ASEE Diversity ASEE

A newsletter of the ASEE Diversity Committee

Issue No. 3, Spring 2015

A Semi-Annual Newsletter

Best Diversity Papers *Read about the winners of the inaugural Best Diversity Papers. Descriptions and process are highlighted.* **Page 1**

Microinequities Webinar Special offer for ASEE members.

Diversity Committee Welcomes Delegates

This year's delegates to the committee from divisions and sections around ASEE. Page 2

Year of Action on Diversity Sessions at the 2015 Annual Conference

Slate of sessions focusing on diversity and inclusion ranging from round table discussions and panels to presentations of Best Diversity papers. Page 3

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Best Diversity Papers Year of Action on Diversity by Sriram Sundararajan Http://diversity.asee.org/

As part of the activities of the Year of Action on Diversity, the diversity committee, with monetary support from the Mechanical Engineering Division, announced a call for nominations for Best Diversity Paper in early 2015 (http://diversity.asee.org/ awards). The call sought to identify highly impactful efforts by ASEE authors that broaden participation and influence the inclusive, diverse future of engineering. Papers from the 2015 Annual conference as well as papers published within any section/zone conference proceedings between May 1, 2014 and April 30, 2015 were eligible. Nominated diversity papers were assessed for novelty of approaches, ideas, interventions, extent of inclusivity, and demonstrated magnitude of impact.

With monetary support from the Mechanical Engineering Division, we are pleased to announce the inaugural **Best Diversity Papers** The Best Diversity Paper rubric (<u>http://diversity.asee.org/DiversityPaperRubric</u>) was utilized by an ASEE Diversity Selection Committee to assess scholarship attributes of the manuscript. and determine the winners.

The winners are listed below and will present their award winning work during a Best Diversity Papers session at the annual meeting (Monday, June 12:30 -2 pm, Washington State Convention Center, Room 309). Come join us and celebrate their contributions!

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 (Affiliation unknown), 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. Trytten (University of Oklahoma)	Mechanical Engineering
4th Place	Students Seeking Different Paths to Entrepreneurial Education 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

MICROINEQUITIES: THE POWER OF SMALL

WEBINAR DELIVERED BY STEPHEN YOUNG



ASEE MEMBERS SPECIAL OFFER

Many leaders have come to recognize that the most important skills of leadership go well beyond the obvious operational, technical or intellectual skills. Research, first conducted at MIT, has revealed the power "MicroMessages" have on establishing the ways we achieve loyalty, engagement and directly influence the performance of colleagues and direct reports. Our lack of



awareness of this higher level skill often leaves us asleep in the fire. Leave the warm and fuzzy behind and embrace the power MicroMessages have on the hard-wired link to performance. Experience this Webinar and learn why more than 20% of the Fortune 500 and nearly 300 corporations in 35 countries have embraced this method as a central platform for management development and effectiveness.

Retail: \$150.00

*Special ASEE Members Discount: \$21.95. Use Promo Code: ASEE 2015

Visit http://insightestore.com/MicroInequitiesWebinar/ for more information and to purchase.

Student essay and video contest - win cash prizes!

Current engineering and engineering technology students, tell us your story or share your persepctives by submitting a 3 - 5 min. video or a 300-500 word essay on topics related to any type of diversity.



Visit <u>http://diversity.asee.org/essay-contest</u> for submission details and additional information.

Diversity committee welcomes nine delegates Year of Action on Diversity

The ASEE Diversity Committee extended invitations to divisions/zones/sections that have dedicated diversity statements in their bylaws to nominate delegates. These ex officio individuals were invited to serve on the committee as a non-voting delegates for a one-year term, with the opportunity to participate in the idea/creation process, shaping future policies, and enhancing communication between the ASEE Diversity Committee and the delegate's group. This years delegates are listed below.

