

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

The 2024 ACS Surgeons and Engineers: A Dialogue on Surgical Simulation meeting was held in person at the ACS Headquarters on March 13 with remarkable success. The Surgeons and Engineering Committee of the ACS Division of Education served as the Program Committee for this meeting, and 120 attendees from the United States and seven other countries joined the meeting to discuss technology-enhanced surgical education with simulation.



The keynote address, “Developing an Ecosystem of Innovation and Entrepreneurship to Advance the Future of Surgery and Academic Medicine,” was delivered by Mark S. Cohen, MD, FACS, FSSO, Dean of the Carle Illinois College of Medicine at University of Illinois Urbana-Champaign and Senior Vice President and Chief Academic Officer for Carle Health. Dr. Cohen’s presentation explored the innovation and entrepreneurship ecosystem within an academic medical center and how to promote a culture that supports innovation.

The Special Panel, “How to Build Better Simulators – Part 2,” which was moderated by Gladys Fernandez, MD, Baystate Simulation Center and built upon last year’s panel discussion, included three experts with significant experience in productive partnerships between surgeons and academic and industry engineers. The Panelists refined their definitions of an ideal simulator, realism, metrics, barriers to building such simulators, and discussed collaborative efforts for the future. The expert panelists were John T. Paige, MD, FACS, MAMSE, Professor of Clinical Surgery at LSU Health New Orleans School of Medicine; Ganesh Sankaranarayanan, PhD, Co-Director of the Center for Assessment of Surgical Proficiency at UT Southwestern; and Henry Lin, PhD, Simulation Learning Architect at Intuitive Surgical. This discussion will continue at the 2025 Surgeons and Engineers Meeting to explore how surgeons, surgical educators, and simulator engineers can collaborate to determine the essential aspects of surgical simulator design.



A total of 73 research abstracts were submitted 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 36 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 available](#) on the Surgeons and Engineers Meeting webpage for the public.



Twenty-five simulators/models were submitted to the inaugural Do-It-Yourself (DIY) Simulator/Model Competition. The competition highlighted the innovative spirit of the surgical simulation community and garnered much interest from attendees. The first-place awardee was Ritika Pansare from Michigan Medicine 3D & Innovations Lab for the “Low-Cost Oocyte Retrieval Simulator.” The People’s Choice award, as voted on by meeting attendees, was awarded to Jenny Garnnet from the University of Washington’s Institute for Simulation in Healthcare

for the simulator “Training Model for Cranial Burr Holes.”

Among the 120 attendees, 44 completed the post-meeting feedback survey. 100% of the survey respondents rated the meeting overall as good or above and responded that the program content was relevant to topics concerning both surgeons and engineers. 95.5% of the survey respondents indicated they are inspired to attend future Surgeons and Engineers Meetings.

Intuitive Foundation, Inovus Medical, and the United States Air Force Medical Service exhibited at the meeting. The ACS Division of Education and Surgeons and Engineers Committee thank our exhibitors.



The next ACS Surgeons and Engineers Meeting is scheduled for March 18-19, 2025, at ACS Headquarters in Chicago, IL. It will consist of a 1.5-day main meeting and optional workshops on specific topics.

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