

**2020 ASEE Engineering Deans Institute**  
**The Venetian, Las Vegas, NV**  
**April 14 (Tuesday) through April 16 (Thursday), 2020**

**TUESDAY, APRIL 14, 2020**

**8:30 a.m. – 3:00 p.m.     EDI Registration— 3002 & 3102 Foyer**

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**9:00 a.m. – 11:15 a.m.     ASEE EDGE Workshop — 3005-6 & 3105-6**

**Organizers:**

Geraldine Gooding, ASEE; Gretal Leibnitz, ASEE

**Speaker:**

Geraldine Gooding, ASEE; Gretal Leibnitz, ASEE; Sharon Walker, Drexel University; Scott Ashford, Oregon State University; Rudolph Buchheit, University of Kentucky; Yannis Yortsos, University of Southern California

Participants will learn about the Engineering Deans Gender Equity (EDGE) Initiative, evidence-based resources available, and the results of the 2019 EDGE Deans' Survey about gender diversity, equity, and inclusion (DEI) practices. The workshop will also feature a panel of deans sharing promising DEI practices; a presentation about the Executive Leadership in Academic Technology, Engineering, and Science (ELATES) program; and an interactive look at the EDGE College Self-Assessment Tool. Deans new to, as well as those familiar with, the EDGE Initiative will walk away with new insights, action steps, and network connections for advancing efforts to promote engineering excellence through gender diversity, equity, and inclusion.

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**11:30 a.m. – 1:30 p.m.     EDC Executive Committee— 3103-4**

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**11:30 a.m. - 1:30 p.m.     Undergraduate-focused Engineering Deans Meeting — 3003-4**

**Organizers:**

Steven Starrett, LeTourneau University; Patrick Mather, Bucknell University; JB Holston, University of Denver

This luncheon meeting will provide a venue for community building and discussion of several topics important to the group. Following an ice-breaker, we will discuss: 1. engaging undergraduates in research and other projects with faculty mentors; 2. integrating engineering education and the liberal arts; and 3. developing a shared voice within ASEE and EDI. Time will be reserved to discuss other topics of interest. The session will be followed during the year by one or two opt-in virtual meetings of members of the ad-hoc group.

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**1:30 p.m. – 2:30 p.m.      Public Policy Committee— 3103-4**

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**2:30 p.m. – 3:30 p.m.      Data Committee — 3103-4**

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**3:00 p.m. – 5:00 p.m.      New Deans Forum— 3003-4**

The role of the engineering dean is multifaceted, complex, and constantly changing. This panel discussion and question-and-answer session provides an opportunity for new and seasoned deans to interact and learn about strategies for success in critical areas of responsibility. Panelists include:

**Organizers:**

- Cammy R. Abernathy, Dean and Professor of Material Science & Engineering, Herbert Wertheim College of Engineering, University of Florida
- Stephanie G. Adams, Dean and Lars Magnus Ericsson Chair, Erik Jonsson School of Engineering & Computer Science, University of Texas at Dallas, and President of the American Society of Engineering Education
- Gilda A. Barabino, Dean of Engineering and Daniel and Frances Berg Professor, Grove School of Engineering, the City College of New York
- Kenneth R. Lutchen, Dean and Professor of Biomedical Engineering, College of Engineering, Boston University
- Darryll J. Pines, Nariman Farvardin Professor and Dean, A. James Clark School of Engineering, and incoming President of the University of Maryland, College Park

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**6:30 p.m. – 8:30 p.m.      Welcome Reception— Rama Venkat, University of Nevada, Las Vegas**

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**WEDNESDAY, APRIL 15, 2020**

**7:00 a.m.                      Registration open — 3002 & 3102 Foyer**

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**7:30 a.m. – 9:00 a.m.      Breakfast, Welcome, and Keynote Address— 3005-6 & 3105-6**  
**Sponsored by Boeing**

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**9:00 a.m. – 10:00 a.m. Welcome, General Session Keynote Speaker — 3002 & 3102**

Introduction: Joseph Rencis, California State Polytechnic University, Pomona

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**10:00 a.m. – 10:30 a.m. Networking Break with Refreshments— 3001AB & 3101AB**

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**10:30 a.m. – 11:45 a.m. Engineering Education in the Era of Exponential Technologies— 3002 & 3102**

**Organizers:**

Christos Christodoulou, University of New Mexico; Fotis Sotiropoulos, Stony Brook University; Sharon Walker, Drexel University

**Speakers:**

Stephanie Farrell, Rowan University  
Stephen Harmon, Georgia Tech

The exponential growth of scientific research, combined with the declining half-life of professional knowledge and the relatively static limits of human learning capacity, mean that we face an ever-increasing challenge in educating the engineers of tomorrow. The goal of this interactive session is to exchange ideas on how educators can adopt new concepts in innovation, pedagogy, and technology in future engineering education. For example, how can robotics, augmented reality, and AI support teaching and learning? What are the disruptive online education methods that deliver student-centered curricula at scale? What policies and structures are barriers to innovation? How can pedagogical innovation improve conceptual understanding as well as motivation, engagement and critical thinking? Will these innovations contribute to broadening participation in engineering?

