

ASEE Diversity



A newsletter of the ASEE Diversity Committee

Edited by Sriram Sundararajan

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Turning Points Panel

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TURNING POINTS PANEL: CREATING ANOTHER TURNING POINT



<http://diversity.asee.org/>

Year of Action on Diversity

by Alice F. Squires, with panelists Carissa Brownotter, Mel Chua, Leroy L. Long III, Joel Alejandro (Alex) Mejia

When Alice Squires from Washington State University heeded the call to join the ASEE Diversity Committee and attended the first half hour meeting, the conversations seeded an idea that took a couple more weeks to form completely. If we wanted to support students in engineering education with diversity challenges they faced, why not ask students themselves to talk about it. Maybe, just maybe, the conversation could bring about positive change; and at the very least it could raise awareness and educate us about what it is like today for students who face these types of challenges every day. The "Turning Points" panel was born and successfully held at the 2015 annual conference. The purpose of this panel was to have an open discussion of a diversity-related challenge that each panelist has faced that became a turning point in his or her life.

Many audience members expressed their take-away from the event, either immediately following the meeting or at other times during the ASEE conference or as a follow-up. **Renata A. Revelo Alonso** offers:

The stories from the four panelists were immensely powerful and needed to be more elevated during ASEE's 2015 conference and exposition. As an audience member, I was moved, in some cases to tears, to hear about the type of obstacles the panel participants overcame to thrive in engineering. Their stories are not just examples of individual success, but also of these agents that aided in the navigation for success.

Turning Points Panelists

Carissa Brownotter, (Tufts U)

Mel Chua (Purdue U)

Dr. Leroy L. Long III (Embry-Riddle Aero. U.)

Dr. Joel Alejandro (Alex) Mejia (W. Virginia U)

The best way to explain the Turning Points panel experience is to let you hear straight from the panelists themselves.

Carissa Brownotter: Throughout my short lifetime, I have experienced the best and worst of America's educational system. My struggles and experiences shaped my goals and aspirations. I am half-Lakota and half-Diné. I am from a low-income family situated on the Standing Rock Sioux Reservation in South Dakota. During my attendance, my former high school ranked as the 2nd lowest public school in the entire state of South Dakota. I was not taught the necessary mathematical and science knowledge required for success in the field of engineering.

Following my graduation from Notre Dame, I desired to help others reach their full potential, and decided to teach mathematics to Native American students in the American Southwest. I dedicated myself to educating middle school and high school students living on the Navajo Nation. I enjoy developing their interest in engineering, and encourage their enthusiasm of the STEM fields. I strongly believe that no student should have to

experience the academic struggle I endured during my early undergraduate years.

The [Turning Points] panel was awesome. Thinking back on the experience continues to put a smile on my face.

Mel Chua: Deafness is an invisible disability, and being Asian and female drops it even deeper underneath the radar. I look like a quiet international student with a foreign accent; I'm actually a native-born Midwesterner who can't hear most of her own voice.

Deaf since age 2, I quickly learned that most people associated "disability" with "dumb," and took great pains to perform my intelligence by disavowing anything related to the Deaf world. A few years later, the state's public magnet school for gifted math and science students admitted me, but they'd never had a deaf student before, and didn't know how to support one. I was heavily involved on campus, in part because people often forgot to give me information access unless I was the club's president. I was tired, but it didn't matter; I needed to run on adrenaline just trying to bricolage the simplest daily communications together from a lossy information stream.

For me, sharing this story in a professional setting was a way to redefine the boundaries of "real engineering education work." I hadn't owned up to that before, or said it -- and

TURNING POINTS PANEL: CREATING ANOTHER TURNING POINT (CONT.)

doing so and "outing" myself was scary and hard, but I'm glad I did.

Dr. Leroy Long III: As a Black male who successfully overcame numerous diversity-related challenges along the STEM pipeline, I have certainly felt unheard and misunderstood at times. So, during the panel, I proudly spoke about my journey while growing up in Dayton, OH. Having an opportunity to share my perspective and lessons learned, while also hearing from other URMs, was very impactful.

During the panel, I talked about my time as an undergrad in mechanical engineering where I faced early academic/social challenges as a URM at a predominately White institution as well about my graduate school experience where I initially faced additional academic/social challenges. However, I overcame these obstacles through support from faculty mentors, advisers and peers, organizations including the National Society of Black Engineers (NSBE) and INROADS, along with internships, research and teaching experiences. Throughout the session, the audience seemed engaged and moved by our stories which made the panel even more impactful. Being able to answer questions from high-ranking and well-

respected members of the engineering education community also added significant value to my experience on the panel.

