

Keynote Speakers



Kick-off Keynote Session—Thursday, June 18th — 8:30 a.m.-9:45 a.m.—Capital Ballroom

Ken Dickerson, retired Senior Vice President of External Affairs for ARCO, The Atlantic Refining Company, where his management responsibilities included the company's government and public affairs, community affairs, communications, environment, health, safety, and the ARCO Foundation. He currently serves on the Development Board and is Chairman of the Board of Industrial Advisors of the School of Engineering of The University of Texas at Dallas, is a member of the Board of Advisors for the Cockrell School of Engineering at The University of Texas at Austin, is a Trustee of the Center for American and International Law in Dallas and serves as Senior Advisor to the Sustainable Development Corporation in California. He has a Bachelor of Arts degree and law degree from The University of Texas at Austin. He is a member of the bar associations of Texas, California, Pennsylvania and New York and is admitted to practice before the U.S. Supreme Court. Sponsored by



Keynote Luncheon— Thursday, June 18th — 1:00 p.m.-1:45 p.m.—Longhorn

Cindy Atman, Ph.D., is a professor in Human Centered Design & Engineering, founding director of the Center for Engineering Learning & Teaching (CELT), director of the Center for the Advancement of Engineering Education (CAEE) and the inaugural holder of the Mitchell T. & Lella Blanche Bowie Endowed Chair at the University of Washington (UW). She earned her doctorate in engineering and public policy from Carnegie Mellon University and joined the UW in 1998 after seven years on the faculty at the University of Pittsburgh. Her research focuses on engineering design learning and students as emerging engineering professionals. She is a fellow of AAAS and ASEE, was the 2002 recipient of the ASEE Chester F. Carlson Award for Innovation in Engineering Education, and received the 2009 David B. Thorud Leadership Award, which is given to a UW faculty or staff for demonstrating leadership, innovation, and teamwork. Sponsored by



Plenary Speaker Session— Friday, June 19th —8:00 a.m.-9:15 a.m.—Capital Ballroom

Truman Bell, is ExxonMobil's Senior Program Officer for education and diversity where he coordinates community relations activities and manages education and diversity contribution programs. These programs include support to higher education and K-12 education, initiatives to improve career opportunities for women and minorities, and programs that foster improvement of teaching and learning in science, technology, engineering and mathematics. Truman serves on boards and advisory committees of organizations such as the National Action Council for Minorities in Engineering, the Society of Women Engineers, SECME, Inc., the National Science Teachers Association, and the Texas Business and Education Coalition. He is also a trustee of the Alpha Phi Omega national endowment trust and the Tarleton State University Foundation.



Beth Holloway, has been the Director of the Women in Engineering Program at Purdue University since 2001. She received a B.S. and M.S. in Mechanical Engineering from Purdue and worked as a research and development engineer for Cummins, Inc. for nine years. In addition to directing the Women in Engineering Program, Beth serves as the advisor to the Purdue section of the Society of Women Engineers. She is a past president of WEPAN, serving on the WEPAN Board of Directors from 2005 – 2008, and was the Co-Chair of the 2003 WEPAN National Conference. She is a Faculty Fellow at Earhart Residence Hall, and on the Board of Directors of the Purdue University Engineering Alumni Association.



Jolene Kay Jesse Ph.D., is a Program Director for the Research on Gender in Science and Engineering program in the Directorate for Education and Human Resources (EHR) at the National Science Foundation. The program funds and promotes research into education and workforce issues aimed at broadening the participation of women and girls across the science and engineering fields. It also funds efforts to diffuse research based innovations in gender equitable teaching, pedagogy, and counseling to practitioner audiences. Before coming to NSF, Jolene 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, at the American Association for the Advancement of Science. She received her Ph.D. from the University of Wisconsin-Milwaukee, and a M.A. from The American University in Washington, DC.



Jan Rinehart, is Executive Director of the ADVANCE Program at Rice 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. Prior to assuming this position, she served as the Deputy Director of the Space Engineering Institute 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 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. Sponsored by



Thursday, June 18, 2009

8:00 a.m.– **Registration Open**
5:00 p.m. **Balcony Alcove**

8:30 a.m.– **Capital Ballroom** *Conference Welcome & Kick-off*
9:45 a.m. *Keynote Session—Ken Dickerson, Retired Senior Vice President, ARCO*
Making the Case for K-12 STEM Education
Sponsored by 

The demand for engineers is growing and if critical changes are not made at the K-12 level and within universities to ensure a dependable workforce is available, the US will not remain a high quality place to do business. The economic impact of an increased pool of engineers and computer scientists is staggering. At the state level, Texas needs to increase the number of higher education students graduating with STEM related knowledge and skills that meet industry needs and will ensure Texas remains competitive in attracting and sustaining industry for the future. Through public policy and state appropriations, collaborative efforts across state universities, state-wide STEM initiatives, and grant-funded education and teacher training programs, efforts are being made across the state to address STEM workforce and pipeline issues. It will take all of us – state governments, universities, K-12 institutions, companies, individuals – to affect the demand.

10:00 a.m.– **Capital B** *Developing Engineering Talent from K to Grey-Research Focused*
11:00 a.m. *Moderator: Kristian Fisher Trampus, Director, East Texas STEM Center; Research Faculty, University of Texas at Tyler*



TH1-1A The Benefits of Routine Performance Feedback for Faculty Elizabeth Creamer, Leigh Harrell, and Peggy Layne

Results from this two-phase qualitative and quantitative study confirm that perceptions about the clarity of performance expectations are significantly more positive among faculty members who receive routine and concrete feedback about performance. This paper reports findings of a two-phase, mixed methods study of pre-tenure engineering faculty at a land grant university in the mid-Atlantic region of the U.S.



TH1-1B Gender Differences in the Career Paths of Engineering Faculty Catherine Didion, National Academy of Engineering

This presentation will focus on a National Research Council Congressionally-mandated study that will be released in early 2009 and will present new findings about career differences between female and male faculty in science, engineering, and mathematics. The purpose of the project is to update earlier analyses, identify and assess any gender differences, and recommend methods for further clarifying assumptions about gender and academic careers.



TH1-1C The Impact of Funding on Female Faculty Advancement Lynn Ellen Katz, Mia K Markey, Kathy J. Schmidt, Sherry E. Woods, and Tricia S. Berry, The University of Texas at Austin

This panel presentation will include representation from faculty, staff and administration in a forum that discusses the benefits and

challenges of various models for advancing representation of female faculty. Data from several institutions, including those with and without NSF ADVANCE grants, will be compared against benchmark measures of female faculty advancement. The focus will be on the type and extent of programs employed to achieve reform.

