

Agenda

2022 ACS Surgical Simulation Summit

March 3-4, 2022 / **VIRTUAL**



AMERICAN COLLEGE OF SURGEONS • DIVISION OF EDUCATION
ACCREDITED EDUCATION INSTITUTES
ENHANCING PATIENT SAFETY THROUGH SIMULATION

AMERICAN COLLEGE OF SURGEONS
DIVISION OF EDUCATION
Blended Surgical Education and Training for Life®

2022 ACS Surgical Simulation Summit

TABLE OF CONTENTS

WELCOME

PAGE 3

**CME
INFORMATION**

PAGE 5

AGENDA

PAGE 6

**ON-DEMAND
SCIENTIFIC
POSTERS**

PAGE 11

**INVITED
SPEAKER
BIOGRAPHIES**

PAGE 13

**SAVE THE
DATES**

PAGE 16

**PAST KEYNOTE
SPEAKERS**

PAGE 17

**ACCREDITED
EDUCATION
INSTITUTES**

PAGE 18

**AEI-
ACCREDITED
FELLOWSHIP
PROGRAMS**

PAGE 20

**AEI
COMMITTEES**

PAGE 20

2022 ACS Surgical Simulation Summit

WELCOME



Dr. Ajit K. Sachdeva

On behalf of the American College of Surgeons (ACS) Division of Education, I would like to welcome you to the 2022 Annual ACS Surgical Simulation Summit (The 15th Annual Meeting of the Consortium of ACS-accredited Education Institutes). While we regret not being able to meet in-person in Chicago this year, we value the opportunity to virtually bring together members of the surgical simulation community to discuss the latest advances in simulation-based surgical education and training, share best practices, and define new strategic directions.

On Wednesday, prior to the start of the Summit, we are pleased to again offer the Special Annual Meeting, "Surgeons and Engineers: A Dialogue on Surgical Simulation" that provides a forum for the exchange of ideas to address advances in simulation-based surgical education and focus on the use of state-of-the-art simulations and simulators.

This year's Summit kicks off on Thursday with Opening Remarks by the ACS Leadership and the Annual Update on the ACS-AEI Consortium. These will be followed by the Scientific Program. Under the superb leadership of Deborah Rooney, PhD and Alexander Perez, MD, FACS, the Program Committee has selected 12 cutting-edge scientific papers and 21 posters. Back by popular demand is the "Innovations in Simulation-Based Education" session, which will include five abstracts submitted as works-in-progress presented in a "Shark-Tank" format to encourage interaction and collaboration. As in years past, Fellows from AEI-accredited Simulation Education Fellowships will present their ongoing research and look forward to your feedback.

We are excited to bring back the special track designed for simulation center personnel who are an integral part of our community and have unique educational needs. The Management, Operations, Research and Education (MORE) Track will explore two topics - different types of surgical curricula and data management solutions - in an interactive format. All attendees will benefit from this track and are encouraged to attend.

Building on the success of last year, we are pleased to partner again with the American Society of Anesthesiologists (ASA) to bring you a collaborative ACS/ASA session on Friday afternoon. Kevin Weiss, MD, MPH, Senior Vice President of Institutional Accreditation at the Accreditation Council for Graduate Medical Education (ACGME), will deliver the Keynote Address on, "Enhancing Clinical Learning Environments and Interprofessional Practice to Improve Operative and Procedural Patient Care." This will be followed by interactive breakout groups and the recommendations from these groups will be presented to all Summit attendees. These will focus on strengthening the collaboration between surgeons and anesthesiologists in operating room settings, to provide safe and high-quality care to patients. Recommendations will specifically focus on the use of simulation in training surgeons, anesthesiologists, and surgical teams, and will define opportunities for ACS and ASA to work together to enhance patient safety.

On behalf of the ACS-AEI Program Committee and the Division of Education staff, we would like to thank you for attending this virtual Summit and look forward to your active participation.

A handwritten signature in black ink that reads "Ajit Sachdeva".

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

CME INFORMATION

CONTINUING MEDICAL EDUCATION CREDIT INFORMATION

Accreditation

The American College of Surgeons is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

AMA PRA Category 1 Credits™

The American College of Surgeons designates this live activity for a maximum of 10.50 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Of the AMA PRA Category 1 Credits™ listed above, a maximum of 10.50 hours meet the requirements for Regulatory Mandates.*

*The content of this activity may meet certain mandates of regulatory bodies. Please note that ACS has not and does not verify the content for such mandates with any regulatory body. Individual physicians are responsible for verifying the content satisfies such requirements.



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PROGRAM OBJECTIVES

At the end of this educational activity, participants will be able to:

- Apply new knowledge and ideas to improve the simulation-based surgical education and training provided to learners at their institutions
- Implement innovative teaching techniques at their institutions
- Discuss and apply the most recent research advancements in the field of simulation education
- Enhance the quality of patient care

DISCLOSURE INFORMATION

In accordance with the ACCME Accreditation Criteria, the American College of Surgeons must ensure that anyone in a position to control the content of the educational activity (planners and speakers/authors/discussants/moderators) has disclosed all financial relationships with any ineligible company held in the last 24 months. Please note that first authors were required to collect and submit disclosure information on behalf all other authors/contributors, if applicable.

