Wednesday, May 29

11:00 - 1:00 Registration Open

1:00 - 2:00 Summit Welcome and Keynote Speaker; Sunita Mishra, MD, MBA, Chief Medical Officer for Amazon Health Services

Theme 1: Update on strategies for enhanced learning environments and evidence based practices in undergraduate programs.

- 2:00 2:45 **Theme Plenary Speaker;** *Maribel Vazquez, PhD, Professor, Biomedical Engineering, Rutgers University*
- 2:45 3:00 Coffee Break

3:00 - 3:50 **Parallel Workshop Sessions**

1: The evolution of teaching and learning styles in the post-pandemic era. Session Chairs: Sally Shady, PhD, Associate Professor and Associate Chair of Undergraduate Studies, Biomedical Engineering, Stevens Institute of Technology. Mahendra Kavdia., PhD, Undergraduate Program Chair and Associate Professor, Wayne State University.

2: Effective learning and teaching strategies in small and large classrooms. (Adopting instructional approaches in BME-specific courses such as: Introduction to BME, Physiology, Biomechanics and Biotransport).

Session Chairs: Christine King, PhD, Associate Professor, Dir. of the Biomedical Engineering Meng Program, University of California Irvine. Laura Christian, PhD, Lecturer, Coulter Dept of Biomedical Engineering, Georgia Institute of Technology.

2: Incorporating DEI into instruction and interpreting the new ABET criteria Session Chairs: Jennifer Leight, PhD, Professional Practice Associate Professor and Associate Director of Undergraduate Education, Dept of Biomedical Engineering, The Ohio State University. Alyssa Taylor Amos, PhD, Associate Teaching Professor, Shu Chien-Gene Lay Dept of Bioengineering, University California San Diego.

4: Strategies to incorporate ChatGPT/AI in BME curriculum. **Session Chairs:** Alexandra Werth, PhD, Assistant Professor, Meining School of Biomedical Engineering, Cornell University. Mike King, PhD, Rice University.

5: Approaches and innovative techniques to teach senior design. **Session Chairs:** Rebecca Scott, PhD, Assistant Professor of Biomedical Engineering, University of Oklahoma. Joseph J. Sarver, PhD, Teaching Professor, School of Biomedical Engineering, Science & Health Systems, Drexel University. 6: Opportunities for experiential learning in the BME curriculum. Session Chairs: Alexander Guevel,PhD, Assistant Professor, VT-WFU School of Biomedical Engineering and Sciences, Wake Forest University School of Medicine. Rob Macleod, PhD, Professor, Vice-chair, and Dir. Of Undergraduate Studies, Dept of Biomedical Engineering, University of Utah.

All workshop sessions will be repeated so that you can attend 3 of the topics.

- 4:00 4:50 Parallel Sessions Repeat I
- 5:00 5:50 **Parallel Sessions Repeat II**
- 6:30 8:30 Dinner at NJIT Opening Reception
- 8:30 10:00 Social/Networking Activity

Thursday, May 30

7:00 - 8:00 Breakfast

Theme 2: Resources for student and faculty success.

8:00 - 8:45 **Theme Plenary Speaker:** *Kay C. Dee, PhD, Associate Dean of Learning and Technology and Professor of Biology and Biomedical Engineering, Rose-Hulman Institute of Technology.*

9:00 - 9:50 Parallel Workshop Sessions

1: Student engagement, participation, and attendance. Session Chairs: Joshua Kays, PhD, Lecturer, College of Engineering, Department of Biomedical Engineering, Boston University. Sarah Rooney, PhD, Associate Professor, Department of Biomedical Engineering, University of Delaware.

2: Academic integrity and use of ChatGPT in BME curricula (focus on communicating restrictions and conveying when crossing into academic integrity violations - role of faculty in integrity investigations).

Session Chairs: Reem Khojah, PhD, Assistant Teaching Professor, Shu Chien-Gene Lay Department of Bioengineering, University of California San Deigo. Kelly W. Broadhead, PhD, Associate Professor (Lecturer) and Director of Undergraduate Operations, Department of Biomedical Engineering, University of Utah.

3: Promoting instructional and TT faculty success, professional training, and individual mentorship.

Session Chairs: Brenda Ogle, PhD, Professor and Department Head, Department of Biomedical Engineering, University of Minnesota Twin Cities. Jenny Amos, Teaching Professor, Grainer College of Engineering, University of Illinois Urbana Champaign.

4: Models for regional programs to work together more closely, including shared resources and collaborative teaching.

Session Chairs: Miiri Kotche, PhD, Associate Dean for Undergraduate Affairs, Clinical Professor, Biomedical Engineering University of Illinois Chicago. Pat Alford, PhD, Associate Professor and Director of Undergraduate Studies, Department of Biomedical Engineering, University of Minnesota Twin Cities.

5: Student support: Mental health and sense of belonging while maintaining educational rigor and curricular success.

Session Chairs: Karin Jensen, PhD, Assistant Professor, Biomedical Engineering, University of Michigan. Kristen Labbazzo, PhD, Associate Teaching Professor, Undergraduate Director Biomedical Engineering, Rutgers University, New Brunswick. 6: Promotion and acceptance of inclusion; University training to departmental engagement – student advising to faculty mentorship.
Session Chairs: Julian Lippmann, PhD, Lecturer, College of Engineering, University of Miami. Lauren Hecklman, PhD, Lecturer, Department of Biomedical Engineering, Columbia University.