Chemical Engineering Division P. Arthur Felse Lecturer & Assistant Director for Research, Master of Biotechnology Program Department of Chemical & Biological Engineering Northwestern University afelse@northwestern.edu

Electrical and Computer Engineering Hossein Mousavinezhad Professor, Electrical Engineering Idaho State University mousseye@isu.edu

Engineering Economy Division Erick Jones Associate Professor University of Texas at Arlington ecjones@uta.edu Engineering Ethics Division Rebecca Bates Professor & Chair Dept. of Integrated Engineering Minnesota State University, Mankato bates@mnsu.edu

Entrepreneurship & Engineering Innovation Division Nathalie Duval-Couetil Associate Professor, Technology, Leadership, and Innovation Director, Certificate in Entrepreneurship and Innovation Program Purdue University natduval@purdue.edu

<u>Mechanical Engineering Division</u> **Sriram Sundararajan** Professor Mechanical Engineering Equity Advisor, College of Engineering Iowa State University <u>srirams@iastate.edu</u> Systems Engineering Division Alice Squires Associate Professor Engineering and Technology Management Washington State University alice.squires@wsu.edu

Women in Engineering Division Debra May Gilbuena Postdoctoral Scholar Oregon State University ambitious.engineer@gmail.com

Southeast Section Michael A. Matthews Professor of Chemical Engineering Associate Dean for Research & Graduate Education College of Engineering & Computing University of South Carolina mamatthe@mailbox.sc.edu

ASEE DIVERSITY COMMITTEE

2015 ANNUAL CONFERENCE Junited Seattle DIVERSITY SESSIONS

This year's annual conference features a rich slate of sessions focusing on diversity and inclusion (<u>www.asee.org/documents/conferences/annual/2015/diversity_sessions.pdf</u>) ranging from round table discussions and panels to presentations of the Best Diversity Papers described earlier on Page 1.
Diversity Sessions at a glance.

Best Diversity Papers: The Best Diversity Paper winners will present their work at this session. Please note that the Best Diversity Paper is a completely separate process from the Best Paper selection process run by the PIC chairs at the Annual Conference. Please join us for the best of the best papers on all aspects of diversity!

Cognitive Diversity (Speaker: Russell Korte, Colorado State University) - Having the capability to apply a greater variety of views to a decision should lead teams to better-informed decisions and greater capacity for problem solving. This Special Session will help participants explore two important questions: 1) What comprises cognitive diversity? and 2) How does cognitive diversity affect performance of decision-making and problem solving?

Roundtable on Diversity and Inclusivity (Moderator: Rebecca Bates, Minnesota State U, Mankato) - Join us in celebrating the year of diversity by bringing your voice to the table. We will have multiple topics for small groups to discuss. Come ready to listen, learn and contribute. We will provide an opportunity to plan for next steps that all can take to support diversity and inclusivity in engineering.

Turning Points Panel: Addressing Diversity-related Challenges (Moderator: Alice Squires) - The purpose of this panel is to have an open discussion of a diversityrelated challenge that each panel member has faced that became a turning point in his or her life. Panel members will take turns describing their specific situation, what

Monday, June 15	Tuesday, June 16	Wednesday, June 17
7:00 am to 8:30 am Safe Zone/Positive Space Ally Training 1 (Level 1)	7:00 am to 8:30 am Safe Zone/Positive Space Ally Training 2 (Level 1)	7:00 am to 8:30 am Safe Zone/Positive Space Ally Training 6 (Level 1)
	8:45 am - 10:15 am Round Table Discussions on Diversity & Inclusivity	8:45 am to 10:15 am Turning Points Panel: Addressing Diversity-Related Challenges
12:30 pm to 2:00 pm Best Diversity Papers Session		12:30 pm to 2:00 pm Safe Zone/Positive Space Ally Training 7 (Level 2)
2:15 pm to 3:45 pm Cognitive Diversity: Peering into the Black Box	2:15 pm to 3:45 pm Safe Zone/Positive Space Ally Training 3 (Level 1)	2:15 pm to 3:45 pm Panel: The Microaggressions Experienced by Non-traditional Marginalized Groups in Engineering
	4:00 pm to 5:30 pm Safe Zone/Positive Space Ally Training 4 (Level 2)	4:00 pm to 5:30 pm Safe Zone/Positive Space Ally Training 8 (Level 1)
	5:45 pm to 7:15 pm Safe Zone/Positive Space Ally Training 5 (Level 1)	

they and others did to address the challenge, what happened as a result of the actions taken, the final outcome, the takeaway from the experience, and how the diversity-related challenge ultimately changed his or her life. The panel member discussions will be followed by an open discussion focusing on lessons learned and positive steps for moving forward.

