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, FASMBDS

*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:** Roy Phitayakorn, MD, MHPE (MEd) FACS

*Director of Medical Student Education and Surgery Education Research, The Massachusetts General Hospital; Associate Professor of Surgery, Harvard Medical School*

**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-Stephenson, 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

Steven Kurapaty, BS
George Washington University School of Medicine and Health Sciences
Creation and Initial Assessment of a Low Cost, Easily Manufactured, Synthetic Fascia for Training

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
Tomāto versus TomĀto: 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

Cortney Webb, BAS, CST, CRCST, CIS
Parkview Health System
Development of a Perioperative Orientation Program for the Advanced Practice Provider

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

Nizamuddin Shaikh, MBBS
Mayo Clinic Multidisciplinary Simulation Centers
Development of an Open Knot Tying Curriculum for Surgical Interns: We Assumed They Already Knew!

Jessica Limberg, MD
NYP-Weill Cornell Medical Center
Can General Surgery Interns Accurately Measure Their Own Technical Skills? Analysis of Cognitive Bias in Surgical Residents’ Self-Assessments