10:00 a.m.– **Lone Star** *Communicating, Marketing and Effective Messaging—Practice Focused*
11:00 a.m.



TH1-2 Discussion—Engineer Your Life: Effective Communication Messages

Thea Sahr, WGBH, Janet Yowell, University of Colorado at Boulder, Tricia Berry, The University of Texas at Austin

Learn about Engineer Your Life (EYL), a national campaign to transform the image of engineering, and how you can use it in your college/university. Hear firsthand how the University of Colorado at Boulder and the University of Texas at Austin are successfully using EYL's messages and resources to recruit girls into their programs.

10:00 a.m.– **Austin North** *Building and Sustaining Collaborative Partnerships and Engaging Volunteers—Practice Focused*
11:00 a.m.

Moderator: Martha Cyr, Director, K-12 Outreach, Worcester Polytechnic Institute



TH1-3A When One Plus One Plus One Equals Much More Than Three

Mimi Lufkin, National Alliance for Partnerships in Equity, Karen Peterson, National Girls Collaborative Project, Lynn Reha, The Illinois Center for Specialized Professional Support

The New Look Project, created and managed by The Illinois Center for Specialized Professional Support (ICSPPS), strengthens programming for special population learners with an emphasis on programs preparing students for nontraditional careers, including women and girls in Science, Technology, Engineering and Math (STEM) fields. ICSPPS is participating in the National Girls Collaborative Project (NGCP) and the STEM Equity Pipeline Project of the National Alliance for Partnerships in Equity. This presentation will show how the integration of these three projects has created a critical mass of resources and interest to bring the formal and informal STEM education sectors together in Illinois around a single vision of increasing the access and success of women and girls in STEM education.



TH1-3B Student Perceptions of Mentoring: Program Implications from a Survey of 2500 Students Raymond M. Rose, MentorNet

MentorNet, with the support of the National Science Foundation conducted a survey of approximately 2,500 science, technology, engineering and mathematics (STEM) undergraduates, graduate students, and postdocs to learn more about their perception of the value and need for mentors. This panel will present the survey results and engage participants in a discussion of the implications.

10:00 a.m.– **Senate** *Developing Engineering Talent from K to Grey-Research Focused*
11:00 a.m.



TH1-4 Workshop—Girls Just Wanna Have Fun with Engineering

Linda Kekelis, Jennifer Wei, Emily Doolittle,
Techbridge, Chabot Space & Science Center

Role models matter and role model visits and field trips have a long-term impact. This workshop will provide the resources to plan role model visits and field trips that introduce girls to engineering careers. Through personal stories and engaging activities, role models can combat stereotypes and show that engineers are problem solvers who work on projects that benefit people. We will share our Resource Guide and Toolkit, Get Involved, Make a Difference, A Guide for Classroom Visits and Field Trips for K-12 Students. These include icebreakers and hands-on activities, biographies of students and role models, questions to promote conversations, schedules, and more to make outreach fun and engaging.

10:00 a.m.– 11:00 a.m. **Austin South Developing Diversity Program Staff**



TH1-5 Workshop—Academic Research, Internship and Funding Workshop

Kate O'Rourke, American Society of Engineering Education

Our activities at the American Society for Engineering Education include promoting and administering various research-oriented fellowships for undergraduate and graduate students in the STEM fields. In total, we handle about 14,000 applications per year, resulting in about 1,800 awardees receiving more than \$60,000,000 of support annually. A common goal is to give opportunities to bright young minds so they can make meaningful contributions to their field. This workshop will give a window into a variety of academic research, internship and funding opportunities for faculty, deans, associated personnel and students.

10:00 a.m.– 5:00 p.m. **Congress Cyber Café—open**
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11:15 a.m.– 12:15 p.m. **Capital B Developing Diversity Program Staff**
Moderator: Suzanne Zurn-Birkhimer, Deputy Director,
Purdue Center for Faculty Success



TH2-1A Spotlight on Engineering Women: Past, Present and Future

Jill Tietjen

Early engineering women contributed to the establishment of the field of industrial engineering, the construction of the Brooklyn Bridge and made numerous other contributions to the advancement of the engineering profession. Significant numbers of women entered the profession in the 1970s and 1980s. Today, however, women still comprise less than 20% of the engineering profession. Gender parity is still the objective so that society can benefit from women's technical contributions.



TH2-1B Training for New and Continuing SWE Faculty Advisors and SWE Counselors

Mary C. Verstraete, The University of Akron

This session is designed for Faculty Advisors and Counselors of SWE Collegiate Sections, both new and returning. Discussions will include information on new procedures, contacts and SWE web site communities. A question and answer session will follow the initial presentation.

11:15 a.m.– 12:15 p.m.

Lone Star Impacting Policy, Legislation and Media—Research Focused

Moderator: Donna Reese, Associate Dean for Academics & Administration, Bagley College of Engineering, Mississippi State University



TH2-2A Campus Climate: Perceptions of SEM and non-SEM Faculty

Dana M. Britton, Chardie Baird, Ruth A. Dyer, B. Jan Middendorf, Beth A. Montelone, and Christa Smith, Kansas State University

A fundamental assumption of programs like NSF ADVANCE and other initiatives intended to increase the numbers of women faculty in SEM has been that women in these disciplines experience a uniquely hostile climate. We explore this assumption, drawing on results from a representative survey of university faculty in one institution (N=601) conducted in 2008. Preliminary results will be shared.



TH2-2B Gateways to Academic Leadership Positions, and the Impact on Women in the Professorial Ranks

Canan Bilen-Green, Karen A. Froelic, Katherine A. Sukalski, North Dakota State University

In gendered organizations, a critical mass of women in leadership positions is postulated to be necessary to overcome tokenism and counter the subtle barriers impeding the advancement of women. We explain prevalence of women in the academic ranks as a function of women in academic leadership positions. We examine two doctoral-degree-granting institutions; one with a stronger tradition of women within all ranks and one near the bottom on most measures. Through archival data, we compare women in leadership positions and faculty ranks, and examine time in position/rank, patterns in type of leadership positions held, and pathways to leadership positions.

