# 2014-2015 Diversity Committee ASEE June Board of Directors Meeting Report

June 1, 2015

### **Executive summary**

This report outlines the current state of the Diversity Committee, its accomplishments, and action items for the Year of Action on Diversity. The Diversity Committee meets every 3 weeks to identify, implement, and oversee the actions associated with the Year of Action on Diversity and ASEE's Diversity Strategic Plan. Our actions are guided by the premise that embracing diversity and striving for inclusiveness enrich and are essential to educational experiences and innovations that drive the development of creative solutions to address the world's challenges. We learn from experiences, beliefs, and perspectives that are different from our own. Diversity, both intellectually and socially, can only fuel innovation and the development of imaginative and enduring solutions to global problems. The Diversity Committee has 14 members led by co-Chairs Adrienne Minerick and Teri Reed. Non-voting delegates from 8 divisions and 1 section participate in the Committee's activities and liaise between their divisions and the diversity committee. Diversity Committee accomplishments since June have included:

- Revised and updated the Diversity Statement (Revised and approved at the February 2015 Board Meeting),
- Coordinated articles for the Year of Action on Diversity in each issue of *Prism*, including a Student Essay & Video Contest (http://diversity.asee.org/awards),
- Developed and launched the Year of Action on Diversity website (<u>http://diversity.asee.org</u>),
- Launched the 'Best of the Best' initiative which encourages ASEE members to share diversity resources through the diversity webpage,
- Publishing a newsletter to enhance communication from the Diversity Committee (Spring 2015 version attached and also located at <a href="http://diversity.asee.org">http://diversity.asee.org</a>),
- Instituted the Best Diversity Paper award and corresponding Best Diversity Paper Session (First place and top six papers are listed in the Spring newsletter),
- Organized messages (termed snippets) to be placed as footprints around the conference to increase awareness and discussions among attendees,
- Successfully fundraised for the Diversity Booth at the 2015 Annual Conference and Exhibition,
- Engaged in functional partnerships with other organizations (most notably the monetary support for the Best Diversity Paper award from Mechanical Engineering division, and the partnership with the US Coast Guard),
- Engineering Deans Council (EDC) of ASEE wrote and released a letter of commitment to diversity (see attached),
- Facilitated LGBTQI Safe Zone Workshops for the second year at the Annual Meeting and serving an advisory role to a now recommended NSF EAGER proposal to develop online learning communities to expand these trainings,
- Presented information during the Division Mixer event during the annual conference, including providing rainbow ribbons cut specifically to reside in the

base portion of the annual conference badges. In addition to rainbow ribbons, printed information is provided both at the Division Mixer and at the Diversity Booth,

- Implemented delegate representation from ASEE divisions, sections and zones to increase coordination and communication,
- Influenced the diversity theme for distinguished lectures selected for 2015, and
- Revisited the leadership and term structure for Chairs and members of the committee to promote continuity and overlap between members of the Diversity Committee itself.

## Year of Action on Diversity Activities

The Diversity Committee has shaped the 2014-15 year of action on diversity to advance inclusivity of the engineering profession via society efforts.

*Statement:* The committee revised their statement on Diversity (attached to this report, and available <u>http://diversity.asee.org/DiversityStatement</u>). The board provided additional edits and approved the statement at the February 2015 Board Meeting.

*Prism articles:* Seven articles on diversity were published in Prism this year as listed in the table below. Each article includes tangible actions that individual members can implement. This tenor underscores a Diversity Committee goal – to energize the membership and get the constituent division to become more involved with diversity-related activities. An additional feature will be filled with the winners of the Student Essay & Video Contest (http://diversity.asee.org/awards). We are currently discussing the implementation of a standing column on diversity. Past articles are of course available in Prism or on our website: <a href="http://diversity.asee.org/events">http://diversity.asee.org/events</a>

Issue	Title	Author(s)
September 2014	A YEAR OF ACTION ON DIVERSITY	Diversity Committee
October 2014	AN UNSUITABLE JOB FOR A WOMAN?	Adrienne Minerick
November 2014	UNSEEN DIFFERENCES	Deborah A. Trytten, Cindy E. Foor, Teri J. Murphy, Randa L. Shehab, Susan E. Walden, and Rui Pan
December 2014	DIVERSITY'S FORGOTTEN DIMENSION	Barbara M. Moskal
January 2015	WHAT WORKS? A CULTURE CHANGE	Elizabeth Holloway
February 2015	HABITAT FOR HUMANITY	Lorie Groll, Teri Reed, and Monica Cox
March/April 2015	A WAY UP FOR LOW-INCOME STUDENTS	Donna Riley

*Website:* For the Year of Action, the Committee created a new website <u>http://diversity.asee.org</u>, which is very visibly linked from the main asee.org website. The website has easy-to-see menu items which provide comprehensive information about ASEE's diversity efforts. Thanks to Diversity Committee Delegate Debra Gilbuena for updating this! This website will be a living resource for the benefit of engineering education stakeholders (i.e. deans, faculty, instructors, professors of practice,

administrators, students, etc.). Also, the new website will continue to evolve organically with input from all ASEE members.