Dr. Joel Alejandro (Alex) Mejia: The panel was a key venue to raise awareness about the societal inequities and prejudices that may actively work to drive people of color and women out of engineering. For instance, legislation and educational policy have been detrimental factors affecting Latinos and other underserved groups in engineering. Nonetheless, it is through small efforts that we can make the educational experience significant to many underrepresented students.

It's always good to be reminded that other people experience life differently than I do. It's a good reminder to "check my presuppositions at the door." - Jeremy VanAntwerp, audience member

My message was to let the participants know that detaching ourselves from the belief that students fail or do not succeed because of internal deficits or deficiencies is crucial. The notion that underrepresented students possess motivational and cognitive deficits marginalizes students and promotes the

model of meritocracy in engineering setting. Challenging our own deficit thinking model and celebrating culture, diversity, and the ways of knowing and world views of underrepresented students is necessary in order to create more inclusive environments. Engineering in the culturally and linguistically diverse classroom must foster and sustain the pedagogies that embrace the pluralism of students.

Panel participants responded in a very positive way. They asked questions on how to provide opportunities to underrepresented students, how to create a more inclusive classroom, and how to provide culturally responsive curriculum to promote diversity. I believe that promoting diversity and inclusivity may be a daunting task, but it takes small steps to overcome inertia.

As Bill Nye the Science Guy said, "Everyone you will ever meet knows something you don't" - the experiences of the panelist further serves to remind us that our experiences make us unique and that there is strength and excellence in diversity.

STUDENT ESSAY AND VIDEO CONTEST WINNERS



Year of Action on Diversity

As a part of our Year of Action on Diversity initiative, we wanted to share stories from our community that highlight inspirational stories, positive changes at any level of the educational system, or examples of still needed change.

In this contest, we asked for a video (3 -5 mins) or essay (300-500 words) from current engineering and engineering technology students sharing a story related to any type of diversity (e.g., age, belief system, disability status, ethnicity, gender, gender identity, gender expression, national origin, race, sexual orientation, socio-economic status, and any other visible or non-visible differences). We are pleased to announce the winners below. Visit <http://diversity.asee.org/essay-contest> to view the works of the winners and for more details about the contest.

- **First Place (\$275 prize) - Shante K. Stowell** (undergraduate, Massachusetts Institute of Technology) with her entry, "Feeling Raced," created a unique audio piece that encourages thought and self-reflection.
- **Second Place (\$150 prize) - Shenwei Chang** (undergraduate, University of Texas) with her entry, "Working Toward a More Inclusive Engineering Educational Environment," provided a unique perspective on diversity through "anecdotes that illustrate the persistence of sexism in engineering and also briefly analyzes the diversity problem within engineering women's spaces through the lens of intersectionality."
- **Third Place (\$70 prize) - Samantha Matta** (Arizona State University) with her entry, "A Bite Into the Baklava of Life," reminded us that there is beauty in our differences.
- **Honorable Mention - Sylvie DeLaHunt** (University of Maryland) and **Brianna Malcolm** (University of Florida)



THOUGHT-PROVOKING FOOTPRINTS HIGHLIGHT DIVERSITY AT THE 2015 ANNUAL CONFERENCE

by Debra Friedrichsen

As part of ASEE's Year of Action on Diversity, the ASEE Diversity Committee featured thought-provoking diversity-themed footprints in the hallways around the 2015 ASEE Annual Conference in Seattle, WA. These footprints raised awareness and got members talking about diversity. Wandering around the convention center and throughout the convention hotels, several conversations could be heard about these messages. People often stopped in the hallways to read the messages. In addition, attendees tweeted pictures and comments about these messages. For example, Jenna Wegner (@wegnerjen) tweeted, "Very impressed as a 1st timer @ASEEconferences on the recognition of diversity & privilege. #ASEE2015 #ASEEAnnual." Dr. Dawn Wendell (@DrDawnMIT) tweeted, "ASEE conference teaches me many things, this one is very sad #ASEE2015 #Diversity."



Want to know more about these thought-provoking snippets? You can find the full list on the ASEE Diversity Committee website at <http://diversity.asee.org/conference>.

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.



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

2015-2016 Committee Members

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

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Ex-officio individuals from divisions/zones/sections that have dedicated diversity statements in their bylaws.

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Electrical and Computer Engineering
Hossein Mousavinezhad
 Idaho State University

Engineering and Public Policy Division
James Ammons
 Florida A&M University

Engineering Economy Division
Erick Jones
 University of Texas at Arlington

Engineering Ethics Division
Rebecca Bates
 Minnesota State University, Mankato

Entrepreneurship & Engineering
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Nathalie Duval-Couetil
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Industrial Engineering Division
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Sriram Sundararajan
 Iowa State University

Systems Engineering Division
Alice Squires
 Washington State University

Women in Engineering Division
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