Ineligible Company: The ACCME defines an “ineligible company” as any entity producing, marketing, re-selling, or distributing healthcare goods or services used on or consumed by patients. Providers of clinical services directly to patients are NOT included in this definition.

Financial Relationships: Relationships in which the individual benefits by receiving a salary, royalty, intellectual property rights, consulting fee, honoraria, ownership interest (for example, stocks, stock options, or other ownership interest, excluding diversified mutual funds), or other financial benefit. Financial benefits are usually associated with roles such as employment, management position, independent contractor (including contracted research), consulting, speaking and teaching, membership on advisory committees or review panels, board membership, and other activities from which remuneration is received, or expected. ACCME considers relationships of the person involved in the CME activity to include financial relationships of a spouse or partner.

Conflict of Interest: Circumstances create a conflict of interest when an individual has an opportunity to affect CME content about products or services of an ineligible company with which he/she has a financial relationship.

The ACCME also requires that ACS manage any reported conflict and eliminate the potential for bias during the educational activity. Any noted conflicts have been managed to our satisfaction. The disclosure information is intended to identify any commercial relationships and allow learners to form their own judgments. However, if you perceive a bias during the educational activity, please report it on the evaluation.

[View the List of Faculty Disclosures.](#)



Claim Your CME Credit or Completion Certificates!

Instructions on how to view on-demand recorded content, claim credit, and access CME or completion certificates will be sent to participants via email on March 14, two weeks after the meeting concludes.

THURSDAY, MARCH 3, 2022 (ALL TIMES CENTRAL CT)

9:00-9:25 am	0 CME	Opening Session
9:25-9:45 am	0 CME	State of the ACS-Accredited Education Institutes: 2022 Update
9:45-10:30 am	0.75 CME / 0.75 Patient Safety	Innovations in Simulation-Based Education "Shark Tank"
10:30-10:40 am	0 CME	Break
10:40 am-12:10 pm	1.5 CME / 1.5 Patient Safety	Original Works Papers Session
12:10-1:00 pm	0 CME	Lunch Break
1:00-2:15 pm	1.25 CME / 1.5 Patient Safety	Collaborative Works Papers Session
2:15-2:30 pm	0 CME	Break
2:30-4:15 pm	1.5 CME / 1.5 Patient Safety	ACS-AEI Fellows: Future Leaders in Simulation-Based Surgical Education
4:15-4:30 pm	0 CME	Awards for the Best in Show and Closing Remarks
THURSDAY TOTAL	5.0 CME/5.0 Patient Safety	

FRIDAY, MARCH 4, 2022 (ALL TIMES CENTRAL CT)

9:00-9:05 am	0 CME	Welcome
9:05-10:35 am	1.5 CME / 1.5 Patient Safety	Data Management and Solutions [MORE]
10:35-10:50 am	0 CME	Break
10:50 am-12:20 pm	1.5 CME / 1.5 Patient Safety	Different Types of Surgical Curricula [MORE]
12:20-1:00 pm	0 CME	Lunch Break
1:00-4:10 pm	2.5 CME / 2.5 Patient Safety	American College of Surgeons/American Society of Anesthesiologists Collaborative Session
4:10-4:15 pm	0 CME	Closing Remarks
FRIDAY TOTAL	5.5 CME / 5.5 Patient Safety	

Sessions with [\[MORE\]](#) indicate they are part of the MORE (Management, Operations, Research, and Education) Track designed for simulation center personnel.

CME Claiming Information

The 2022 Annual ACS Surgical Simulation Summit will offer attendees continuing education credits for their participation in this activity. Physicians are eligible to claim CME Credits. Residents and Allied Health Professionals are not eligible to claim CME Credits and may instead request a Certificate of Completion. Certificates can be earned by participating in real-time on March 3-4 and/or by watching the recordings of the sessions afterwards. Recordings will be available to watch on-demand March 14-May 16, 2022.

ALL ATTENDEES MUST COMPLETE THE COURSE EVALUATION before you are able to claim a CME Certificate or a Certificate of Completion. Claims for CME/Certificates of Completion are due no later than 11:59 pm CT on May 16, 2022. The course evaluation will close at that time.



AGENDA

THURSDAY, MARCH 3, 2022 (ALL TIMES CENTRAL CT)

