2020 ACS Surgical Simulation Summit
Research Presentations
Featuring select presentations weekly this fall!

facs.org/aeisummit
The Annual ACS Surgical Simulation Summit brings together members of the surgical simulation community including surgeons, academic engineers, medical students, residents, simulation center directors, educators, administrators, technicians, and researchers to learn about the latest advances and cutting-edge initiatives in simulation-based surgical education and training, to present innovative research, and to share best practices.

**Opening Remarks**

**Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME**  
Director, American College of Surgeons, Division of Education, and Chair, ACS Program for Accreditation of Education Institutes

**Gordon A. Wisbach, MD, CAPT, MC, USN**  
Surgical Director, Bioskills & Simulation Training Center Naval Medical Center San Diego, and Chair, Program Committee of the AEI Consortium

**James R. Korndorffer, Jr., MD, MHPE, FACS**  
Vice-Chair of Education, Department of Surgery, Stanford University School of Medicine and Recorder, Annual ACS Surgical Simulation Summit

**Kathleen A. Johnson, EdM**  
Assistant Director, Program for Accreditation of Education Institutes, American College of Surgeons, Division of Education

**Innovations in Simulation-Based Education**

Learn about four innovative projects under development in simulation centers around the country. This session offers innovators a forum to present preliminary research and developments on simulators, curricula, and technology even though there may not yet be outcomes data to support its widespread adoption.

**Moderator:** Deborah M. Rooney, PhD  
Director, Education and Research in Simulation, University of Michigan Medical School

**Edward Jasper, MD**  
Thomas Jefferson University  
Development of a Modified HERT Trained Interprofessional Student Decontamination Team for Hospital Mass Casualty Response

**Gustavo Mastroianni, MD**  
Hospital Italiano de Buenos Aires  
Hepaticojejunostomy: A novel training model

**Rafael de Azevedo, MD**  
Mayo Clinic  
Validation of a Vascular Anastomosis Station: Using an Inexpensive Tool for Teaching and Assessing Surgical Residents

**Jenny Bui, BS**  
University of North Carolina at Chapel Hill School of Medicine  
Development and Educational Testing of a Beating Tissue-Based Congenital Cardiac

Participants can earn up to 5.25 CME and Patient Safety Credits by attending all three days of the meeting.

*Please note, on-demand posters are not eligible for CME credit.*
**Scientific Papers**

*Nine cutting-edge scientific podium presentations* will be featured during this oral abstract session. All work being presented is from original research, not previously published or presented.

**Moderator:** Robert B. Lim, MD, FACS, FASMBS  
Vice-Chair of Education, Surgery, Oklahoma  
University School of Medicine Tulsa

Zachary Budesa, MA  
University of Tennessee, Knoxville Graduate School of Medicine  
Evaluating First Year Residents’ Communication Skills: A Health Literacy Curriculum Needs Assessment

Dimitrios Athanasiadis, MD  
Indiana University School of Medicine  
Multidisciplinary Trauma Team Training with an Emphasis on Crisis Resource Management Improves Residents’ Non-Technical Skills

James N. Lau, MD, MHPE, FACS  
Stanford University School of Medicine  
In-situ Interprofessional Operating Room Simulations Improve Learner Confidence in Crisis-Resource Management Principles

Nicholas E. Anton, MS  
Indiana University Purdue University  
Stress and Resident Interdisciplinary Team Performance: Results of a Pilot Trauma Simulation Program

Bryce Lowry, MD  
University of Manitoba  
Mobile Virtual Collaborating—Realizing the Future of Surgical Education

Danielle Julian, MS  
AdventHealth Nicholson Center  
Optimizing Simulation-Based Skills Acquisition for Novice Robotic Surgeons

James Cooke, MD  
University of Michigan  
Overarching Themes from ACS-AEI Accreditation Survey Best Practices 2011–2019

Christopher Dyke, MD  
Walter Reed National Military Medical Center  
Early Implementation of FES Training Using a Simulation-Based Mastery Learning Curriculum

Miles Benjamin, MBChB  
St George’s Hospital, London  
Using Haptic Feedback in Virtual Reality Bone Drilling Simulation to Reduce Plunge Distance

**AEI Fellows: Future Leaders in Simulation-Based Surgical Education**

This session features presentations from Fellows at ACS-accredited surgical simulation fellowship programs. Our talented group of budding researchers will describe their in-progress work and ongoing projects.