11:15 a.m.– 12:15 p.m. **Austin North Developing Engineering Talent from K to Grey—Research Focused**

Moderator: Ruth Davis, Professor of Computer Engineering and Associate Dean for Undergraduate Education, Santa Clara University



TH2-3A The Process of STEM Career Choice

Roxanne M Hughes, Florida State University

The purpose of this study is to identify particular issues influencing women's decisions to remain or not in STEM fields at a Research 1 University. Participants describe their experiences, influences, perceptions, and interpretations that have led to their current decisions regarding STEM majors and careers.



TH2-3B Career Planning by Women Engineering Students

Mary Ruth Anderson-Rowland, Arizona State University

This study analyzes the results of the students' plans by gender, ethnicity, and if the student is a community college transfer to discover if there are differences in the groups and if there are any patterns that would suggest a change in future programming for these students.

Thursday, June 18, 2009, continued

11:15 a.m.–
12:15 p.m. **Senate** *Building and Engaging and Sustaining Collaborative Partnerships & Volunteers*



TH2-4 Workshop—Changing the Face of Engineering
Linda Kekelis, Jennifer Wei, Emily Doolittle,
~~Techbridge, Chabot Space & Science Center~~

~~The introduction of role models requires careful planning and thoughtful support. This workshop will present best practices to host successful role model visits and field trips. Participants will receive a copy of the Resource Guide and Toolkit: Get Involved. Make a Difference. A Guide for Classroom Visits and Field Trips for K-12 Students. Presenters will highlight sample icebreakers and hands-on activities, biographies of students and role models, questions to promote conversations, scavenger hunts, schedules, and more to make outreach fun and engaging.~~

11:15 a.m.–
12:15 p.m. **Austin South** *Communicating, Marketing and Effective Messaging- Practice Focused*



TH2-5 Workshop—Why Don't They Hear What I Say?
Patricia B. Campbell, Campbell-Kibler Associates, Inc., Kathryn B. Campbell-Kibler, The Ohio State University, Jennifer L. Weisman, Campbell-Kibler Associates, Inc.

Have you ever felt as though you're shouting and no one hears; that your good work on women in engineering is ignored by policy-makers, educators and the public who too often fall back on myths and stereotypes about gender? Why do so many people refuse to learn from your work and the work of others like you? The answer lies in how people think about gender.

1:00 p.m.–
1:45 p.m. **Longhorn** *Keynote Lunch & Session—*
Cindy Atman, Ph.D., Director, Center for the Advancement of Engineering Education Director, University of Washington Center for Engineering Learning and Teaching Professor, Human Centered Design and Engineering Mitchell T. and Lella Blanche Bowie Endowed Chair
Pathways Study of Engineering Undergraduates: A Comparison of Women and Men
Sponsored by 

Results from the Academic Pathways Study of Engineering Undergraduates: A Comparison of Women and Men
The Academic Pathways Study (APS) is part of the Center for the Advancement of Engineering Education (CAEE), an NSF-funded research center that began in 2003. Qualitative and quantitative data were gathered from the students in these studies using a multi-method approach including surveys, structured and semi-structured interviews, and written design tasks. The two largest threads of APS research involve a large, national-level Academic Pathways of People Learning Engineering Survey (APPLES) with over 4200 participants at 21 institutions, and a Longitudinal Cohort that followed a group of 160 undergraduates at four varied institutions from their first through fourth years. Gender-related findings from APPLES and the Longitudinal Cohort about differences between women and men cluster around a number of themes that range from differences in approaches to engineering design problems; to differential involvement in extracurricular activities and sense of overload; to motivational factors and confidence to do design. Based on these and other findings from

the study's multi-method, student-focused approach to data collection, the CAEE research team is building a set of compelling results that paint rich and nuanced pictures of the engineering student experience.

2:00 p.m.–
3:00 p.m.

Capital B *Communicating, Marketing and Effective Messaging- Practice Focused*

Moderator: Barbara Hacker, Professor, Chemical and Materials Engineering, California State Polytechnic University, Pomona



TH3-1A Marketing Positive Images of SET for Diverse Teenagers

Felizitas Sagebiel, Jennifer Dahmen, Bergish University Wuppertal

Often obsolete and unattractive job images characterize attitudes of young people towards sciences and technique in school and beyond. Peer groups, teachers, job advisers and media are influencing as socialisation agents this image and therefore the attitudes of young people differently. A comparison of initiatives aiming on raising attractiveness for science and technology of young people in a practical and appealing way will give information about successful measures to change the attitudes of adolescents in relation to the image of science and technology.



TH3-1B The Engineering Pathway: A New Metaphor Especially Appropriate for Women
Mary Ruth Anderson-Rowland, Arizona State University

The "engineering pipeline" has been used to describe the eventual dearth of women and men engineers. However, a person who leaves the "pipeline" has no way back in. A more recent metaphor is the "engineering pathway" which allows a person to wander off and back on the path and to enter the pathway at different point.

This paper presents a new metaphor to encourage women for the engineering career: the engineering freeway. This freeway with fast and slow lanes, on and off ramps, speed bumps, detours, alternate routes, and frontage road better describes the engineering careers of many women.



TH3-1C Kama'aina Come Home: Recruiting Diverse Engineering Talent with Hawai'i Roots
Leslie Wilkins, Jenilynne Salvador, Shawna

Sodersten, Maui Economic Development Board

This paper will describe concerted efforts, over the past 5 years, to recruit women, Native Hawaiians and persons with local ties and qualifications to return home to Maui to work. It will also discuss the potential to replicate these efforts in other communities. To date, these efforts have reached over 5,000 expatriates, attracted nearly 800 applicants and resulted in more than 70 job placements.

2:00 p.m.–
3:00 p.m.

Lone Star *Building and Sustaining Collaborative Partnerships and Engaging Volunteers- Practice Focused*



TH3-2 Discussion—Innovation in the Workplace
Geetika Tandon, Lisa Bradley, Valerie Bennett, FuYi Li, IBM

~~This session is focused on increasing and encouraging employee involvement in the identification and publishing of their innovative ideas. Innovation and research are no longer restricted to laboratories and research centers, especially with the advent of the computing industry. In this session will we talk about how to share ideas about how to spark innovation in your company.~~

2:00 p.m. – 3:00 p.m.: **Austin North – Developing Engineering Talent from K to Grey – Practice Focused**



TH3-3 Workshop – Introduce a Girl to Engineering Day Panel: Best Practices

Didey Muniz, UT Austin, Susan Arnold-Christian, Kansas State University, Paige Smith, University of Maryland and Nicole Bradford, WPI

Introduce a Girl to Engineering Day (Girl Day) is celebrated internationally during National Engineers Week. Launched in February 2001, Girl Day was created as an outreach campaign to bring the world of engineering to girls (National Engineers Week Foundation, 2001). A panel of National Engineers Week Introduce a Girl to Engineering Day Award recipients will share experiences and lessons learned on how to design and implement a Girl Day program.

