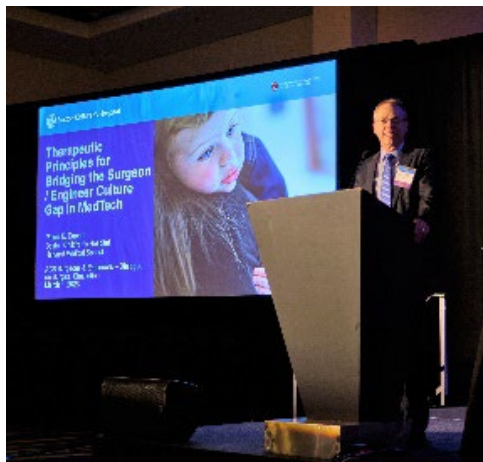


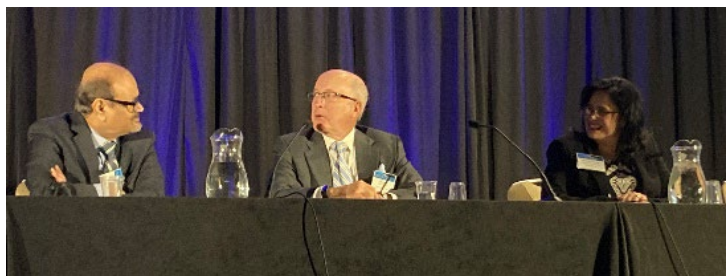
ACS Surgeons and Engineers: A Dialogue on Surgical Simulation Meeting promoted the collaboration between surgeons, surgical educators, academic engineers, and the simulation industry to build better surgical simulators.

The full-day 2023 ACS Surgeons and Engineers: A Dialogue on Surgical Simulation meeting was held in person on March 1 with notable success. The Surgeons and Engineering Committee of the ACS Division of Education served as the Program Committee for this meeting, which attracted over eighty-eight registrants from the U.S. and seven other countries.

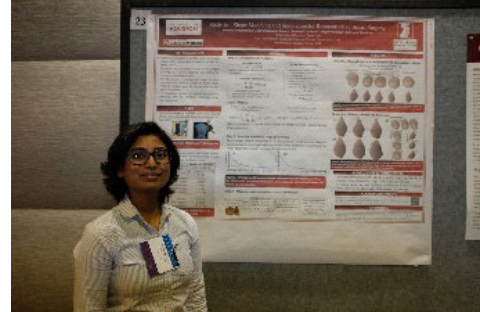


The keynote address, “Therapeutic Principles for Bridging the Surgeon / Engineer Culture Gap in MedTech,” was delivered by Dr. Pierre E. Dupont, PhD, Boston Children’s Hospital, Harvard. Dr. Dupont spoke about his academic engineering lab's challenges when implementing research projects with transferable outcomes in a clinical setting. He gave insights on navigating research projects through the commercialization process and how to foster collaboration between clinicians and engineers.

The Special Panel, “How to Build Better Simulators,” included three experts with significant experience in productive partnerships between surgeons and academic and industry engineers. The panel discussed on their definition of an ideal simulator, realism, and metrics, barriers in building such simulators, and collaborative efforts in the future. This discussion will continue at the future Surgeons and Engineers meeting to explore how surgeons, surgical educators, and simulator engineers can collaborate to determine the essential aspects of surgical simulator design. The expert panelists were Gladys Fernandez, MD, the Director of Simulation Education for the Baystate Simulation Center and Goldberg Surgical Skills Laboratory; John P. Lenihan Jr., MD, FACOG, Clinical Consultant to Surgical Science; Thenkurussi Kesavadas, PhD, the founding director of the University of Illinois Urbana-Champaign’s Health Care Engineering Systems Center (HCESC).



A total of 58 research abstracts were received in four categories: Research, Research in Progress, Challenges in Technology-Enhanced Surgical Education, and Promoting Technology and Collaboration. Nine highly scored abstracts were presented during two oral presentation sessions, and twenty-seven outstanding abstracts were presented as poster presentations. Several oral and poster presentations were made by young investigators, including medical/surgical trainees and engineering students. The presented abstracts are now posted on the Surgeons and Engineers Meeting webpage for the public.

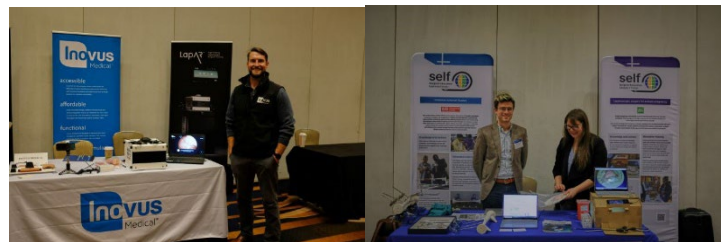


David Hananel, BSEE, BACS, Director of the Center for Research in Education and Simulation Technologies, and Victoria Roach, PhD, Research Assistant Professor, Division of Healthcare Simulation Science, Department of Surgery, University of Washington, lead a workshop session titled “Cognitive Task Analysis (CTA), An Important Step for Simulator Development—What, Why, and How.”

Mr. Hananel and Dr. Roach provided the general concept and process of creating a CTA and its application in building surgical simulators. Meeting participants had an opportunity to work in small groups to apply the simplified CTA process to a backpacking task.



Intuitive Surgical was a platinum sponsor of this meeting. In addition, Intuitive Foundation and Inovus exhibited at the meeting. The Division of Education and Surgeons and Engineers Committee thank our industry sponsor and exhibitors.



The next ACS Surgeons and Engineers Meeting is scheduled for March 13, 2024, at the Swissôtel in Chicago, IL.

For additional information, please visit the meeting’s webpage (www.facs.org/surg-eng) or contact Gysung I. Lee, Ph.D., Co-Program Chair of the Surgeons and Engineers Meeting, at glee@facs.org.