Panel on Microaggressions (Moderator: Odesma Onika Dalrymple) - Many individuals from non-traditional marginalized groups continue to perceive the climate as hostile and un-welcoming, which negatively affects their retention or persistence in the field. The goal of this panel is to expand the conversation on diversity in engineering by presenting narratives on the experience of these non-traditional marginalized groups. This dialogue is expected to help faculty and administrators develop a better awareness and understanding of the issues and challenges of nontraditional marginal groups on a day-to-day basis, and be equipped to address them in a positive, proactive manner.

Safe Zone Ally Training Sessions: Creating a Positive and Inclusive Campus Environment for LGBTQ People: The perception of campus environment influences learning and developmental outcomes, and discriminatory environments have a negative effect on student learning. LGBTQI (lesbian, gay, bisexual, transgender, queer or questioning, or intersex) people have a more negative perception of campus climate than other populations. Safe Zone Ally Training is a two-part interactive workshop for students, faculty, and the professional community during which participants will build knowledge and skills to create a more inclusive and affirming environment for LGBTQI individuals in engineering. In Level 1 participants will focus on understanding LGBTQI concepts and developing awareness of biases. In level 2, participants will learn to reduce discrimination and heterosexual privilege and explore aspects of engineering culture that act as barriers to LGBTQI equality. There will be 8 safe zone training sessions throughout the conference

The diversity committee acknowledges the gracious support of the following divisions for co-sponsoring various sessions.

Chemical Engineering Division Engineering Ethics Division Engineering Libraries Division Engineering Physics and Physics Division Student Division



ASEE DIVERSITY COMMITTEE

2014-2015 Committee Members

The ASEE Diversity Committee is a standing committee reporting to the ASEE Board of Directors through our Chairs Teri Reed and Adrienne Minerick. We meet monthly to identify, implement, and oversee the actions associated with the ASEE Diversity Strategic Plan, and we welcome your feedback about diversity-related engineering education issues and topics. Please contact any of our committee members with your questions or concerns.

Diversity Committee Co-Chair **Teri Reed** (2015) Assistant Vice Chancellor for Academic Affairs for Engineering Associate Professor, Department of Petroleum Engineering Dwight Look College of Engineering Texas A&M University terireed@tamu.edu

Diversity Committee Co-Chair Women in Engineering Division Representative **Adrienne Minerick** (2015) Associate Professor, Chemical Engineering Department Michigan Technological University <u>minerick@mtu.edu</u>

Corporate Member Council Representative Veronica Nelson (2017) Manager, Career Pathways Program Northrop Grumman Corporation veronica.nelson@ngc.com

Engineering Deans Council Representative Yannis C. Yortsos (2016) Dean, Viterbi School of Engineering University of Southern California yortsos@usc.edu

Engineering Technology Council Representative Niaz Latif (2016) Dean, College of Technology Purdue University Calumet nlatif@purduecal.edu

K-12 Division Representative Andrea M. Ogilvie (2016) Director, Equal Opportunity in Engineering Program University of Texas, Austin aogilvie@utexas.edu

Minorities in Engineering Division Representative **Monica Farmer Cox** (2016) Associate Professor, Engineering Education Purdue University, West Lafayette <u>mfc@purdue.edu</u> Member-at-Large **Timothy A. Wilson** (2016) Professor and Chair, Electrical, Computer, Software, and Systems Engineering Department Embry-Riddle Aeronautical University <u>wilsonti@erau.edu</u>

Member-at-Large **Marilyn A. Dyrud** (2016) Professor, Communication Department Oregon Institute of Technology <u>marilyn.dyrud@oit.edu</u>

Member-at-Large **Frank Flores** (2017) Vice President, Engineering Northrop Grumman Corporation <u>frank.flores@ngc.com</u>

Representative from Engineering Diversity Organization Burgess Mitchell (2016) Assistant Dean for Minority Affairs, Student Services School of Engineering Vanderbilt University burgess.mitchell@vanderbilt.edu

Headquarters Staff Representative Staff Liaison **Rocio C. Chavela Guerra** (2015) Director, Education and Career Development ASEE <u>r.chavela@asee.org</u>

Vice President Member Affairs (Ex Officio w/o vote) **Grant Crawford** (2016) Professor, Department of Engineering Quinnipiac University bobby.crawford@quinnipiac.edu



Chairs

Teri Reed — Co-Chair Adrienne Minerick — Co-Chair

Primary Point of Contact

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