**Moderator:** Robert M. Sweet, MD, FACS  
Professor of Urology, Surgery, and Bioengineering; Chief, Division of Healthcare Simulation Science; Executive Director of WISH and CREST; Medical Director, Kidney Stone Center, University of Washington

**FELLOWS**

Douglas Cassidy, MD  
Massachusetts General Hospital

Sujata Datta, MD  
University of Tennessee Graduate School of Medicine

Karen J. Dickinson, MBBS, BSc, MD, FRCS  
Houston Methodist Institute of Technology

Alexis Graham-Stephens, MD  
Lahey Hospital and Medical Center

Elizabeth Huffman, MD  
Indiana University Department of Surgery

Alison Johnson, MD  
University of Vermont Medical Center

Sarah Kelso, MD  
University of Vermont Medical Center

Eduardo Martin Palavecino, MD, FACS  
University of Washington

Ingrid Schmiederer, MD  
Stanford University

Naomi M. Sell, MD, MHS  
Massachusetts General Hospital

Eugene Tuyishime, MD, MSc  
OhioHealth Learning

Jonathan Wingate, MD  
University of Washington

**Closing Remarks**

Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME
**GROUP A—CT, Anesthesia, Transplant, GYN and Other Innovations**

**Weifeng Zeng, MD**  
*University of Wisconsin, Madison*  
The Infused Pig Chest Wall “Sandwich”—A Novel Training Model for Internal Mammary Artery Preparation in Breast Reconstruction

**Konstantinos Georgiou, MD**  
*Intervention and Technology (CLINTEC), Karolinska Institutet*  
Novel needle holder provokes less stress during laparoscopic simulation procedures

**Blagoi Marinov, MD, PhD**  
*Medical Simulation Training Center, Medical University of Plovdiv*  
Salivary Chromogranin A: A Valid Stress Biomarker in Surgery Trainees

**Meredith Poole, BSc, MSc**  
*Queen’s University*  

**Erica Robinson, MD**  
*Wake Forest School of Medicine*  
Rapid Implementation of FLS Curriculum for OBGYN Residents and the Effect on FLS Scores

**GROUP B—General Surgery and Laparoscopy**

**Wei Quan How, MD**  
*Easton Hospital*  
Development of totally robotic biliopancreatic diversion with duodenal switch simulation model

**Robert Naples, DO**  
*Cleveland Clinic*  
Do Surgical Boot Camps or Previous Training for General Surgery Interns Predict Improved Fundamentals of Laparoscopic Surgery (FLS) Skills?

**Parvathi Balachandran, MBBS, PhD**  
*Mayo Clinic Multidisciplinary Simulation Centers*  
From FLS Peg Transfer to Graham Patch Repair: Can Low Cost Simulation Models Assess Advanced Laparoscopic Skills? A 7-year experience

**GROUP C—Team-based and Non-technical Simulation**

**John T. Paige, MD, FACS**  
*LSU Health New Orleans School of Medicine*  
Tomâto versus Tomâto: Comprehensive literature review to determine the key components of assessment tools measuring nontechnical skills in the operating room

**Lauren Welsch, PhD**  
*Naval Medical Center Portsmouth*  
Simulation Team Training to Improve Standardized Patient Satisfaction in Emergent Situations

**Carmen Spalding, PhD, RN**  
*Naval Medical Center San Diego*  
Development of a Novel Curriculum to Teach Military Nurses REBOA

**Katherine Jackson, MD**  
*University of Rochester Medical Center*  
Operating Room Safety and Simulation: Assessing Attitudes and Efficacy of a Multidisciplinary Team Training Program

**Robert Shi, MS, BA**  
*Stanford University School of Medicine*  
Supporting Performance in TeamSTEPPS-Based Teamwork Skills in the Operating Room through Interprofessional In-Situ Simulation

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**ADDITIONAL RESOURCES**

**Posters can be viewed on-demand at**  
*facs.org/aeisummit*