers, especially first generation, rural, females, and underrepresented minority students with unmet financial need.</td>
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<tr>
<td>11:15 a.m. – 12:15 p.m.</td>
<td>Charles S. Frost</td>
<td>2: Create Equal Opportunity Panel Policies for Leveling the Playing Field by Canan Bilen-Green, North Dakota State University; Karen Froelich, North Dakota State University; Susan Carlson, University of California; Sandra Holbrook, North Dakota State University. In this session, we will share policies developed and implemented at NSF ADVANCE institutions designed to create equal opportunity and level the playing field, especially for women faculty. The session will describe both the process and outcomes of specific policy change initiatives.</td>
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<tr>
<td>11:15 a.m. – 12:15 p.m.</td>
<td>A.J. Earling</td>
<td>3: Value Difference Panel Corporate Service Corps Creating an ‘Inclusion for Everyone’ Environment by Dan Gateno, IBM; Jessica Eidem, IBM. This session will feature two IBM employees who will share their experiences and explain the importance of global volunteerism and its impact on inclusion, at a global scale, in the workplace. As part of this program, IBM provides direct training to support working in diverse teams.</td>
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## Detailed Schedule

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<td>11:15 a.m. – 12:15 p.m.</td>
<td>Soo Line</td>
<td><strong>How to Actively Manage Culture in your Organization</strong>&lt;br&gt;Sheila Edwards Lange (moderator), University of Washington&lt;br&gt;This session featuring corporate panelists will help you understand the systemic factors that drive engineering culture in business settings and why culture change should matter to you. The audience will be engaged to share their strategies to manage culture change and drive the full engagement of diverse communities of women in engineering. Come discuss how culture can be a great enabler of organizational change.</td>
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<tr>
<td>11:15 a.m. – 12:15 p.m.</td>
<td>Rock Island</td>
<td><strong>Beyond “Fixing” the Women: Using Lessons Learned from ENGAGE (EngageEngineering.org) to Discuss the Four Frames and Implications for the Future of WIE Programs</strong>&lt;br&gt;Susan Staffin Metz, Stevens Institute of Technology; Patricia Campbell, Cambell- Kibler Associates, Inc.; Beth Holloway, Purdue University&lt;br&gt;Working across the four WEPAN Forum Frames, ENGAGE provides lessons learned about what does and doesn’t work within the frames and why it is so difficult to move beyond “Equip the Women”. The panel involves participants in discussions on implications for the future and the ability of WIE programs to move beyond “fixing” the women.</td>
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<tr>
<td>12:30 p.m. – 1:45 p.m.</td>
<td>Great Hall</td>
<td><strong>WEPAN Awards Luncheon – See Page 28</strong></td>
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<tr>
<td>Wednesday</td>
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<td><strong>NSF ADVANCE Programs: Leveling the Playing Field for Women Faculty</strong>&lt;br&gt;Peggy Layne, Virginia Tech; Jenna Carpenter, Louisiana Tech; Autumn Reed, University of Maryland, Baltimore County; Marci Levine, Lehigh University&lt;br&gt;Four NSF ADVANCE grantee universities will describe initiatives to level the playing field for women faculty, including increased transparency of policies, procedures, support for interdisciplinary research, implementation of work/life balance policies, educating university leaders about equity and inclusion, and lead a discussion about ways to adapt and implement similar initiatives at other institutions.</td>
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<tr>
<td>2:00 p.m. – 3:00 p.m.</td>
<td>Rock Island</td>
<td><strong>ADVANCE Approaches to Changing Academic Culture: Educating Allies About Implicit Bias</strong>&lt;br&gt;Jennifer Sheridan, University of Wisconsin- Madison; Canan Bilen-Green, North Dakota State University; Gretal Leibnitz, ADVANCE Implementation Mentors Network&lt;br&gt;In this session, we discuss three approaches developed by NSF ADVANCE institutions towards changing the culture of academic science and engineering towards underrepresented persons. These approaches rely on the use of “implicit bias” as a frame for changing culture. The session will include fun exercises, short presentations, and engaging discussion.</td>
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<tr>
<td>2:00 p.m. – 3:00 p.m.</td>
<td>A.J. Earling</td>
<td><strong>Conversations on Leadership – Lessons from ELATE at Drexel</strong>&lt;br&gt;Diane Magrane, Drexel University; Keri Hornbuckle, University of Iowa; Diana Marculescu, Carnegie Mellon University; Janice Naegle, Wesleyan University&lt;br&gt;Alumnae of ELATE at Drexel® will engage audience members in a discussion of how the outcomes of leadership development have shaped their opportunities and influenced their organizations. Audience members will then be invited to explore questions about how on-the-job leadership development bolstered by formal leadership training might influence the culture of academic engineering.</td>
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### Detailed Schedule