2:00 p.m. – 3:00 p.m.: **Senate – Developing Engineering Talent from K to Grey – Research Focused**



TH3-4 Workshop – Social Capital and Engineering Talent Development

Julie Martin-Trenor, Clemson University

This highly interactive discussion session will investigate the significance of social capital – that is, the resources embedded in one's social networks – in developing engineering talent. Specifically, we will discuss how social capital influences students' decisions to enter and persist in undergraduate engineering majors. We will ask ourselves: how can we adapt this social science concept and apply it to the challenges we currently face in developing a diverse and ample engineering talent pool? Participants will engage in activities and discussions that focus on translating research into practice. The session organizers welcome student affairs personnel, faculty, administrators, corporate and community advocates.

2:00 p.m. – 3:00 p.m.: **Austin South – Developing Engineering Talent from K to Grey – Practice Focused**



TH3-5 Workshop – Engineer Your Outreach with PBS' Design Squad!

Natalie Hebshie, Thea Sahr, Margot Sigur, WBH

Design Squad (DS), PBS' award-winning engineering competition series, is more than just a TV show. It has robust educational resources that give kids the opportunity to flex their design process skills while learning science and engineering concepts. Learn about the show and its multimedia campaign. Try activities from DS' latest outreach resources: NASA/DS On the Moon Activity Guide and Online Training, the DS Invent Today Activity Guide, and DS' Girl Scout Patch Program. Hear how others have incorporated DS into their outreach. Discuss ways to start up or spice up your outreach with DS.

3:00 p.m. – 3:30 p.m.: **Foyer – Coffee-Break & Networking**

3:30 p.m. – 4:30 p.m.: **Capital B – Impacting Policy, Legislation and Media – Practice Focused & Developing Engineering Talent from K to Grey**

Moderator: Rachelle Reisberg, Director of Women in Engineering at Northeastern University



TH4-1A – Evaluating the Success of Faculty Recruitment and Hiring Processes

Canan Bilen Green, Elizabeth J. Birmingham, Ann Burnett, North Dakota State University

ADVANCE institutions have employed a number of proactive strategies to attract highly qualified diverse pool of candidates and developed search and hiring processes that are gender sensitized and attractive to both genders. However, impact evaluation data concerning these strategies are not easily available in comparative form. This paper examines annual reports from ADVANCE institutions, compiles data concerning strategies for recruiting women faculty, and employs the reports of institutions' own evaluation of strategies to identify promising practices. The paper closes by explaining how compiling earlier scholarship provides a framework for focusing and evaluating our own fledgling faculty recruitment programs.



TH4-1B – How to Integrate Your SWE and WIE Programs Through Collegiate Participation

Mary C. Verstraete, Heidi Cressman, University of Akron

Women in Engineering Programs may benefit greatly from a solid relationship with the collegiate section of the Society of Women Engineers at their university. Since both organizations concentrate on the retention of female students in engineering colleges, their focus populations are thus identical. In addition, female engineering students are more often than not interested in participating in outreach activities, providing the WIE programs with a willing group of volunteers for such programs. This session is a result of WEPAN and SWE collaborations on a national level.

3:30 p.m. – 4:30 p.m.: **Lone Star – Developing Engineering Talent from K to Grey – Research Focused**
Moderator: Elizabeth Holloway, Director, Engineering Program, Purdue University



TH4-2A – Toward Creating Computer-Based Math Learning Favoring High-School Females

Yanghee Kim, Utah State University

Research indicates that teenage females prefer to work and perform better in a learning environment that supports frequent interactions and allows them to build relationships with others. This paper will introduce a computer-based algebra-learning environment MathGirls equipped with pedagogical agents (digital life-like characters) that simulate real-world social interactions and relations. The goal of MathGirls is to help young women of high-school age build positive attitudes toward and self-efficacy in math learning through this simulated social context.



TH4-2B – A Four-year Study of a Female Engineering Outreach Program

Lily G. Gossage, California State University, Long Beach

"Women Engineers @ the Beach", an innovative outreach program offered at California State University, Long Beach, is designed based on the findings from a correlation study which investigated the relationship between participants' math ability and participants' interest in engineering as a career choice.



TH4-2C **Developing an Engineer-Focused Narrative TV-Series**

Elizabeth T. Cady, Norman L. Fortenberry, National Academy of Engineering

Recent reports indicate a general lack of awareness and excitement about the field of engineering, despite numerous attempts to educate the public about the field. One way to spread the word about engineering is through the use of entertainment media. With that in mind, the Center seeks to increase public awareness of the role of engineering through a "prime time" commercial television series that highlights the positive roles of engineers in modern society.

3:30 p.m. – **Austin North** *Developing Engineering Talent from K to Grey-Practice Focused*
4:30 p.m.



TH4-3 **Discussion—Overcoming Obstacles in the STEM Workplace**

Carlie S. Bower, Christina Mendez, IBM

This discussion will examine present-day barriers and inhibitors of women in STEM fields at both universities and companies, and will focus on best and promising practices as presentation of established tactics for increasing diversity is enhanced by participants' own success stories.

3:30 p.m. – **Senate** *Developing Engineering Talent from K to Grey-Practice Focused*
4:30 p.m.



TH4-4 **Discussion—Increase Your Reach!**

Alana Erin Johnson, Paige Elizabeth Smith, University of Maryland

The Inaugural WIE DREAM Conference was held in February 2008 with the goal of educating and exciting students, parents and teachers about the opportunities a career in engineering provides. Over 350 participants interacted with faculty, engineering students and professionals through seminars, panel discussions and information fair. The "Increase Your Reach" workshop will discuss key components required to plan a successful conference.

3:30 p.m. – **Austin South** *Communicating, Marketing, and Effective Messaging*
4:30 p.m.



TH4-5 **Workshop—Virtual Teaming - Working Together Apart**

Robin L. Redden, PMP®, SCPM, Professional Coach®

The Brave New World of globalization and remote or virtual teaming is here to stay. Old skills don't necessarily translate to the new environment and new skills are necessary to be successful. This presentation shares the challenges to be aware of with virtual teaming and offers hints and tips for effectiveness. We'll review factors that affect team dynamics, new team models, differences between traditional and remote teams, how to develop and maintain trust among team members, media richness theory, cultural reminders and how to optimize team performance.

