### 2026 ACS Surgical Simulation Summit Agenda

Agenda and speakers are subject to change. The views expressed by individual speakers are their own and do not necessarily reflect those of the American College of Surgeons.

All sessions and meals will be held at the Swissôtel Chicago. Times below are Central (CT).

Thursd	 B 4 1	43
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7:00 am – 8:00 am Zurich ABC Registration, Breakfast & Exhibits

Zurich ABC

8:00 am - 8:20 am

**Opening Session** 

Zurich DEFG

Patricia L. Turner, MD, MBA, FACS – (Video Welcome)

**Executive Director & Chief Executive Officer, American College of Surgeons** 

Luis E. Llerena, MD, FACS MD, FACS, MAMSE, CHSE-A 2026 Chair, ACS Annual Surgical Simulation Summit

8:20 am – 8:45 am

Zurich DEFG

State of the ACS-Accredited Education Institutes: 2026 Update

Kyla Terhune, MD, MBA, FACS Senior Vice President of Education

8:45 am – 9:30 am

Zurich DEFG

**Keynote Address** 

"Synergy, Science, Symbiosis and Serendipity: Reflections on the ACS AEI Program's Influence on a

"Rock Doc's" Career in Simulation Science

Robert Sweet, MD, FACS, MAMSE

Professor of Urology, Surgery and Bioengineering(adj) Chief, Division of Healthcare Simulation Sciences

**Executive Director of WISH and CREST** 

**University of Washington** 

9:30 am - 10:00

am

Zurich ABC

**Break and Exhibits** 

10:00 am - 12:00

pm Zurich DEFG Concurrent Sessions: Papers Session I, MORE Track, and Simulation Technologist SIG

Papers 1-6

Implementation of a Novel, Proficiency-Based Simulation Curriculum in Minimally Invasive Surgery for Senior Medical Students

- A Novel Simulated Education Curriculum for Placement of Temporary Vascular Shunts
- Markerless Al-driven System for Objective Assessment of Surgical Suturing Skills
- Transferring Skills Across Hands: A Randomized Trial of Non-Dominant Hand Training in Laparoscopy
- Enhancing Anatomical Understanding of the Lung, Liver, and Heart Using Virtual Reality versus Cadaveric Dissection Among First- to Third-Year Medical Students
- Teaching Medical Error Disclosure: The Development of a Customized GPT-based Simulator with Formative Feedback

10:00 am - 12:00

pm

Need to Find a

Room

MORE Track

Demonstrating Impact and Value of Simulation Based Education (120 Minutes)
Ngan Nguyen, PhD, Director of Education, Evaluation, and Research, Corewell Health
Applebaum Simulation Learning Institute

12:00 pm - 1:00

pm

Zurich ABC

**Lunch and Exhibits** 

#### Papers 7-12

#### **7urich DFFG**

- Diffuse Reflectance Spectroscopy as a Novel Tool for Assessing Laparoscopic Surgical Skills
- Mi Safe Spinal Sam: Preliminary Evaluation and Durability Test of a Novel Infant Spinal Anesthesia Task Trainer
- Advancing Practical Skills and Improving Confidence in High Acuity, Low-Occurrence (HALO) Operative Trauma using High-Fidelity Operative Simulation
- Confidence is Key: Knowledge Donor Cadaveric Simulation Unlocks Tube Thoracostomy Proficiency for Surgery Residents
- Ballin' On A Budget: Improving Pediatric Emergency Care Through Simulation Training For Testicular Torsion
- ➤ A High-Fidelity Thoracic Model for Minimally Invasive Cardiac Surgery Training: Aortic Coarctation as a Use Case

#### MORE Track

A Comprehensive Ostomy Training Package for General Surgery Residents (120 Minutes)
Katharine Jackson, MBBS, Simulation Director, Duke University

## 3:00 pm – 4:00 pm Zurich Foyer

## **Meet the Authors Poster Session**

Dedicated time is provided to have conversations with an author of a poster(s) you are interested in. This is a self-guided session.

# 3:00 pm – 4:00 pm Need to Find a Room

## Simulation Technologist Track Special Interest Group (SIG)

- Moderator Robert M. Rush, MD, FACS, Surgery Chief Medical Officer, PeaceHealth St. Joseph's Medical Center
- Moderator Robert M. Sweet, MD, FACS, Professor of Urology, Surgery, and Bioengineering, University of Washington

## 4:00 pm – 5:00 pm Zurich DEFG

# Artificial Intelligence –What We Need to Know

#### **Introduction to Using AI**

Scott Pappada, PhD

Associate Professor, Director of Research, Department of Anesthesiology, University of Toledo College of Medicine and Life Sciences

Director, Healthcare Technology and Innovation Laboratory, University of Toledo College of Medicine and Life Sciences

Simulation Research Fellow, Lloyd A Jacobs Interprofessional Immersive Simulation Center, University of Toledo College of Medicine and Life Sciences