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<th>Event</th>
<th>Speaker(s)</th>
<th>Details</th>
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<tbody>
<tr>
<td>3:15 p.m. – 4:45 p.m.</td>
<td>Changing the Culture: Micro-Aggressions and Micro-Affirmations</td>
<td>Kaitlyn J. Bunker, Michigan Technological University; Raven R. Rebb, Michigan Technological University; Laura E. Brown, Michigan Technological University; Leonard J. Bohmann, Michigan Technological University; Nilufer Onder, Michigan Technological University; Gretchen L. Hein, Michigan Technological University</td>
<td>Throughout your career you may observe backlashes against policies that had started well. When things slowly and unnoticeably turn backwards, you may be experiencing the effects of micro-aggressions. This workshop will focus on micro-aggressions and micro-affirmations in the context of institutional policies. The participants will collaborate to explore ways to affect change at their institutions.</td>
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<tr>
<td>3:15 p.m. – 4:45 p.m.</td>
<td>Equitable Solutions for Retaining a Robust STEM Workforce: Beyond Best Practices</td>
<td>Donna J. Dean, Association for Women in Science; Cynthia Simpson, Association for Women in Science</td>
<td>Academic institutions must rethink the policies that are currently in place in order to make recruitment and retention of women faculty in STEM more gender equitable. This interactive workshop will focus on the well-researched best practices that are currently in place which can provide the basis for cultural change.</td>
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<tr>
<td>3:15 p.m. – 4:45 p.m.</td>
<td>What Are You Asking Me to Do?!: A “Speed-Networking” Session to Develop a Shared Vision and Actions for How Corporations and Universities can Work Together on Culture Change</td>
<td>Tricia Berry, University of Texas at Austin; Beverly Louie, University of Colorado Boulder</td>
<td>In this interactive, speed-networking session, WEPAN’s corporate and university partners will discuss critical questions to collaborate on culture change. Participants will interact through fast-paced, small group break-outs and whole-group sharing. Participants will take away new ideas for collaborations and for developing culture change within their institution or company.</td>
</tr>
<tr>
<td>3:15 p.m. – 4:45 p.m.</td>
<td>An Innovative Approach to Addressing Inclusive Language on Campus</td>
<td>Paige Smith, University of Maryland; Amy Martin, University of Maryland</td>
<td>This session reviews components of a comprehensive campaign about why language matters. Participants engage in simulated classroom experiences demonstrating approaches to conversations around language and inclusion. This is an important session that provides one approach to creating welcoming environments for diverse communities of women.</td>
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<tr>
<td>3:15 p.m. – 4:45 p.m.</td>
<td>The StratEGIC Toolkit: Strategies for Effecting Gender Equity and Institutional Change</td>
<td>Sandra Laursen, University of Colorado Boulder; Ann E. Austin, Michigan State University</td>
<td>The newly launched StratEGIC Toolkit draws on evidence from ADVANCE Institutional Transformation projects to identify strategic interventions that contribute to the development of institutional environments supportive of STEM women scholars. In this workshop we highlight variations in how particular interventions can be used strategically and outline their affordances and limitations.</td>
</tr>
<tr>
<td>5:15 p.m. – 9:00 p.m.</td>
<td>Optional Outing to Mall of America</td>
<td></td>
<td>Groups meet in Winter Garden to depart.</td>
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</tbody>
</table>
### WEPAN Awards Luncheon – Wednesday, June 11, 12:30 p.m. – 1:45 p.m.

The Awards Luncheon 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.