4:45 p.m. –
5:45 p.m.

Capital B *Building and Sustaining Collaborative Partnerships and Engaging Volunteers-Practice Focused*



TH5-1 Discussion—Regional Women in Engineering Program Networks

Tricia Berry, The University of Texas at Austin,
Beverly Louie, University of Colorado, Carol
Heaverlo, Iowa State University

This discussion session will include an overview of the agenda and outcomes of the Big XII WIE Meeting as well as a brainstorm and discussion of other opportunities for regional collaborations and other possible networks. Participants will also discuss ways in which the WEPAN Knowledge Center could facilitate regional WIE collaborations and other networks.

4:45 p.m. –
5:45 p.m.

Lone Star *Developing Engineering Talent from K to Grey-Practice Focused*

Moderator: Lisa Norwood, Assistant Dean,
Engineering Undergraduate Studies, University of
Rochester



TH5-2A **Corporate Model to Attract & Retain Women Engineers**

Diane Piszczor Rink, Cheryl McKinney, Deb Grubbe

BP has a history of supporting and participating in female student and professional organizations. Our goal in providing support to these organizations is to help foster an effective educational system and adequate workforce pool that reflects the diversity of the people in the countries in which we operate. The activities that BP has been involved in to date have been gathered together into a volunteer advisory council, whose goal is to help BP leverage the relationship to provide business value, stimulate women to achieve full potential in careers as engineers and leaders, expand the image of the engineering profession as a positive force in improving the quality of life; and demonstrate the value of diversity.



TH5-2B **Growing an Engineering Talent Pipeline—Lockheed Martin IS&GS Approach**

Dalila Wortman, Lockheed Martin Corporation

The key to the defense industry's ability to develop state-of-the-art technologies the future is to encourage our future workforce to pursue careers in engineering and science. Traditionally, this has entailed corporate America working with universities to encourage underclassmen to pursue technical degrees. With a shrinking percentage of college-bound students pursuing technical degrees, there is an increased need to demonstrate the importance and excitement that engineering and science degrees can offer to high school and even grade school students. This involves not only single-day activities such as Space Day and National Engineers week, but also building a continued relationship with local schools. There are several programs currently being executed in Lockheed Martin, including tutoring partnerships with community schools,



Spotlight 1:
Developing Engineering
Talent K to Grey



Spotlight 2:
Communicating
Marketing, and Effective
Messaging



Spotlight 3:
Building Engaging and
Sustaining Collaborative
Partnerships & Volunteers



Spotlight 4:
Developing Diversity
Program Staff



Spotlight 5:
Impacting Policy,
Legislation and Media

high school internship programs for high school students interested in Information Technology careers, and participation in FIRST Robotics competitions. Many of these programs are supported by our early-career Leadership Development Program participants, providing valuable leadership and mentoring opportunities for our future corporate leaders.



TH5-2C Growing Your Career: The Shift from Individual Contributor to Technical Management Lenisha Gandhi, IBM

Our technical industry offers many avenues of career growth and opportunities varying from architects, technical managers, and product managers to release management and much more. However, it is up the individual to determine that path and proceed toward it. This paper will focus on the journey of proceeding from individual contributor to a technical manager

~~4:45 p.m. – Austin North Developing Engineering Talent from K to Grey Research and Practice Focused~~
~~5:45 p.m. – Moderator: Yvonne Spicer, Vice President – Advocacy and Educational Partnerships, Museum of Science – Boston~~



TH5-3A Undergraduate Women Students and Engineering Outreach Pamela Wolting, Katrina Sanders, Gretchen Louise Hein, Chris Anderson

How do women engineering students get girls interested in engineering and create positive examples of women in engineering? Michigan Tech's Chapter of the Society of Women Engineers (SWE) has been working through on-campus events and the community to help girls in junior high and high school become interested in math, science, and engineering.



TH5-3B High School Enterprise: Increasing STEM Enrollment Jean Kampe, Robert Warrington, Mary Raber, Doug Oppliger, Anne Warrington, Valorie Troesch

High School Enterprise (HSE) is an extra- or in-curricular school activity in which students from grades 9-12 engage in active, applied STEM learning. The goal of HSE is to cultivate and grow a world-class and broadly inclusive science and technology workforce. Team members will demonstrate proficiency in applied workforce skills, will be more disposed to enter STEM careers, and

will be better prepared to undertake the education needed for these careers.

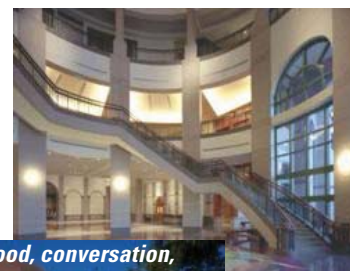
4:45 p.m. – Senate Developing Diversity Program Staff-Practice Focused
5:45 p.m.



~~TH5-4 Discussion – Assessing Pre-College Events: A Methods Discussion~~

~~Didey Muniz, The University of Texas at Austin~~
~~The Women in Engineering Program (WEP) at The University of Texas at Austin has used AWE assessment tools and other formal assessments for pre-college events since 2001. However, longitudinal analysis of the data collected could not be done using database programs available at the time. In order to track and analyze the data collected over the years, WEP developed the Pre-college Student Database. In this discussion group, participants will learn how the WEP database was developed and learn its functionality.~~

6:30 p.m. – Center Stage in Austin:
9:30 p.m. – Bob Bullock Texas State History Museum
Meet in Lobby. Buses begin loading at 6:30 p.m. and leave from main entrance. Return at 8:30 p.m.



2009 WEPAN National Conference Proceedings

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8:00 a.m.–
3:30 p.m. **Registration Open**
Balcony Alcove

8:00 a.m.–
9:15 a.m. **Capital Ballroom Plenary Panel—**
Jan Rinehart, Executive Director of the ADVANCE Program at Rice University; **Beth Holloway**, Director of the Women in Engineering Program at Purdue University; **Truman Bell**, Program Officer for Education and Diversity at the ExxonMobil Foundation; and **Jolene Jesse**, Program Director for Research on Gender in Science and Engineering Program at the National Science Foundation
Understanding Priorities and How to Strategize Your Fundraising Efforts
Sponsored by 

Women in Engineering Programs are funded through a variety of sources with most directors responsible for a major portion of the fund-raising. Through the years, funding source priorities have changed. The panel will provide information on what is currently fundable, trends in funding, and provide advice to help strategize fund raising work. This lively discussion will provide tips and recommendations for directors as they plan for their programs sustainability and growth.