Time	Session
9:00–9:25 am 25 minutes	<p>Opening Session</p> <p>Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME, MAMSE, Director, ACS Division of Education, and Chair, ACS Program for Accreditation of Education Institutes</p> <p>Julie Ann Freischlag, MD, FACS, FRCS, Ed(Hon), DFSVS, Chief Executive Officer, Atrium Health Wake Forest Baptist; Dean, Wake Forest School of Medicine; Chief Academic Officer, Atrium Health Enterprise; and President, American College of Surgeons</p> <p>Patricia L. Turner, MD, MBA, FACS, Executive Director, American College of Surgeons</p> <p>Deborah Rooney, PhD, Director, 3D & Innovations Lab; Director, Education and Research Clinical Simulation Center, University of Michigan Medical School, and Chair, Program Committee of the ACS-AEI Consortium</p> <p>Gyusung Isaiah Lee, PhD, Assistant Director, Simulation-Based Surgical Education and Training, ACS Division of Education</p>
9:25–9:45 AM 20 minutes	<p>State of the ACS-AEI Program: 2022 Update</p> <p>Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME, MAMSE</p>
9:45–10:30 am 45 minutes	<p>Innovations in Simulation-Based Education “Shark Tank”</p> <p>Learn about five preselected innovative projects under development in simulation centers around the world. The 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. Modeled after the popular show <i>Shark Tank</i>, simulation sharks (i.e., experts) will be on hand to provide feedback, offer recommendations, and potentially take a “bite” at one or more of the projects for future collaboration.</p> <p>Moderator: Robert M. Rush, Jr., COL (Ret.), MD, FACS, Trauma Medical Director, PeaceHealth St. Joseph Medical Center</p> <p>Sharks:</p> <p>Daniel Hashimoto, MD, MS, Flexible Endoscopy and Foregut Surgery Fellow, University Hospitals Cleveland Medical Center, and Instructor of Surgery, Case Western Reserve University School of Medicine</p> <p>Carla Pugh, MD, PhD, FACS, Thomas Krummel Professor of Surgery at Stanford University School of Medicine</p> <p>Dimitrios Stefanidis, MD, PhD, FACS, FASMBS, FSSH, Professor of Surgery and Vice Chair of Education; Chief, MIS/Bariatric Surgery; and Surgical Director, IU Skills Laboratory, Department of Surgery, Indiana University School of Medicine</p> <p>Presenters:</p> <p>Vascular Emergency Surgery: Simulated Exercises for Limb Salvage (VESSELS)—Development of a Simulation Model for the Military General Surgeon Cassandra Hickey, DO, Navy Medicine Readiness & Training Command, Portsmouth, VA</p> <p>A Surgineering Approach to Coarctation Repair Banu Kose, PhD, Istanbul Medipol University, Istanbul, Turkey</p> <p>Novel Lower Extremity Fasciotomy Model Using In-Hospital Fabrication Mia Benavidez, BSA, University of Texas Medical Branch at Galveston, Galveston, TX</p> <p>Addressing a Training Gap: Development of a Novel Priapism Task Trainer Alexa Cotter, Department of Biomedical Engineering, University of Michigan College of Engineering, Ann Arbor, MI</p> <p>Development of a High-Fidelity Surgical Simulation Utilizing the Unreal Gaming Engine Evan Geller, MD, FACS, Touro University Nevada, Las Vegas, NV</p>
10:30–10:40 am 10 minutes	Break





<p>10:40 am–12:10 pm 90 minutes</p>	<p>Original Works Papers Session Seven cutting-edge scientific presentations will be featured during this oral abstract session. All work being presented is from original research, not previously published or presented. Judges will select the best podium presentation, and the winner will be given the Best in Show Award at the end of the day on Thursday.</p>
	<p>Moderator: Robert B. Lim, MD, FACS, FASMBS, Professor of Surgery, Oklahoma University School of Medicine at Tulsa, and Vice Chair of Education for Surgery</p>
	<p>Novel Synchronous Augmented Reality Surgical Mentoring System in the Performance of Trauma Procedures: Initial Results of the ARTEMIS Study [ACS-AEI Fellow] Matthew Tadlock, MD, FACS, Naval Medical Center San Diego, San Diego, CA Discussant: John Christopher Graybill, MD, FACS, San Antonio Military Medical Center, Fort Sam Houston, TX</p>
	<p>The Effect of an Attending versus Neutral Observer on Peg Transfer and Intracorporeal Knot Tying Laparoscopic Tasks [ACS-AEI Fellow] Kathryn Howard, MD, William Beaumont Hospital, Royal Oak, MI Discussant: Aimee K. Gardner, PhD, Baylor College of Medicine, Dallas, TX</p>
	<p>Robotic Training for Medical Students: Feasibility of a Pilot Simulation Curriculum Anya Greenberg, MBA, University of California-San Francisco, San Francisco, CA Discussant: Emily Huang, MD, MEd, The Ohio State University Wexner Medical Center, Columbus, OH</p>
	<p>Socially Distanced Resident Training in the COVID Era: The Development and Implementation of a Novel At-Home, Internet-Based Laparoscopic Training Platform Dong-Kha Tran, MD, University of Chicago Medicine, Chicago, IL Discussant: James N. Lau, MD, MHPE, FACS, Loyola University Chicago Stritch School of Medicine, Maywood, IL</p>
	<p>Using Table-Top Simulation to Promote Systems Thinking in Surgical Residents Julie Hartman, DC, MS, Center for Procedural Skills and Simulation, University of Iowa Health Care, Iowa City, IA Discussant: Gladys L. Fernandez, MD, UMass Chan Medical School - Baystate, Springfield, MA</p>
	<p>Which Tasks Are Hard and Who's Faster? Evaluating an Advanced Open Surgical Skills Curriculum [ACS-AEI Fellow] Mohammad Karimzada, MD, University of California-San Francisco, San Francisco, CA Discussant: Katherine McKendry, MD, McGill University, Montreal, QC</p>
	<p>Surgical Skills and Distance Learning: Comparing Feedback Videos with Correct Versus Error-Containing Examples [ACS-AEI Fellow] Sarah Lund, MD, Mayo Clinic, Rochester, MN Discussant: Jose Velasco, MD, FACS, FCCM, Rush University Medical Center, Chicago, IL</p>
<p>12:10–1:00 pm 50 minutes</p>	<p>Lunch Break</p>
<p>1:00–2:15 pm 75 minutes</p>	<p>Collaborative Works Papers Session All abstracts selected for this session represent collaborative research studies or solutions implemented to address a particular challenge or need. Work presented in this session may be completed, in the development phase, or in early stages of implementation; however, must be multi-institutional or interdisciplinary in nature. A special presentation by Dr. Mark Aeder, Co-Chair of the ACS-AEI Dissemination Committee, will follow. Judges will select the best podium presentation and the winner will be given the Best in Show Award at the end of the day on Thursday.</p>
	<p>Moderator: Mark Aeder, MD, MS, FACS, FAST, Associate Professor of Surgery, Transplant and Hepatobiliary Surgery; Director, Surgical Quality UHCCMC; and Director of Transplant Quality UHTI, University Hospitals Cleveland Medical Center</p>
	<p>From Chaos to Creativity: Designing Collaborative Communication Training for the Delivery of Bad News Emily Burke Rivet, MD, FACS, Virginia Commonwealth University, Richmond, VA Discussant: Cate Nicholas, EdD, MS, PA, FSSH, University of Vermont, Burlington, VT</p>
	<p>Validation of Performance Measures of Laparoscopic Salpingostomy Using Novel Low-Cost Ectopic Pregnancy Simulator C. Yoonhee Ryder, BS, University of Michigan, Ann Arbor, MI Discussant: Nicole Kissane Lee, MD, EdM, FACS, Indiana University, Department of Surgery, Indianapolis, IN</p>