**11: 45 a.m. – 12:00 p.m. Cool Idea Intro and Presentations I**

**3002 & 3102**

**Organizer: Larry Stauffer, University of Idaho**

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**12:00 p.m. – 12:30 p.m. Transition to Lunch— 3005-6 & 3105-6**

**Sponsored by Dassault Systèmes**

**12:30 p.m. – 1:30 p.m. Lunch and Keynote Session— 3005-6 & 3105-6**

**SPONSOR:**

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**1:30 p.m. – 2:45 p.m.            Panel 2: Future of Engineering Research— 3002 & 3102**

**Organizers:**

Yannis Yortsos, USC; Rashid Bashir, University of Illinois at Urbana–Champaign

Panelists will offer visions of the future of engineering research from the perspectives of different federal funding agencies (National Science Foundation, Department of Defense, National Institutes of Health), foundations (the Clara Wu and Joe Tsai Foundation), and corporations (Amazon).

**Panelists;**

- Dawn Tilbury, Assistant Director for Engineering, National Science Foundation
- Bindu Nair, Deputy Director for Basic Research, Office of the Secretary of Defense (DoD)
- Tom Skalak, of the Clara Wu and Joe Tsai Foundation
- Jill Heemskerk, Deputy Director, National Institute of Biomedical Imaging and Bioengineering (NIH)
- Prem Natarajan, Vice President of Natural Understanding in the Alexa AI group, Amazon

**2: 45 p.m. – 3:00 p.m. Cool Idea**

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**3:00 p.m. – 3:30 p.m.            Break— 3001AB & 3101AB**

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**3:30 p.m. – 4:45 p.m.            Panel 3: Mastering Media Interactions in 75 Minutes — 3002 & 3102**

**Organizers:**

Rama Venkat, University of Nevada, Las Vegas ; Jayathi Murthy, University of California, Los Angeles

**Speakers:**

**Tony Allen**, Senior Director of Media Relations, UNLV

**Kevin Stoker**, Professor and Director, UNLV Hank Greenspun School of Journalism and Media

Communicating effectively with media is a powerful way to influence public perception and educate key stakeholders on issues and trends affecting our universities, our communities, and our fields of study.

This session will place attendees on the road to mastering media interactions with easy-to-implement interview and preparation techniques—both verbal and non-verbal—to successfully navigate any interview scenario. Attendees will learn how to quickly develop compelling media stories, gain strategies to maintain control and avoid common interview pitfalls, and effectively evaluate success. They'll also put their newly

acquired skills to the test through an interactive scenario-based exercise and have a chance to ask questions of the experts.

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**4: 45 p.m. – 5:00 p.m. Cool Idea**

**5:00 p.m. - 6:00 p.m. ABET Session — 3002 & 3102**

**Organizers:**

Jeffrey L. Ray, Western Carolina University; Joe Sussman, ABET Chief Accreditation Officer and CIO

Are you aware that ABET has an Academic Advisory Council (AAC)? Did you know the AAC represents all four ABET commissions? Provosts, deans, and chairs from a variety of institutions across North America populate the AAC. It is one of three councils providing recommendations to the ABET Board of Directors on issues of importance, particularly to the academic community. This listening session will highlight the work of the AAC, review its current initiatives, and invite you to present topics and issues for the AAC to consider that might make meaningful and helpful changes to ABET processes and practices.

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**7:00 p.m. – 7:30 p.m. Networking Reception— 3003-4 & 3103-4**

**Sponsored by Oregon State University**

**7:30 p.m. – 10:00 p.m. Banquet and Keynote— 3005-6 & 3105-6**

**Sponsored by UCLA**

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**THURSDAY, APRIL 16, 2020**

***Sponsor display tables are available during refreshment and networking breaks.***

**7:30 a.m. – 9:00 a.m. Breakfast and Sponsor Speaker — 3005-6 & 3105-6**

**Sponsored by University of Florida**

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**9:00 a.m. – 10:00 a.m. General Session Keynote Speaker — 3002 & 3102**

**Introduction:** Rashid Bashir, University of Illinois at Urbana-Champaign

**Speaker:**

Thomas M. Siebel

Digital transformation represents a dramatic step function in information technology that is impacting all aspects of business, government, and society. With a career spanning four decades as a technologist, entrepreneur, and philanthropist, Tom Siebel will discuss how 21<sup>st</sup> century technologies—including artificial intelligence, cloud computing, and the Internet of Things—are fundamentally changing the nature of work, organizational structure, and how we must educate our workforce for success. Self-learning corporate cultures, continuous education, multidisciplinary study, and design thinking all play a key role.