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- 10:00 10:50 Parallel Sessions Repeat I
- 11:00 11:50 Parallel Sessions Repeat II
- 12:00 1:00 Networking Lunch

Thursday, May 30

Theme 3: The future of graduate programs in biomedical engineering.

1:00 - 1:45 **Theme Plenary Speaker; Soumyadipta Acharya, MD, MSE, PhD, Assistant Professor, Biomedical Engineering, Johns Hopkins University.**

2:00 - 2:50 **Parallel Workshop Sessions**

1: Structures for interdisciplinary co-mentored research training that bridges biology, engineering, computer and data science chemistry, and medicine. **Session Chairs:** David Schmidtke, PhD, Professor, Professor of Biomedical Engineering, University of Texas at Dallas. Michael Miga, PhD, Interim Chair, Professor, Vanderbilt University.

2: Preparing students for academic post-PhD careers in the AI era. Session Chairs: Chris Geiger, PhD, Instructional Associate Professor, University of Florida. Wawosz Dobrucki, PhD, Associate Professor, Associate Head of Graduate Programs, Grainger College of Engineering, University of Illinois Urbana-Champaign.

3: Integration of entrepreneurship and commercialization training in graduate BME curricula.

Session Chairs: Katherine Reuther, PhD, Practice Associate Professor, University of Pennsylvania. Joe Bradley, PhD, Clinical Assistant Professor Grainger College of Engineering, University of Illinois Urbana-Champaign.

4: Industry and multi-institution interdisciplinary partnerships and their role in graduate BME curricula.

Session Chairs: Dhruv Seshadri, PhD, Assistant Professor, Department of Bioengineering, Lehigh University. Nathan Jacobs, PhD, Director of Research Training and Education, University of Oregon.

5: Discussions on the value-added proposition for BME Masters programs and views from industry.

Session Chairs: Anand Ramamurthi, PhD, Professor and Chair of the Department of Bioengineering, Lehigh University. Marissa Gray, PhD, Master's Program Director, Assistant Professor, Brown University.

6: Strategies to increase diversity and inclusion among students and faculty in graduate BME programs.

Session Chairs: Tomas Gonzalez-Fernandez, PhD, Assistant Professor, Department of Bioengineering, Lehigh University. Brian Helmke, PhD, Director of Undergraduate Research, Associate Professor, Department of Biomedical Engineering, University of Virgina.

All workshop sessions will be repeated so that you can attend 3 of the topics.

- 3:50 4:10 **Coffee Break**
- 4:10 5:00 Parallel Sessions Repeat II
- 5:00 6:30 Buses to Stevens Institute of Technology
- 6:30 10:00 Dinner at Stevens Institute of Technology

Friday, May 31

7:00 - 8:00 Breakfast

Theme 4: Industry-readiness skills for an evolving and diversified job market.

8:00 - 8:45 **Theme Plenary Speaker;** Arda Ural, PhD, Americas Industry Markets Leader for Life Sciences and Healthcare at Ernst & Young LLP.

9:00 - 9:50 Parallel Workshop Sessions

1: What are the most critical industry readiness skills and are our programs designed to build upon these skills?

Session Chairs: Christian Rivera, PhD, Associate Professor of Instruction, Department of Bioengineering, University of Texas Dallas. Gabrielle Lam, PhD, Assistant Professor of Teaching, University of British Columbia.

2: The importance of data science in BME education.

Session Chairs: Lori Herz, PhD, Associate Chair, Teaching Professor, Department of Bioengineering, Lehigh University. Patricia Widder, PhD, Associate Director of Undergraduate Studies, Principal Lecturer, Department of Biomedical Engineering, Washington University in St. Louis.

3: Challenges with capstone experience to maximize workforce readiness and meet students' expectations.

Session Chairs: Holly Golecki, PhD, Teaching Assistant Professor, Grainer College of Engineering, University of Illinois Urbana Champaign. Laura Gaviria, PhD, Associate Professor of Instruction, Department of Biomedical Engineering, University of Texas San Antonio.

4: Integration of extra- and co-curricular topics to increase student employment success.

Session Chairs: Isgard Hueck, PhD, Director of Educational Assessment and Industrial Outreach in Biomedical Engineering, University of California San Diego. Kris Billiar, PhD, Department Head and Professor, Worcester Polytechnic Institute.

5: Benefits to the BME employers from specialized credentials or certifications such as Solidworks, "Grow with Google" or "Pathway for Patient Health."
Session Chairs: Novella Keeling, PhD, Teaching Assistant Professor, Biomedical Engineering Program University of Colorado Boulder. Ruth Ochia, PhD, Professor of Instruction, Bioengineering Department, Temple University.

6: Important topics and instructional approaches for preparing students for DEI in the workforce.

Session Chairs: Brian Helmke, PhD, Director of Undergraduate Research,

Associate Professor, Department of Biomedical Engineering, University of Virgina. Sabia Abidi, PhD, Assistant Teaching Professor, Department of Bioengineering, Rice University.

All workshop sessions will be repeated so that you can attend 3 of the topics.

- 10:00 10:50 Parallel Sessions Repeat I
- 11:00 11:50 Parallel Sessions Repeat II
- 12:00 2:00 Closing Lunch and Keynote 2: Jenny Munson, PhD, Associate

Professor, Virgina Tech.