	<p>AMPATH Surgical App: Open Appendectomy Joshua Matthews, BA, Indiana University School of Medicine, Indianapolis, IN Discussant: Mayur Narayan, MD, MPH, MBA, MHPE, FACS, FCCM, FICS, DABS, New York-Presbyterian Hospital/Weill Cornell Medical Center, New York, NY</p> <p>Training Together in Trauma: A Model for Cross-Departmental Collaboration [ACS-AEI Fellow] Julie Clanahan, MD, Washington University in St. Louis, St. Louis, MO Discussant: Luis. E. Llerena, MD, FACS, CAMLS/USF Health, Tampa, FL</p> <p>Impact of the COVID-19 Pandemic on American College of Surgeons-Accredited Education Institutes: Opportunities for Interdisciplinary Collaboration Gordon G. Wisbach, MD, MBA, FACS, Navy Medicine Readiness & Training Command, San Diego, CA Discussant: Sharon Muret-Wagstaff, PhD, MPA, Emory University School of Medicine, Atlanta, GA</p> <p>Special Presentation: Overcoming the Challenges of Organizing and Disseminating Educational Content Mark Aeder, MD, MS, FACS, FAST</p>
2:15–2:30 pm 15 minutes	Break
2:30–4:15 pm 105 minutes	<p>ACS-AEI Fellows: Future Leaders in Simulation-Based Surgical Education This session features presentations from Fellows at ACS-AEI-accredited surgical simulation fellowship programs. This talented group of young researchers will have an opportunity to describe their in-progress work and ongoing projects. Feedback from the audience is welcomed and encouraged.</p> <p>Moderator: Robert M. Sweet, MD, FACS, Professor & Chief, Division of Healthcare Simulation Science; Professor of Urology and Professor of Surgery; Adjunct Professor, Bioengineering; Executive Director, WWAMI Institute for Simulation in Healthcare (WISH); Executive Director, Center for Research in Simulation Technologies (CREST); Medical Director, UW Medicine Kidney Stone Center, Washington University</p> <p>Stas Amato, MD, MSc, General Surgery Resident and Clinical Simulation Fellow, University of Vermont Medical Center, Burlington, VT</p> <p>CPT Megan Davic, MD, Walter Reed National Military Medical Center, Bethesda, MD</p> <p>Haydee del Calvo, MD, The Houston Methodist Institute for Technology, Innovation and Education (MITIE), Houston, TX</p> <p>Dom Doster, MD, IU Surgical Education Research Fellow, Indiana University Department of Surgery, Indianapolis, IN</p> <p>Gary Duncan, MD, OhioHealth Simulation Fellow, Riverside Family Medicine, Columbus, OH</p> <p>Amy Han, MD, Surgical Education Research Fellow, Cleveland Clinic Foundation, Cleveland, OH</p> <p>Britta Han, MD, MEd, General Surgery Resident, Washington University, St. Louis, MO</p> <p>Nicholas Jonas, MD, Surgical Simulation and Education Fellow, Lahey Hospital and Medical Center, Burlington, MA</p> <p>Andrew Rabley, MD, ACS-AEI Pellegrini/Oelschlager Endowed Fellow, University of Washington, Seattle, WA</p> <p>Amelia (Rogers) Collings, MD, IU Surgical Education Research Fellow, Indiana University Department of Surgery</p> <p>Robert (Trey) Sinyard, MD, MBA, Surgical Resident, Massachusetts General Hospital, Boston, MA</p> <p>Roi Anteby, MD MPH, General Surgery Clinical Resident, Massachusetts General Hospital, Boston, MA and The Chaim Sheba Medical Center, Tel-Hashomer, Israel</p> <p>LCDR Steven Grosser, Health Certification Officer, Royal Australian Navy Medical School and Fellow, Naval Medical Center San Diego, San Diego, CA</p>
4:15–4:30 pm 15 minutes	<p>Awards for the Best in Show and Closing Remarks Deborah Rooney, PhD Alexander Perez, MD, FACS, Le Roy Hillyer, M.D. Endowed Chair in Surgery; Professor of Surgery; Vice Chair of Quality and Medical Director of Value; Chief, Division of Advanced Gastrointestinal and Minimally Invasive Surgery; Adjunct Professor, University of Texas MD; Anderson Cancer Center; Surgical Director, Sealy and Smith Laboratory for Surgical Training, Assessment, and Research; Program Director, Surgical Simulation and Education Research Fellowship; University of Texas Medical Branch; and Vice-Chair, Program Committee of the ACS-AEI Consortium</p>