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**10:00 a.m. – 10:30 a.m.    Networking Break with Refreshments— 3001AB & 3101AB**

**10:30 a.m. – 11:45 a.m.    Panel 4: International Collaborations and Security— 3002 & 3102**

**Organizers:**

Vijay Kumar, University of Pennsylvania; Julia Ross, Virginia Tech; Rama Venkat, University of Nevada, Las Vegas

**Panelists:**

Teresa Domzal, Assistant Director, Corporate Strategy, National Counterintelligence and Security Center, Office of the Director of National Intelligence

Patricia A. Valdez, Extramural Research Integrity Officer, National Institutes of Health, Department of Health and Human Services

Katharina McFarland, Former Assistant Secretary of Defense (Acquisition, Logistics & Technology); Chair, National Academies Board on Army Research and Development

Engineering education and research activities increasingly address global challenges and draw collaborators and students from across the globe. As a result of this globalization, academic institutions face many complex issues resulting from the tension between the open science culture that is fundamental to academe, and American values and interests. This panel will provide an overview of challenges to national security, potential conflicts of interest faced by administrators, faculty and students, and the threats to universities posed by increasingly stringent immigration policies. The panelists will provide constructive suggestions for developing and implementing policies that will help engineering deans navigate this complex landscape.

**11: 45 p.m. – 12:00 p.m. Cool Idea**

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**12:00 p.m. – 1:30 p.m.    EDC Business Lunch Meeting (Gilda Barabino, EDC Chair) —**

**3005-6 & 3105-6**

**Sponsored by the Samueli Foundation**

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1:30 p.m. – 2:45 p.m.

Panel 5: Funding the Future — 3002 & 3102

**Organizers:**

Alexis Abramson, Dartmouth College; Rashid Bashir, University of Illinois at Urbana-Champaign

**Panelists;**

- Jean Zu; Dean of the Schaeffer School of Engineering and Science; Stevens Institute of Technology
- Chaouki Tanios Abdallah; Executive Vice President-Research; Georgia Tech
- Vijay Kumar; Nemirovsky Family Dean, Penn Engineering; University of Pennsylvania
- Emily Allen; Dean of the College of Engineering, Computer Science, and Technology, California State University Los Angeles

How will schools/colleges of engineering be funded in the future? Will the breakdown across undergraduate and graduate tuition, endowments and gifts, and government funding remain roughly the same? Will online education become an important revenue source? This panel will explore these topics and engage audience members in this important conversation

**2: 45 p.m. – 3:00 p.m. Cool Idea**

3:00 p.m. – 3:30 p.m.

Refreshment Break —3001AB & 3101AB

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3:30 p.m. – 4:45 p.m.

Panel 6: Equity, Diversity, and Inclusion — 3002 & 3102

**Organizers:**

Sharon Walker, Drexel University; Pat Mather, Bucknell University; Jane Goodyear, York University; Emily Allen, California State University, Los Angeles; Rama Venkat, University of Nevada, Las Vegas; Manos Maragakis, University of Nevada, Reno

**Speaker:**

**Jeffery Allen Steiger**, Creative Director of AWED (Advance Women, Equity & Diversity) Theater at Florida International University

**"Bias, Equity, and Leadership: A Theatrical Case Study of the Early Stages in a Faculty Lifecycle"**

Deans can intuit a great deal about the health and function of a department, but without a close-up view of the nuances of an organizational climate and culture, it can be tricky to find the best approach to foster change. In this session, participants will have the opportunity to be flies on the wall of an engineering department by observing a theatrical case of an academic search process that follows a committee from the formation of the

search committee to the third-year review. This highly interactive session will allow participants to share perspectives, experiences, and dean-level strategies to address not only the processes and practices that lead to implicit and explicit bias and inequity in faculty experience, but also allow for broader cultural change. The session's goal is to help deans identify pressure points in the early stages of a faculty member's "lifecycle" and the institutional processes and traditions that must be addressed to ensure the recruitment and successful retention of diverse talent.

**4: 45 p.m. – 5:00 p.m. Cool Idea**

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**5:30 p.m. – 7:30 p.m. Closing Reception— 3001AB & 3101AB**

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**FRIDAY, APRIL 17, 2020**

### **1. CityCenter's Aria Resort & Casino Sustainability Tour**

From the inception of CityCenter, throughout design, development and construction, there was one goal in mind: Create a destination that is not only built in an environmentally sustainable manner but operates every day with the same commitment to conserving natural resources. The tour will focus on the elements that helped the Aria Resort & Casino win a U.S Green Building Council LEED Gold certification and also improvements that have been made over the past 10 years of operation.

**Capacity: 25 (max)**

**Date: 17, April 2020**

**Time: 10 am to 11:30 am**

**Meeting place: Aria Resort & Casino Lobby, 3730 S. Las Vegas Blvd, Las Vegas, NV 89158**

### **2. Celestia: Behind-the-scenes Tour**

Each night, Celestia brings to life elite acrobatics and dance, aerial feats, live music, state-of-the-art technology. and overwhelming imagination. Attendees will have the opportunity to tour the 30,000-square-foot interactive big top that houses this immersive production.

**Capacity: 40 (max). Free tickets to the 7 p.m. show that night.**

**Date: 17, April 2020**

**Time: 10 am to 11:30 am**

**Meeting Place: Stratosphere Lobby: 2100 S Las Vegas Blvd, Las Vegas, NV 89104**