9:30 a.m.–
10:15 a.m. **Omni Boardrooms—Spotlight on WEPAN Opportunities—open to all** WEPAN's new strategic plan positions our organization to transform culture in engineering education to promote the success of all women. During this session, you'll learn about the exciting ways that WEPAN's eight fabulous committees contribute to our important work. Members of the Awards, Communications, Conference, Diversity Advancement, Finance, Knowledge Center, Membership and Professional Development committees will be on hand to share their recent accomplishments as well as their plans for the upcoming year. Pick up a bag, and fill it with goodies from each committee as you learn about opportunities to use your talents to contribute to WEPAN's mission!

10:00 a.m.–
5:00 p.m. **Congress Cyber Café—open**
Sponsored by 

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0:30 a.m.–
11:30 a.m. **Capital B Developing Diversity Program Staff**

F1-5 Workshop—Annual SWE Literature Review and WEPAN Data Slides

Lisa M Frehill, Commission on Professionals in Science and Technology

This presentation will provide attendees with an overview of two important resources that are available to assist them in their work, the Society of Women Engineers' Review of Literature on Women in Engineering and the WEPAN slide presentation. Both projects exemplify the work done by the Commission on Professionals in Science and Technology.

10:30 a.m.–
11:30 a.m. **Lone Star—Developing Engineering Talent from K to Grey Practice and Research Focused**
Moderator: Julie Trenor, Asst Professor of Engineering and Science Education, Clemson University



FR1-2A Building P-16 Engineering Collaboratives from the Higher Education Perspective

Fredericka Brown, Kristian Trampus, Michael Odell

This paper presents details on a P-16 collaborative that involves several entities – The University of Texas at Tyler College of Engineering and Computer Science and the School of Education, Tyler Independent School District, Texas Girls Collaborative, science museums, after school intervention programs, STEM summer camps, and industrial partners



FR1-2B A Speaker Series to Patch the Pipeline for Women

Barbara A. Hacker, California State Polytechnic University, Pomona

A program created at this Hispanic Serving Institution will bring to campus talented women who are pursuing a doctoral degree or currently hold a post-doctoral fellowship to give departmental seminars to faculty and students. As a result of this initiative, women who facilitate the seminars have a better understanding of a primarily undergraduate institution as a career path, faculty have a wider pool of candidates to invite to apply for a faculty position, and undergraduate students see the possibility of pursuing an advanced degree.



FR1-2C Undergraduate Women in Computing: Strategic Recruiting

Lecia Barker, Stephanie L. Hamilton, National Center for Women & Information Technology

This workshop supports computer science recruiting by helping participants develop a strategic plan using a "low-hanging fruit" approach. The focus is on the greatest "return on investment" in the shortest time, with the smallest resource commitment. Participants will receive a professionally produced guidebook on strategic recruiting for undergraduate computing, examples of materials, and other handouts.

10:30 a.m.–
11:30 a.m. **Austin North—Developing Engineering Talent from K to Grey Practice Focused**



FR1-3 Workshop—K-12 Activity Exchange Workshop

Suzanne Zurn-Birkhimer, Ruth Friedman, Purdue University

This workshop allows participants to share one of their favorite "tried and true" outreach activities in exchange for one activity idea from each of the other workshop participants. Presenters will provide each workshop attendee with the supplies necessary for one person to complete the activity, along with the activity guidelines and sample student handouts.

10:30 a.m.–
11:30 a.m. **Senate Communicating, Marketing and Effective Messaging—Practice Focused**



FR1-4 Workshop—Facebook: Changing the Conversation Media

Ana M. Dison, The University of Texas at Austin

This interactive session will include live demonstrations for users on how to create groups and events, sending personal messages and reading threads, posting photos and other items and using the online chat feature. Basic facebook etiquette will be discussed as well as hot topics in the social networking world. Attendees should have a personal profile already created prior to attending this session.

In the Spotlight: Best and Emerging Practices

1:30 p.m. – Capital Ballroom *WEPAN 20th Birthday Celebration Party and In the Spotlight Welcome*
1:45 p.m. – Celebrate WEPAN's 20th Birthday and explore WEPAN's history. Join the WEPAN Board and WEPAN Founders for the celebration which includes several special recognitions.

1:45 p.m. – Balcony & Capital Ballroom *In the Spotlight—Best and Emerging Practices*
3:00 p.m. – The "In the Spotlight" Showcase includes WEPAN and the Texas Girls Collaborative Project (TxGCP) posters, hands-on activity demonstrations, and best and emerging practices in recruitment and talent development

SH-01 Attracting Women to Computer Security through an REU
Paige E. Smith, Michel Cukier, University of Maryland
The Computer Security REU takes advantage of an enhanced team research experience as a method of overcoming barriers to success for women in STEM majors. The research team is a predominantly female group, providing a hierarchy of role models and mentors for the participants. The CS Scholars also act as role models for high school students, introducing the high school women to undergraduate research experiences. The poster will highlight some key results learned in the first two years of the program's existence.

SH-02 The Benefits and Challenges of a Girls' Pre-Engineering Camp
Tiffany Smith, Elizabeth J. Cook, University of Oklahoma
This past summer, the University of Oklahoma College of Engineering initiated its first ever high school girls' pre-engineering camp, called Discovering Engineering Via Adventure in Science (DEVAS). The program includes interacting with practicing female engineers from all fields through lunch and dinner discussions, a series of hands-on sessions with college professors from the various disciplines, visits to local companies, and tours of campus.

SH-03 Guide to Running a STEM Camp for Your Company
Janel Barfield, Carlie Bower, Christy Lauridsen, Afua Bruce, Lisa Gable, Carol Woodhouse, Deirdre Athaide, Jennifer Schachter, Helena Pugsley, IBM
Running a Science, Technology, Engineering and Mathematics (STEM) camp for middle school girls requires a lot of planning and dedication for successful execution. These camps typically have little funding and require the time and resources of many volunteers. This guide can be used as a starting point for someone who wants to organize this kind of camp for the first time or as a useful resource for those who already support similar programs.