AGENDA

FRIDAY, MARCH 4, 2022 (ALL TIMES CENTRAL CT)

Time	Session
9:00–9:05 am 5 minutes	<p>Welcome Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME, MAMSE</p>
9:05–10:35 am 90 minutes	<p>Data Management and Solutions [MORE] This session will identify and define the types of data that need to be collected by simulation centers in relationship to day-to-day operations as well as accreditation requirements. Panelists will discuss various data collection and storage methods, from “homegrown” solutions to commercial simulation center software programs, and will conclude with presentations on effective ways to visualize the data you collect. This will be an interactive session and audience participation will be encouraged.</p> <p>Moderator: Melinda Klar, RN, Administrative Director, UT Center for Advanced Medical Simulation</p> <p>Presenters: Zach Budesza, PhD, UT Center for Advanced Medical Simulation Megan Sherman, MAEdHD, WWAMI Institute for Simulation in Healthcare (WISH), University of Washington Melissa Cappaert, MA, Simulation Center, The University of Chicago Medicine and Biological Sciences Division Allison Anderson, MS, RRT, CHSE, Simulation Center, The University of Chicago Medicine and Biological Sciences Division</p>
10:35–10:50 am 15 minutes	Break
10:50 am–12:20 pm 90 minutes	<p>Different Types of Surgical Curricula [MORE] Hear about five different curricula developed at AElS and the different approaches that were taken during the design process to assess need, overcome challenges, identify available resources, and determine which evaluation tools would be most appropriate to measure the effectiveness of the curricula. This session will be an opportunity to learn from your colleagues, so come prepared with your curriculum design questions and/or lessons learned from your own experiences!</p> <p>Moderator: Crystal L. Bencken, MSN, RN, CEN, CPEN, CHSE, Simulation Education Manager, Carolinas Simulation Center</p> <p>Presenters: Julie A. Hartman, DC, MS, CCRP, Center for Procedural Skills and Simulation Lisa Satterthwaite, RPN, ORT, University of Toronto Surgical Skills Centre at Mount Sinai Hospital Susan Carter, MD, FACOG, FACS, Rocky Vista University Nicholas Jonas, MD, Lahey Center for Professional Development and Simulation Dawn Swiderski, MSN, RN, CCRN-K, FSSH, Carolinas Simulation Center</p>
12:20–1:00 pm 40 minutes	Lunch Break
1:00–4:10 pm 190 minutes	<p>American College of Surgeons/American Society of Anesthesiologists Collaborative Session Building on the success of last year’s session, we are pleased to bring back the collaborative session with the American Society of Anesthesiologists (ASA). This session will include an overview of the work accomplished from last year’s session; a keynote address from Kevin Weiss, MD, MPH; interactive breakout groups; report-outs; and direction on how the ACS and ASA can work together to improve patient care.</p>
1:00–1:15 pm 15 minutes	<p>Welcome and Opening Remarks Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME, MAMSE R. H. Steadman, MD, MS, Carole Walter Looke Centennial Chair, Department of Anesthesiology & Critical Care, Houston Methodist Hospital</p>

1:15–1:35 pm 20 minutes	Recap and Accomplishments from the 2021 Collaborative Session Jeffrey B. Cooper, PhD , Professor of Anesthesia, Harvard Medical School, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, and Executive Director Emeritus and Senior Fellow, Center for Medical Simulation
1:35–2:20 pm 45 minutes	Keynote Address Enhancing Clinical Learning Environments and Interprofessional Practice to Improve Operative and Procedural Patient Care Presenter: Kevin Weiss, MD, MPH , Chief Sponsoring Institutions and Clinical Learning Environment Officer, Accreditation Council for Graduate Medical Education Moderator: Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME, MAMSE
2:20–2:30 pm 10 minutes	Overview of the Breakout Groups Jeffrey B. Cooper, PhD Robert V. Rege, MD , Associate Dean for Undergraduate Medical Education; Professor of Surgery; Distinguished Teaching Professor, UT Southwestern Medical Center
2:30–2:40 pm 10 minutes	Break
2:40–3:25 pm 45 minutes	Breakout Groups Convene
3:25–4:05 pm 40 minutes	Reports from Breakout Groups Moderated by Randolph H. Steadman, MD, MS
4:05–4:10 pm 5 minutes	Wrap-Up and Next Steps R. H. Steadman, MD, MS
4:10–4:15 pm 5 minutes	Closing Remarks of the Summit Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME, MAMSE