Associate Professor, Department of Psychiatry and Neurosciences, University of Toledo College of Medicine and Life Sciences

Associate Professor, Department of Bioengineering, University of Toledo College of Engineering Prestige Faculty Appointment, Department of Electrical Engineering and Computer Science, University of Toledo College of Engineering

Adjunct Assistant Professor, Department of Anesthesiology, The Ohio State University Wexner Medical Center

# What Policies Does a Simulation Center (AEI) Need to Have in Place When Using AI Jesika S. Gavilanes EdD, MATESOL, FSSH

OHSU Simulation Operations Director & SETA Program Manager – Office of the Provost Oregon Health Sciences University (OHSU)

#### Where is AI Going in the Future?

Ganesh Sankaranarayanan, PhD, UT Southwestern (Associate Professor)

Department of Surgery & Department of Biomedical Engineering Director, Artificial Intelligence and Medical Simulation (AIMS) Lab Co-Director of the Center for Assessment of Surgical Proficiency The University of Texas Southwestern Medical Center at Dallas

5:00 pm – 6:00 pm Zurich ABC

## **Networking Reception and Exhibits**

#### Friday, March 13

7:00 am – 8:00 am Zurich ABC **Networking Breakfast & Exhibits** 

8:00 – 10:00 am Geneva

#### **Simulation Technologists Track**

#### Surgical Training and the Role of Surgical Simulation Technologists

This session will address the overview and fundamentals of simulation-based surgical education and explore the important role of simulation technologists. Participants will explore the diverse environments in which surgical simulation occurs and will be introduced to essential clinical topics required to excel in the role of a surgical simulation technologist.

Robert M. Sweet, MD, FACS, Professor of Urology, Surgery, and Bioengineering, University of Washington Robert M. Rush, MD, FACS, Surgery Chief Medical Officer, PeaceHealth St. Joseph's Medical Center

Jenny Garnett, MFA, Simulation Instructional Designer, University of Washington Jon Chaika, Simulation Specialist, University of Minnesota Haneen Alnazzawi, MD, Assistant Professor, Jeddah University - Faculty of Medicine

8:00 - 10:00 am

#### MORNING CONCURRENT WORKSHOPS

Zurich DEFG

#### **ACS-AEI Fellows: Future Leaders in Simulation**

This session features presentations from Fellows at ACS-AEI-accredited surgical simulation fellowship programs. This talented group of young researchers will describe their in-progress work and ongoing projects. This session is applicable to all attendees interested in hearing about their important research.

**Jehad AlSamhori, MD,** The Houston Methodist Institute for Technology, Innovation and Education (MITIE)

Blake Beneville, MD, Washington University Institute for Surgical Education (WISE)

 $\textbf{Megan Bartel, MD, LT, MC, USN,} \ \text{National Capital Region Simulation Consortium}$ 

Tiffany Bellomo, MD, MGH Learning Laboratory

Melissa Burns, MD, LT, MC, USN, National Capital Region Simulation Consortium

Kara Faktor, MD, MSc, UCSF Surgical Skills Center Claire Ferguson, MD, MGH Learning Laboratory

Keenan Gibson, MD, UC Davis Center for Simulation and Education Enhancement

Sarah Grebennikov, DO, Ohio Health Learning

Abigail Hatcher, MD, Washington University Institute for Surgical Education (WISE)

Jacqueline Hausner, DO, Naval Medical Center San Diego Bioskills and Simulation Training Center

Mika Lindsley, MD, Lahey Center for Professional Development and Simulation

Chase Marso, MD, MGH Learning Laboratory

Justin McKone, MD, MPH, Mayo Clinic Multidisciplinary Centers

Fabio Morales Salas, MD, Mayo Clinic Multidisciplinary Centers

Dena Shehata, MD, Lahey Center for Professional Development and Simulation

Jonah Thomas, MD, MGH Learning Laboratory

**Tony Torres, PhD, RN, ANP, CNS, CEN,** Naval Medical Center San Diego Bioskills and Simulation Training Center

Pooja Varman, MD, Cleveland Cllinic

Need to Assign Rooms

Bridging Theory and Practice: Teaching and Assessing Non-Technical Skills (90 Minutes)

Non-technical skills (NTS), such as communication, situational awareness, and teamwork, are essential to safe and effective surgical care. Still, their integration into healthcare simulation-based training remains inconsistent across institutions. This interactive workshop will equip participants with practical strategies and tools to effectively teach and assess NTS within surgical simulationbased education.

Need to Assign Rooms

Building Bridges: Developing Institutional Partners to Support QI Simulation (90 Minutes)

Two facilitators, one managing a hospital simulation program and the other an experienced simulationist seeking institutional support—will guide a discussion on building effective partnerships between simulation professionals and leadership for sustainable programs. They will share insights on establishing institutional backing and overcoming challenges in gaining traction.