SH-04 Engineering Technology Program for Girls Ages 9-13
Jeanne W. Christman, Elizabeth M. Dell, Carol Romanowski, Teresa Wolcott, Rochester Institute of Technology

This poster describes a program led by female Engineering Technology students, with support from female faculty, to provide an introduction to Engineering Technology to 4th – 7th grade Girl Scouts through a series of interactive laboratory experiments. The program takes place on our college campus and makes use of four different Engineering Technology laboratories.

SH-05 She Power!—Women In Technology Mentoring Program for Female IBM Taiwan employees and Female College Students
Li-Fen Li, Yu-Wen Yang, IBM Taiwan

Embracing the IBM global principle to create a diversity work environment, IBM Taiwan set up a mentoring program in 2007 for the university female students in Taiwan, namely "Women In Technology Mentoring Program" and "WIT Mentoring". This one year program is designed to encourage the female college and graduate students majoring in Science, Technology, and Management to pursue a career in the technology industry, and to promote the campus relationship between IBM and the universities in Taiwan.

SH-06 Practical Guide to Advance Women in Engineering
Elizabeth T. Cady, Norman L. Fortenberry, Catherine J. Didion, National Academy of Engineering

The development of a train-the-trainer model that incorporates the research base in gender equity and engineering education into the curricula, classroom climate, and academic preparation of students in grades six through fourteen. The ultimate goal is to increase the number of women who earn bachelor's degrees in engineering. In support of this goal, we have begun production of three related booklets that address recruitment, retention, and advancement of women and girls, including women of color and women with physical disabilities, in engineering and pre-engineering courses.

SH-07 CalWomenTech: Huge Increases in Women via Marketing
Donna Milgram, The Institute for Women in Trades, Technology & Science

The Institute for Women in Trades, Technology & Science's CalWomenTech Project is funded by NSF and is working with 8 community colleges in California to assist them in increasing the number of women in technology education areas in which they are under-represented. An important component of the Project has been to assist the colleges with marketing and early results show these strategies are working.

SH-08 "I know I need a mentor"
David Porush, MentorNet

Virtually every study shows that mentoring is one of the primary ingredients in career success especially for those protégés (mentees) who are less likely to have visible models on the other side of the career bridge, and especially as they approach that bridge. E-mentoring—using the Web to match and guide relationships—levels the playing field for women and other under-represented protégés by creating a safe, no-fault environment and a relationship with a mentor outside the protégé's organization. MentorNet is an 11-yr old non-profit devoted to e-mentoring women and minorities in engineering and related sciences.

SH-09 IBM Interactive Tools Encourage Diversity
Carlie S Bower, Beth Tracy, Lisa Gable, IBM

Participants will learn about IBM's groundbreaking interactive programs: Power Up, a 3D virtual world showcasing green initiatives in solar, water and wind energy in a gaming environment; TryScience, an interactive science and technology center; TryEngineering, online resources for educators and students; and World Community Grid, the world's largest shared humanitarian effort, powered by IBM's grid computing technology.

SH-10 Expanding the Pipeline: Increasing Women's Participation in STEM

Adrienne Marie Stropes, IBM

This poster will focus on influences and decisions from childhood to undergraduate graduation. Negative impacts from social pressures, classrooms and lack of early exposure to computers are some of the areas explored as contributors to decreased confidence and (therefore) interest by women in STEM. It also explores Malaysia, which does not have this disparity amongst CS students and proves as a useful comparison to other "Western" cultures.

SH-11 Kentucky's Success with the National Girls Collaborative Project

Suzanne Scheff, University of Kentucky

This poster will describe the process and transformation accomplished by the state of Kentucky after becoming a member of the National Girls Collaborative Project in Fall 2007. The "Kentucky Girls STEM Collaborative", has had tremendous success in connecting with others who share a passion for increasing girls' interest in science, technology, engineering and math.

SH-12 Faculty Recruitment and Hiring Processes at University

Canan Bilen-Green, Elizabeth Birmingham, Ann Burnett, Karen Froelich, North Dakota State University

This poster summarizes a recruitment program developed to achieve gender diversity and fairness in recruitment and hiring processes. A full-time position in University has been created to provide training for faculty search committees, assist search committees in targeted recruiting efforts, and work with search committee members to help them identify and use effective and gender sensitized search and hiring practices. The recruitment plan was developed through analysis of policies and practices implemented at other ADVANCE institutions. This recruitment program not only increases the participation of women at all levels, but also attracts highly qualified candidates of both genders to University.

SH-13 The Power of the Women On Whose Shoulders We Stand

Jill Tietjen, Technically Speaking

Women have changed the culture and the economy of the U.S. throughout its history but often their accomplishments have been ignored, forgotten, or minimized. Over 850 women in U.S. history from 1587 to 2007 are included in the author's bestseller "Her Story: A Timeline of the Women Who Changed America" from artists and entertainers, to scientists and engineers, to authors and businesswomen. Come discover the amazing women on whose shoulders we stand.

SH-14 The Power of Synergy: Networking via Mentoring

Suparna Sinha Roy, Linda Zimmer

This paper describes programs that have been effective in connecting networks via mentoring. These include testimonials of women from global business scenarios, both mentors and mentees, talking about networking value add as a result of the mentoring relationship. A framework is proposed to optimize networking outreach from mentoring relationships. Conclusions will include recommendations for optimizing career progression via mentoring relationships – to expand networks and connections.

SH-15 Addressing Regional and State Competitiveness: Central Texas Engineering Education Collaborative

Hannah Gourgey, E3 Alliance

The Central Texas Engineering Education Collaborative, facilitated by E3 Alliance, addresses a critical need for regional and state competitiveness. Central Texas is a recognized technology and entrepreneurial hub, but to remain competitive, we must provide a skilled engineering workforce to local business and create strategies that attract and retain students traditionally underrepresented in higher education, particularly in science, technology, engineering, and mathematics (STEM) disciplines. The Collaborative leverages and scales existing proven program components to strengthen the regional engineering pipeline.

SH-16 Central Texas Discover Engineering: Bringing Engineering to the Community

Leslie McMaster, Central Texas Discover Engineering

For more than fifteen years, Central Texas Discover Engineering has been connecting teachers with engineers who want to share their passion for their profession. Up to 20,000 students are served each year in this unique partnership between local businesses, professional societies and schools. This all-volunteer organization trains guest lecturers in classroom management and age specific activities. Collaborators have included the local PBS station KRLU, the Austin Children's Museum, the Texas Girls Collaborative Project and Citizen Schools.