Sessions with **[MORE]** indicate they are part of the MORE (Management, Operations, Research, and Education) Track. Intended for all simulation center personnel (for example, directors, administrators, managers, coordinators, simulation specialists, educators, researchers, and engineers, as well as physicians and surgeons), the MORE track focuses on current themes in the constantly evolving management and operations of medical simulation centers and provides an interactive forum to exchange ideas, views, and methods.



ACS-AEI SCIENTIFIC POSTER PRESENTATIONS

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

NOVEL APPLICATIONS OF TECHNOLOGIES

2022 Poster of Distinction

Nicholas Anton, MS, Indiana University School of Medicine, Indianapolis, IN

Utilizing Eye-Tracking to Assess Resident Non-Technical Skills in Simulation: Results of a Pilot Study

2022 Poster of Distinction

[ACS-AEI Fellow] Rachel Jensen, MD, Stanford University, Stanford, CA

An Innovative Endovascular Surgery Simulation Module Using 3-Dimensional (3D) Printed Models

Fatemeh Rashidi Fathabadi, PhD, Western Michigan University, Kalamazoo, MI

Real-Time Multi-Object Detection for the Peg Transfer Task in a Virtual 3D Space of a Laparoscopic Box-Trainer

ASSESSMENT

Xhesika Shanja-Grabarz, MD, Northwell Health North Shore/Long Island Jewish, New Hyde Park, NY

Uniform Improvement in Self-Assessed Skill and Confidence during Sensor-Based Robotic Simulator Pilot Study

Steven Long, PhD, University of Iowa, Iowa City, IA

Establishing the Reliability of an Orthopaedic Wire Navigation Skill Assessment

Joe Nigh, MD, University of Arkansas for Medical Sciences, Little Rock, AR

Impact of Formal Robotic Surgery Curriculum on Resident Perceptions of Robotic Surgery

IMPROVING OPERATIVE OUTCOMES

Sarah Benammi, MD, University Mohamed V of Rabat, Rabat, Morocco

Does First Assistant Surgeon's Experience in a Training Program without Simulation Training Impact Surgical Outcome?

Neal Getty, PhD, Data Science and Learning Division at Argonne National Laboratory, Lemont, IL

Toward a Context Awareness System Based on Machine Learning with OR Videos to Improve Patient Safety and OR Efficiency

NOVEL CURRICULA

Julie Cox, RN, CCRN, Parkland Memorial Hospital, Dallas, TX

High-Fidelity Multidisciplinary In-Situ Simulation Training: A Novel ECMO Program Process Improvement Project for Low-Frequency, High-Risk Events

2022 Poster of Distinction

[ACS-AEI Fellow] Kathryn Howard, MD, Beaumont Hospital, Royal Oak, MI

The Impact of the Mental Skills Curriculum on the Stress Response of Surgical Residents Performing a Simulated Task

[ACS-AEI Fellow] LaDonna Kearse, MD, Stanford University, Stanford, CA

A Review of Military-Developed Simulation-Based Training Suitable for Civilian Surgeons

Madhuri Nagaraj, MD, MS, University of Texas Southwestern, Dallas, TX

Advanced Techniques in Laparoscopic Suturing (ATLAS): Optimization for National Curriculum Launch

Shannon Sturgeon, BS, Rocky Vista University College of Osteopathic Medicine, Parker, CO

Qualitative Analysis of Second and Third Year Medical Student Experiences with a High-Fidelity Postpartum Hemorrhage Simulation

NOVEL SIMULATORS

Lisa Clemens, MS, PA-C and Cortney Hartman, MBA, CST, CRCST, CIS, FAST, Parkview Health, Fort Wayne, IN

Development of a Cost-Effective Simulation-Based Central Line Task Trainer

Ana Lourido, MD, Universidad del Cauca, Popayan, Colombia

Development of a Low-Cost Training Model for Laparoscopic Common Bile Duct Exploration

**NOVEL
TRAINING
MODALITIES**

Hugo Enrique Estrada, MD, Hospital Juárez de México, México City, México

Virtual Education in General Surgery at COVID-19 Pandemia: Experience in Junior Residents of Hospital Juárez De México

Jessica Marie Gonzalez-Vargas, MS, The Pennsylvania State University, State College, PA

From the Theory to the Practice: How Online Training Impacts Surgical Residents CVC Knowledge and Mechanical Skills?