## 2014 WEPAN Awards

<table>
<thead>
<tr>
<th>Award Type</th>
<th>Award Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WEPAN Women in Engineering Program Award</strong></td>
<td>The WEPAN Women in Engineering Program Award recognizes an outstanding Woman in Engineering Program that serves as a model for other institutions.</td>
<td>2014 Recipient: Cal Poly Women’s Engineering Program (CPWEP), California Polytechnic State University</td>
</tr>
<tr>
<td><strong>WEPAN Women in Engineering Initiative Award</strong></td>
<td>The WEPAN Women in Engineering Initiative Award recognizes an outstanding project or initiative that serves as a model for other institutions.</td>
<td>2014 Recipient: ELATE (Executive Leadership in Academic Technology and Engineering), Drexel University</td>
</tr>
<tr>
<td><strong>Recognition Award</strong></td>
<td><strong>WEPAN University Change Agent Award</strong></td>
<td>The WEPAN University Change Agent Award honors an individual who has 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.</td>
</tr>
<tr>
<td></td>
<td>2014 Recipient: Cordelia Ontiveros, Associate Dean of Engineering, California State Polytechnic University, Pomona</td>
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<tr>
<td><strong>Research Award</strong></td>
<td><strong>WEPAN Betty Vetter Award for Research</strong></td>
<td>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.</td>
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<tr>
<td></td>
<td>2014 Recipient: Amy Sue Bix, Associate Professor, Iowa State University</td>
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<tr>
<td><strong>Pre-College &amp; WIE Initiative Awards</strong></td>
<td><strong>WEPAN/DiscoverE Girl Day Award</strong></td>
<td>WEPAN and the Introduce a Girl to Engineering Day Program, an initiative of DiscoverE, work together to recognize major contributions of organizations or individuals to the Introduce a Girl to Engineering Day initiative.</td>
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<td></td>
<td>2014 Recipient: Raytheon</td>
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</table>

## Service & Recognition Awards

<table>
<thead>
<tr>
<th>Award Name</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>WEPAN Distinguished Service Award</strong></td>
<td>The WEPAN Distinguished Service Award recognizes a WEPAN member whose individual service has made a significant impact for the organization.</td>
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<tr>
<td>2014 Recipient: Beth Holloway, Director, Women in Engineering Program, Purdue University</td>
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<tr>
<td><strong>WEPAN Founders Award</strong></td>
<td>The Founders Award honors a WEPAN member who exemplifies the spirit of the WEPAN founders through her/his extraordinary long-term service to the organization. This award is named for the three founders of WEPAN, Inc. – Suzanne G. Brainard, Jane Zimmer Daniels and Susan Staffin Metz.</td>
</tr>
<tr>
<td>2014 Recipient: Tricia Berry, Director, Women in Engineering Program, The University of Texas at Austin</td>
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<tr>
<td><strong>WEPAN President’s Award</strong></td>
<td>The President’s Award recognizes individuals or groups who have made significant contributions to WEPAN’s goals and objectives.</td>
</tr>
<tr>
<td>2014 Recipients: Mary Anderson-Rowland, Associate Professor of Engineering, Arizona State University Brenda Hart, Professor and Director of Student Affairs, J.B. Speed School of Engineering, University of Louisville</td>
<td></td>
</tr>
</tbody>
</table>
Get Involved with WEPAN!

Build your skills and volunteer to help out on a committee or task force.

Future task forces may be related to:

- Social Media
- Communication
- Finance
- Diversity Advancement
- Evaluation/Assessment
- Leadership

2014-2015 Standing Committees

WEPAN Professional Development Committee
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.

Women in STEM Knowledge Center Committee
The Women in STEM 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 WSKC usage and provides an avenue to make publication-quality content available.

WEPAN Awards Committee
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 Change Leader Forum Committee
The 2015 Change Leader Forum Committee seeks volunteers to assist with leading, planning and executing WEPAN’s annual conference, to be held June 9-11, 2015 at The Omni Interlocken Hotel, Broomfield, CO. Opportunities for the 2015 conference include developing the program, recruiting and organizing session coordinators, planning newcomer and networking events, planning local events, publishing the conference program, marketing the conference and publishing the conference proceedings.