SH-17 Elementary School Computer Science: From Bee Bots to Crystal Rain Forests in Houston ISD

Karen North, Houston ISD

This display will show samples of what computer science looks like at the elementary school level. The CS lessons are part of The Creative Problem Solving and Design Tool Series and include an online puzzle lesson, Bee Bot World, Crystal Rain Forest, graphic programming and drawing tools. The display will also show how students connected computer science to recycling and will include an overview of CSTA/ACM Level I curriculum, a curriculum model designed to introduce computer science to students from kindergarten through eighth grade.

SH-18 Engineering the Leander Way: An After School Collaboration Using Engineering is Elementary Curriculum

Carol Edenfield, Julia McComas, Leander ISD

This display will showcase the Leander ISD (Texas) after school program, Engineering the Leander Way, for girls in grades 3-5 held at four bilingual campuses in the fall of 2008. The program was designed around the research-based STEM curriculum, Engineering is Elementary: A Sticky Situation, Designing Walls. We encouraged parental involvement and support in this program through parent information meetings. In partnership with IBM Austin's Women in Technology (WIT), female engineer guest speakers presented their education and experience to the parents and girls.

SH-19 **Latinitas Tech Savvy Chica Project: A Collaborative Workshop Series Encouraging Hispanic Girls to Explore Technology**

Laura Donnelly, Latinitas

Latinitas will showcase the Tech Savvy Chica Project, a collaborative workshop series focused on encouraging Hispanic girls to explore technology and was tailored to recruit and meet the unique interests of Latina girls. Also showcased will be the video public service announcements, audio recordings and webpages created by the girls to share the lessons they learned throughout the project such as shattering myths that girls aren't good at technology, promoting the importance of technology coursework, exploring career opportunities in STEM and encouraging girls to pursue higher education.

SH-20 **UTEP Future Educators of Math and Science "Girls Count" Collaborative Outreach Program**

Ellen Esposito and Carlos Amato, The University of Texas at El Paso

Girls Count is an outreach program led by undergraduate student members of UTEP's Future Educators of Math and Science (FEMaS) organization. Teachers and 40 El Paso 5th grade girls participated monthly in inquiry-based, integrated math and science activities led by the students who are enrolled in degree plans leading to math and science secondary teacher certification.

SH-21 **Imaginarium of South Texas Wind Tunnel Tinkering**

Cheryl Potemkin, Imaginarium of South Texas

The Imaginarium of South Texas will showcase one of the museum's outreach exhibits: the wind tunnel. Made of easily found and affordable items, the wind tunnel is able to travel to different locations around the community. Presenters will share the wind tunnel experiments, as well as how to construct a wind tunnel of your own.

SH-22 **Tinkerer's Workshop: An Austin Children's Museum and UT Austin Women in Engineering Program Collaboration**

Christina Soontornvat, Austin Children's Museum

Learn how the Austin Children's Museum collaborated with the UT Austin Women in Engineering Program (WEP) to design its Tinkerer's Workshop, an exhibit to engage girls in science and engineering. Ongoing partnerships with WEP and TxGCP have informed exhibit development, including the Summer 2009 exhibit Maker Kids and the design of the new museum.

SH-23 **Texas Girls Collaborative Project (TxGCP)**

Didey Muniz and Tiffany Grady, TxGCP

The TxGCP connects leaders and advocates from non-profits, K-12 schools, higher education institutions, companies, museums and organizations across the state of Texas committed to informing and motivating girls to pursue careers in science, technology, engineering and mathematics (STEM). The TxGCP provides many opportunities for individuals and organizations across Texas to meet or reconnect, learn about each other's work, and develop ways to work together to better serve girls and young women in STEM.

SH-24 **Girlstart**

Julie Shannan, Girlstart

Girlstart is a non-profit organization created to empower girls to excel in math, science, and technology. Girlstart has quickly

established itself as a best-case practices leader in empowering, educating, and motivating girls to enjoy and become more proficient in math, science and technology. Girlstart will display information about summer camps, after school workshops, and results from our Project IT-Girl NSF funded project for high school girls.

SH-25 **Girl Scouts of Central Texas**

Terry Olguin, Girl Scouts of Central Texas

Girl Scouts of Central Texas introduced First Robotics into their programming last year, sending two teams to FIRST Lego competition and 1 team to First Robotics. With the help of mentors from National Instruments and UT, all 3 "Rookie" teams received awards. The Girl Scouts also collaborates with organizations including the Texas Girls Collaborative Project, Society of Women Engineers (Green Building event), Stunt Ranch (Science in the Movies event), and the Society for the Prevention of Cruelty to Animals to provide new and exciting programs for girls.

SH-26 **Design Squad and Engineering Your Life: Bringing Engineering to Life**

Thea Sahr, WGBH Educational Foundation

WGBH, Boston's public television station, has developed Design Squad and Engineer Your Life to bring engineering to life for kids. Based on in-depth research and message testing, Engineer Your Life meets high school girls where they live, promoting engineering through the lens of what matters to girls as they begin to shape their own futures. Design Squad, an award-winning reality TV series, shows kids engineering is fun, something that they can do, and helps make the world a better place. Both are supported by media-rich web sites, a robust network of partners, and resources to inspire the next generation of engineers.

SH-27 **National Center for Women & Information Technology**

Lecia Barker, National Center for Women & Information Technology

The National Center for Women & Information Technology (NCWIT) is a coalition of more than 170 prominent corporations, academic institutions, government agencies, and non-profits working to increase women's participation in information technology (IT). Member organizations and the NCWIT social science team identify best practices for recruiting, retaining, and advancing women. These best practices are transformed into Promising Practice Sheets (theoretical/research foundations accompanied by case studies) and Programs-in-a-Box (turnkey solutions that address pressing issues facing the IT community).

SH-28 **Society of Women Engineers (SWE) - Aspire, Advance, Achieve**

Walter McFall, Karen Horting, Penny Parang and Suzanne White, SWE

SWE is a not-for-profit educational and service organization that empowers women to succeed and advance in the field of engineering, and to be recognized for their life-changing contributions as engineers and leaders. Founded in 1950, SWE is the driving force that establishes engineering as a highly desirable career for women through an exciting array of training and development programs, networking opportunities, scholarships, outreach and advocacy activities, and much more. Learn about SWE, the AWE (Assessing Women and Men in Engineering) Project and SWE-Southwest Texas outreach activities.