Joshua Harkins, DO, MEd, OhioHealth Riverside Methodist Hospital, Columbus, OH

Efficacy of Didactic Education versus Experiential Learning in Pulmonary Artery Catheterization

Lindsay Haskett, MSN, RN, Indiana University School of Medicine, Indianapolis, IN

Utilizing Flipped Classroom Simulation to Teach Rapid Response in Surgical Residency Preparation Course

2022 Poster of Distinction

Mark Solinski, BS, Loyola University Chicago Stritch School of Medicine, Maywood, IL

Impact of Virtual Suture Workshop for High School Students

Haroula M. Tzamaras, BS, Penn State University, State College, PA

From Start to Finish: The Impact of a Whole Procedural Trainer on CVC Self-Efficacy and Proficiency



INVITED SPEAKER BIOGRAPHIES



Mark Aeder, MD, MS, FACS

Mark Aeder, MD, MS, FACS is a Transplant and General Surgeon at University Hospitals Cleveland Medical Center and an Associate Professor of Surgery at Case Western Reserve University. He has been an active participant in the ACS Accredited Educational Institutes for the past decade and is currently the Co-Chair of both the Committee for Dissemination of Educational Resources and the Research and Development Committee. Additionally, he serves as the Co-Editor in Chief of the AEI Online Community in the ACS Member Communities. He has produced and hosted multiple AEI Podcasts on current topics of interest for the Consortium as well as participated in the educational webinars. Within the College, he is a member of the Committee for Professional Opportunities for Senior Surgeons and The Practice Protection Committee. He has authored chapters and papers for the College covering a variety of topics, especially in personal and practice financial management. At University Hospitals, he is the Director for Surgical Quality and the Quality Medical Director for the Transplant Institute. His background also includes over 25 years of Leadership and Committee positions for the United Network for Organ Sharing, The National Kidney Foundation and state quality boards. He helped pioneer hospital electronic medical records implementation and is presently working on developing hospital based quality tracking programs. He enjoys teaching and mentoring students, residents and junior faculty.



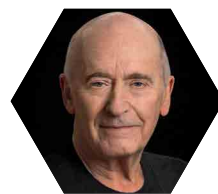
Crystal Bencken, BSN, MSN

Crystal Bencken received her BSN from the University of Kansas in 1997. During her 16

years as an emergency nurse, she worked in various teaching hospitals and trauma centers across the US and has been involved with department education and leadership.

Ms. Bencken earned her MSN in nursing education from Duke University in 2011. During the program, she was introduced to simulation as a teaching modality, and her life was changed forever. She became a simulation education specialist at Carolinas Simulation Center in 2013 where she was able to put her passion for education into practice.

In 2018, Ms. Bencken transitioned to the role of simulation education manager. Her focus expanded from personally developing, implementing, and evaluating simulation education to oversight and mentorship of new educators and facilitators. She and her fellow simulation educators created a multi-tiered facilitator development program that incorporates simulation best practices and mentorship from simulation experts. Ms. Bencken is a Certified Healthcare Simulation Educator and active in both the Society for Simulation in Healthcare and the American College of Surgeons-Accredited Education Institutes. She has presented nationally and internationally on simulation best practices with a focus on in-situ simulation and systems testing.



Jeffrey B. Cooper, PhD

Dr. Jeffrey B. Cooper is professor of anesthesia at Harvard Medical School and Massachusetts General Hospital. He is the founder, executive director emeritus, and senior fellow of the Center for Medical Simulation in Boston.

Dr. Cooper is one of the pioneers in patient safety. He did landmark research in medical errors in the 1970's and is a co-founder of the Anesthesia Patient Safety Foundation (APSF). He was for many years Director of Biomedical Engineering at the Massachusetts General

Hospital and then Partners Healthcare System. He is author or co-author of more than 150 peer reviewed articles and book chapters.

Dr. Cooper has been awarded several honors for his work in patient safety, including the John M. Eisenberg Award for Lifetime Achievement in Patient Safety from the National Quality Forum and the Joint Commission and the Lifetime Achievement Award from the American Academy of Clinical Engineering. He received the Distinguished Service Award of the American Society of Anesthesiologists in 2013, the only non-MD to receive the honor. He is one of the first two members of the Hall of Fame of the American College of Clinical Engineering and is among the inaugural fellows of the Academy of the Society for Simulation in Healthcare. In his personal life, he is an equestrian, avid Argentinian tango dancer and dabbles in haiku and poetry.



Julie Ann Freischlag, MD, FACS, FRCS, Ed(Hon), DFSVS

Dr. Julie A. Freischlag is the chief executive officer of Atrium Health Wake Forest Baptist, dean of Wake Forest School of Medicine, and chief academic officer of Atrium Health Enterprise. Consistently ranked among the nation's top medical centers, Wake Forest Baptist includes a growing, multi-hospital health system and physician network, the state-of-the-art and highly competitive Wake Forest School of Medicine, and the school's technology transfer and commercialization arm, Wake Forest Innovations.

As CEO and dean, she has the overall responsibility for the health system's clinical, academic and innovation enterprises and its annual operating budget of \$3 billion. Previously, Freischlag was vice chancellor for Human Health Sciences and dean of the School of Medicine at UC Davis.