*Best of the Best:* In a related effort to enhance content, the Committee invited all members to submit "Best of the Best" links to journal articles, websites, and white papers that provide practical guidance on actions to recruit, retain, develop, and advance diverse students and faculty/ instructors in engineering education, engineering technology education, and the engineering profession. To date, we have received more than 30 responses to our request for your recommendations on "Best of the Best" resources in diversity. We are in the process of formatting content to go live on the ASEE website in 2015. <u>https://www.research.net/s/Online\_diversity\_resources</u>

*Newsletter:* The Diversity Committee's biannual newsletter was circulated to the ASEE membership in January 2015 and May 2015. The newsletter provides updates of the Committee's activities, is also a source for diversity-related information for ASEE members, and is a means to enhance communication. Thanks to Diversity Committee Delegate Sriram Sundararajan for leading this! The Spring 2015 newsletter is attached to this report. Past newsletters are upon our webpage (http://diversity.asee.org/about)

*Best Diversity Paper Award:* The Diversity Committee developed the Best Diversity Paper award to increase the visibility of diversity efforts within the entire ASEE membership, to encourage broad participation, to influence activities to become inclusive, and to reward highly impactful diversity-related efforts. Monolith was updated to facilitate easy flagging of these papers during the review process. The award was reviewed by the awards policy committee, voted upon and approved at the February Board Meeting. National divisions as well as sections/zones participated to nominate 25 papers, which were reviewed by the diversity committee, delegates, and volunteers. The Best Diversity Paper rubric was utilized to assess novelty of approaches/ ideas/interventions, extent of inclusivity, demonstrated magnitude of impact, and scholarship attributes of the manuscript. The top six papers were identified and all authors agreed to present in a special Best Diversity Paper Session. The Mechanical Engineering Division has provided \$500 monetary support for the Best Diversity Paper Session.

Rank	Paper Title	Division/Zone
1st Place	Creating Inclusive Environments in First-Year Engineering Classes to Support Student Retention and Learning by Dr. Christina H. Paguyo (Colorado State University), Dr. Rebecca A. Atadero (Colorado State University), Dr. Karen E. Rambo-Hernandez (West Virginia University), and Jennifer Francis (West Virginia University)	First-Year Programs
2nd Place	Into the pipeline: A freshman student's experiences of stories 'told' about engineering by Mr. Michael Brewer (University of Georgia), Dr. Nicola Sochacka (University of Georgia), and Dr. Joachim Walther (University of Georgia)	Liberal Education/ Engineering & Society
3rd Place	Leadership, Management, and Diversity: Missed Opportunities within Student Design Competition Teams by Dr. Susan E. Walden (University of Oklahoma), Ms. Cindy E. Foor (University of Oklahoma), Dr. Rui Pan (University of Oklahoma), Dr. Randa L. Shehab (University of Oklahoma), and Dr. Deborah A. TryYen (University of	Mechanical Engineering

	Oklahoma)	
4th Place	<b>Students Seeking Different Paths to Entrepreneurial Education</b> by Dr. Sergio Celis (Universidad de Chile) and Dr. Aileen Huang-Saad (University of Michigan)	Entrepreneurship & Engineering Innovation
5th Place	Changes in Latino/a Adolescents' Engineering Self-Efficacy and Perceptions of Engineering After Addressing Authentic Engineering Design Challenges by Dr. Joel Alejandro Mejia (West Virginia University), Mr. Dustin Drake (Utah State University), and Dr. Amy Wilson-Lopez (Utah State University - Teacher Education and Leadership)	K-12 and Pre- College Engineering
6th Place	The Summer Undergraduate Research Bridge Experience for Community College Students: Providing Connections from Community College to the Four-Year Institution by Ms. Jeanne R. Garland (New Mexico State University), Ms. Michele A. Auzenne (New Mexico State University), and Dr. Ricardo B. Jacquez (New Mexico State University)	Multidisciplinary Engineering

*Walking Toward Inclusiveness:* This Diversity Committee project places snippets of information and encouragement on footsteps around the annual conference. Around 50 short statements/ information/ thought-provoking sentences on diversity were screened by the committee to arrive at the most impactful snippets. These are being printed on footsteps which will be positioned around the conference to encourage dialogues about diversity and encourage participation in Diversity Committee efforts such as the Safe Zone Training and Best Diversity Paper presentations.

*Partnerships:* The Diversity Committee is maintaining functional partnerships with several diversity promoting organizations such as the American Indian Science and Engineering Society, National Action Council for Minorities in Engineering, National Society for Black Engineers, and Society for Women Engineers. A particular highlight is the partnership we established with the US Coast Guard which has invested a significant amount of effort in fostering diversity within its rank and file. The Diversity Committee welcomes the United States Coast Guard as a partner working toward diversity in engineering practice and education. The leadership of the Diversity Committee continues to attend DiscoverE Diversity Council meetings held every six months at various locations around the country. This past year meetings were attended in Las Vegas, NV and in Columbus, OH. A continuing project and partnership is an effort to add diversity language into each of the four commissions within ABET. This is a joint effort with the Women in Engineering Division.