Need to Assign Rooms

The following workshops will be offered twice.

Need to Assign Rooms

Mastering the Art of Surgery: Teaching the Skills Residents Need to Navigate Crucial **Conversations with Colleagues (60 Minutes)** 

Crucial Conversations—where stakes are high, emotions run strong, and opinions differ—are an unavoidable part of surgical training. Unfortunately, residents often lack the tools to navigate these moments in a way that preserves both relationships and outcomes. This interactive workshop introduces an adapted SPIKES framework to help residents manage difficult interpersonal dynamics with professionalism and clarity. Participants will receive an overview of SPIKES, a protocol originally developed for delivering bad news in clinical settings, now adapted to help residents approach highstakes conversations with colleagues.

Need to Assign Rooms

Small Group Teaching of Medical Students Using Felt Simulators – (60 Minutes)

A unique type of education may be utilized by clerkships to teach medical students surgical topics to improve their outcomes. The attendees of this workshop will learn a new technique using inexpensive tools to teach medical students surgical anatomy. Medical students can learn about surgical topics and anatomy in a small group setting using felt simulators to improve their scores on shelf exams, oral exams and as participants in the clerkship.

10:00 am - 10:30

**Break and Exhibits** 

am Zurich ABC

Geneva

10:00 am – 12:30

pm

Surgical Simulation Technologies and Modalities (Simulation Technologists Track)

This session will explore the diverse technologies and modalities commonly used in surgical simulation. Participants will learn how to optimize simulation-based education by appropriately aligning modalities and technologies with curricular needs. Different types of simulators and their core features will be addressed.

Jenny Garnett, MFA, Simulation Instructional Designer, University of Washington Jon Chaika, Simulation Specialist, University of Minnesota

10:30 am - 11:30

**Role-based Special Interest Groups (SIGs)** 

am Need to Assign Rooms

- **Simulation Center Directors**
- **Simulation Center Surgical Directors**
- **Simulation Center Educators**
- **Perioperative Teams**

11:30 am – 12:30 pm

Need to Assign Rooms **Topic-based Special Interest Groups (SIGS)** 

- Design Thinking to Simulation Excellence
- Use of Cadaveric, Animal, and Synthetic Tissue in Skill Development
- Faculty Development Overcoming Challenges and Seizing Opportunities
- Artificial Intelligence
- Robotics Training

12:30 pm – 1:30

pm Zurich ABC Lunch and Exhibits (Exhibits Break Down After Lunch)

1:30 pm – 4:15 pm Use It Up, Wear It Out, Make It Do, or Do Without (Simulation Technologists Track)

This session will guide participants on effective management of a simulation center's inventory and equipment assets. Identifying resources within your institution, inventory and storage management, warranties and equipment maintenance, and troubleshooting simulators and equipment will be discussed.

Jenny Garnett, MFA, Simulation Instructional Designer, University of Washington Jon Chaika, Simulation Specialist, University of Minnesota

1:30 pm – 4:15 pm AFTERNOON CONCURRENT WORKSHOPS -

Need to Assign Rooms

The following workshops will be offered twice.

Use of AI in Education and How to Leverage It (90 Minutes)

The workshop will provide an overview of the use of AI in education and how to leverage it. The faculty experts will share their experiences on how they have successfully used AI at their institutions. Breakout groups will offer attendees the opportunity to work together to address the three questions proposed by the faculty.

Using Available AI Solutions to Create Simulations that Reduce Postoperative Mortality and Readmissions (90 Minutes)

This interactive workshop will explore known perioperative risk factors, review evidence-based intervention strategies, and demonstrate how simulation-based training can be used to operationalize risk mitigation. Participants will engage with simulations that incorporate real-world risk stratification tools embedded in electronic medical records (EMRs) and evaluate scenario-based simulations that model the potential effectiveness of various interventions. The session will emphasize practical applications for clinical teams to recognize risk early and implement targeted strategies to improve outcomes.

Representing More Than What Meets the Eye: Extending the Boundaries of Fidelity for More Effective Learning (90 Minutes)

Simulation is defined by imperfection. We can never fully capture all elements of reality with complete fidelity. Simulation educators, engineers, and technicians must decide what aspects of reality to represent to maximize learning, but there are few effective frameworks that guide these efforts. Drawing from research in psychology, education, and simulation, this panel will present principles for simulation design and fidelity centered on supporting expertise development, as well as engage the audience with their own questions and concerns about simulation fidelity and how to best leverage simulation to represent tasks in ways that maximize effective learning.

Luis Llerena, MD, MD, FACS, MAMSE, CHSE-A 2026 Chair, ACS Annual Surgical Simulation Summit

Cristina Alvarado, MBA, BSN, RN, CHSE 2027 Chair, ACS Annual Surgical Simulation Summit