Contact any WEPAN Board Member to start your professional development now!

Through serving on WEPAN’s Professional Development Committee, I have learned a great deal about collaborating virtually, using webinar software, and organizing, hosting, and evaluating a webinar. The webinars themselves are also engaging and informative, providing the opportunity to learn about the four frames, culturally relevant pedagogy, and engaging male allies in gender equity, to name a few. It is a pleasure working with the team, and the experience has been a gratifying professional development opportunity.

— Jennifer Heckscher, The Ohio State University
Thank You!

For your generous contribution of Program and Signage printing for the 2014 WEPAN Change Leader Forum

From the WEPAN Board of Directors and WEPAN Change Leader Forum Planning Committee
• Explore over 1,800 curated resources related to advancing women in STEM
• Watch webinar recordings from national speakers on topics such as “Male Allies Moving the Gender Equity Needle” from the team at North Dakota State University
• Read interviews with thought leaders like Dr. Margaret Bailey, Senior Faculty Associate to the Provost for ADVANCE, PI, Professor, Rochester Institute of Technology, and Founding Executive Director, WE@RIT
• Discover Connected Advocates like Dr. Elizabeth Creamer, a Professor in the Educational Research and Evaluation Program (EDRE) at Virginia Tech, and interact with data visualizations on over 900 topical publications
• Collaborate with peers on grant proposals, projects or committees in private work groups

Check out the WSKC today at www.WSKC.org!

Join us in Colorado!
WEPAN’s 2015 Change Leader Forum

June 9 – 11, 2015
Omni Interlocken Hotel
Broomfield, Colorado

www.wepan.org
Recognize special people in your life — make a gift in their honor or memory

Make a tribute gift for someone who has inspired you.
Donate to WEPAN Now: www.wepan.org

Tribute Honor Roll
We are privileged to honor and congratulate our Honor Roll recipients:

Stephanie Adams
Susan Arnold-Christian
Chris Anderson
Winnifred Anderson
Michael and Jacqueline Artis
Sharnnia Artis
Cathleen Barton
Tricia Berry
Aileen Blair
Donna and Larry Bower
Suzanne G. Brainard
Pat Campbell
Daryl Chubin
Eunice Cordes
Jane Zimmer Daniels
Cathy Deno
Harriett Tate Frye
Len V. Hills
Nancy Hellman
Leah Jamieson
Jolene Jesse
Loretta Juhas
Talina Knox
Klod Kokini
Maurice and Maria Kokini
Sheila Edwards Lange
Isabel Le
Elizabeth Mason Long
A. Robert Matt
Diane Matt
Derek McGowan
Susan Metz
Anna Recker Niebling
Carl Norbeck
Helen Norbeck
Jan Rinehart
Dolores S. Rockwood
Ruta Sevo
Catherine Long Schavul
Linda Scherr
Paige Smith
Lee J. Suttner
Paul E. Torgersen
Betty Vetter
Sister Luella Wall
Bevlee A. Watford
Sherry Woods
Laura Niebling Zimmer

Transforming Culture in Engineering Education
Four Frames for Creating Gender Inclusive Organizations

**Frame 1: Equip the Women**
Minimize differences in experience between women and men so that women can compete as equals.
Focus is on the individual.

**Frame 2: Create Equal Opportunity**
Focuses on eliminating structural and procedural barriers that are biased against women and impede advancement.
Interventions tend to be legalistic and policy-based.

**Frame 3: Value Difference**
Focuses on valuing difference rather than eliminating difference.
Places gender equity within a broader diversity perspective.
Gender seen as an important contributor to innovation and business performance.

**Frame 4: Re-Vision Engineering Culture**
Focuses on underlying systemic factors that lead to inequity.
Organizations are inherently gendered and gender is a social construct.
Interventions change the culture by addressing underlying assumptions, norms, and practices.

Source:
CGO Insights, Briefing Note No. 1, Simmons Graduate School of Management, http://www.simmons.edu/som/docs/Insights_01.pdf.
Downloaded June 17, 2013

Special credit to Beth Holloway for providing WEPAN with this illustration.