*Diversity Booth Fundraising efforts:* Fundraising by the Diversity Committee for the 2015 Diversity booth has been completed thanks to the following generous contributions. The booth will again be prominently located within the exhibit hall and include information from Diversity Committee efforts and partnering organizations. We express our deepest gratitude to the following sponsors for making this possible.

Sponsor	Amount
Coast Guard	\$5,000
WIE Division	\$500
K-12 Division	\$1,000
NOGLSTP	\$1,000
NC State	\$500
Northrop Grumman Corporation	\$2,000
Total GOAL (\$10,500)	\$10,000

Delegates serving on the Diversity Committee: To encourage diversity related efforts within individual division as well as to increase the communication between the Diversity Committee and other constituents of ASEE, the Diversity Committee invited each division to nominate one Diversity Delegate to the Diversity Committee, provided their division added a diversity statement to their bylaws. The delegates are non-voting members yet have stepped up to take on major roles of projects within the committee. The delegates started participating in the Committee meetings (via teleconference) starting January 2015. The delegates were brought up-to-speed on the various activities of the Committee and have begun assisting the Committee with multiple activities. The delegates serve as a liaison between their divisions and the diversity committee, so we expect broader engagement with the membership in the future. The new delegates are (\* indicates awaiting bylaws update):

### **Divisions**

Chemical Engineering Div (on Consent Agenda) P. Arthur Felse, Ph.D. Northwestern University afelse@northwestern.edu

Electrical and Computer Engineering\* Hossein Mousavinezhad Idaho State University mousseye@isu.edu

Engineering Economy Division\* Erick Jones, PhD, PE University of Texas at Arlington ecjones@uta.edu

Engineering Ethics Division\* Rebecca Bates, PhD Minnesota State University, Mankato bates@mnsu.edu

Entrepreneurship & Engineering Innovation Division\* Nathalie Duval-Couetil, MBA, PhD Purdue University natduval@purdue.edu

Mechanical Engineering Division\* Sriram Sundarajan, PhD Iowa State, Mechanical Engineering srirams@iastate.edu

Systems Engineering Division\* Alice Squires, PMP, CSEP-Acq Washington State University alice.squires@wsu.edu

Women in Engineer Division Dr. Debra May Gilbuena Oregon State University ambitious.engineer@gmail.com

#### **Geographic Sections**

Southeast Section Michael A. Matthews, P.E. University of South Carolina mamatthe@mailbox.sc.edu Engineering Deans Council (EDC) letter: Thanks to Yannis Yortsos for leading an effort that grew out of the Diversity Panel at the 2015 Engineering Deans Institute (EDI). The EDC Diversity Committee drafted a commitment letter, which was widely endorsed and then submitted to the EDC Executive Committee for its consideration. The letter is attached.

*Revisited the leadership and term structure for Chairs and members:* In an effort to facilitate continuity on the Diversity Committee, a new leadership structure is proposed. The ADC Chair would be a tiered position with the incoming Vice-Chair appointed by the ASEE President for a three-year term. The first year of the appointment is as Vice-Chair, the second year is as Chair, and third year is as Past-Chair.

*Proposal Efforts with which the Diversity Committee has assisted:* ASEE staff led an effort to write and secure an NSF grant to fund a Women in Engineering Workshop just prior to the 2015 annual conference. This effort is coordinated by Rocio Chavela and has been periodically advised by members of the Diversity Committee. The planning committee includes Rocio Chavela, Adrienne Minerick, Teri Reed, and Diane Matt. An abstract was submitted and accepted for the global Gender 2015 Summit in South Africa. Unfortunately the team was unable to secure funds to attend and was forced to withdraw the workshop.

A second proposal was developed by a team led by Stephanie Farrell to coordinate online learning communities to train Safe Zone trainers. This proposal has been recommended for funding with the National Science Foundation.

*Diversity Committee Budget:* Thanks to support from ASEE, the Diversity Committee has leveraged their \$5,000 budget with as many highly visible items as is possible. We welcome feedback on designation of these funds in subsequent years.

### **Action-items:**

• None

In summary, the ASEE Diversity Committee has engaged in numerous, highly visible activities that promote diversity within our membership. The efforts outlined here are the result of volunteer efforts that coordinate across ASEE headquarters to every division, section, and zone in the ASEE network. Further, our efforts have the potential to impact the larger engineering community and encourage mainstream, majority involvement in diversity efforts. On behalf of the committee, we look forward to working with each of you as we strive to make this Year of Action on Diversity change the future

Respectfully submitted,

Adrienne R. Minerick and Teri Reed, Diversity Committee Co-Chairs minerick@mtu.edu or terireed@tamu.edu