Freischlag has helped to drive change in academic medicine with a deep commitment to diversity and inclusion. For more than 15 years, she has led education and training programs at top medical schools in her role as professor and chair of surgery and vascular surgery departments. Freischlag also has more than 30 years of experience leading patient-care services as chief of surgery or vascular surgery at nationally ranked hospitals. She served as professor, chair of the surgery department and surgeon-in-chief at Johns Hopkins Medical Institutions. She led initiatives to expand research, add specialty clinical services, improve patient-centered care and patient safety, redesign the surgical training program and enhance academic career paths for faculty.

Her national leadership includes serving as a former governor and secretary of the Board of Governors and a regent and past chair of the Board of Regents of the American College of Surgeons. She is the past president of the Society for Vascular Surgery and the Society for Vascular Surgery Foundation, and past president of the Association of VA Surgeons and the Society of Surgical Chairs. Freischlag was the editor of *JAMA Surgery* for ten years (2005-2014) and is currently a member of the JAMA Oversight Committee and the editorial boards of the *Annals of Vascular Surgery*, *Journal of the American College of Surgeons*, *British Journal of Surgery*, and the *Journal of the American Medical Association*. She has published more than 300 manuscripts, abstracts and book chapters, primarily addressing the treatment of thoracic outlet syndrome, abdominal aortic aneurysms, carotid artery disease and peripheral vascular disease utilizing outcome data and clinical trials; additionally, she has published on burnout and work-life balance.

Freischlag is an internationally recognized expert in the treatment of thoracic outlet syndrome which can require a specialized surgical procedure. She continues to evaluate and treat thoracic outlet syndrome patients and evaluates their results in a registry. Freischlag has received numerous teaching and achievement awards, including an achievement award from the Department of Veterans Affairs. She was elected to the National Academy of Medicine in 2015.

She mentors students, residents and young faculty and is a frequent speaker on topics ranging from her expertise in vascular diseases, teamwork and patient safety,

leadership and work-life balance to women succeeding in health professions. Freischlag has dedicated her career to serving as a role model for her students, a respected colleague across health professions, a strong community leader and a national voice for improving health and healthcare.

Currently, Freischlag is President for the American College of Surgeons and also serves on the Board of Directors of the Association for American Medical Colleges, National Institute of Health Clinical Center Research Hospital Board, Aga Khan University Board of Trustees and chair of the Health Services Committee, University of Pittsburgh School of Medicine Board of Visitors, and the University of Illinois Health Advisory Council.



Daniel Hashimoto, MD, MS

Dr. Daniel Hashimoto is Flexible Endoscopy and Foregut Surgery Fellow at University Hospitals Cleveland Medical Center. He was previously the Associate Director of Research at the Surgical Artificial Intelligence and Innovation Laboratory and a general surgery resident at the Massachusetts General Hospital. He earned his MD from the University of Pennsylvania, where he also obtained an M.S. in Translational Research with a focus on technology and surgical education for which his research was conducted at the Imperial College London. He completed the Surgical Education Research Fellowship and the Surgical Artificial Intelligence and Innovation Fellowship at MGH and Harvard Medical School. He serves on the ACS Committee on Emerging Surgical Technologies. He is the editor of the textbook *Artificial Intelligence in Surgery: Understanding the Role of AI in Surgical Practice*. His research lies at the intersection of surgical data science and surgical education, exploring computer vision techniques as applied to surgical performance assessment and decision inference.



Melinda Klar, RN

Melinda Klar has been the administrative director of the University of Tennessee Center for Advanced Medical Simulation (UTCAMS) for the past 13 years and is currently Co-Chair of the AEI Consortium Administration and Management Committee. Prior to taking the position as UTCAMS Administrative Director, she was the Clerkship Education Coordinator, Clinical Trials Coordinator, and Pediatric Surgery Nurse Specialist for the Department of Surgery at the University of Tennessee Medical Center and Graduate School of Medicine. Before coming to UT Medical Center, she practiced pediatric critical care and general surgery nursing in Kentucky, Florida, and Tennessee.

The UT Center for Advanced Medical Simulation received initial AEI Accreditation in December 2012 and reaccreditation in December 2015 and 2018. In addition to maintaining and coordinating accreditation reports and activities, current special projects for Ms. Klar include UTCAMS activity database development, expanding the standardized patient program, and providing administrative support for the UTCAMS Medical Education and Simulation Fellowship program.



Gyusung Lee, PhD

Gyusung Lee, PhD is the Assistant Director of Simulation-Based Surgical Education and Training in the Division of Education at American College of Surgeons. He also serves as a Society Manager for both ACS Surgical Simulation Summit and *Surgeons and Engineers with Surgery* journal. Dr. Lee obtained his training in academic laboratories as well as in clinical environments, performed sponsored research studies both independently as well as within teams, and championed the development and execution

of various surgical education programs. He completed his graduate studies in Biomechanics and obtained MS and PhD degrees in the Department of Biomedical Engineering at Texas A&M University in 1996 and 2002. After two years of post-doctoral training, Dr. Lee joined the Department of Surgery at the University of Maryland, School of Medicine (UMSOM) as a Faculty Research Associate. His primary research interest at the UMSOM was to investigate the physical and cognitive ergonomics associated with various minimally invasive surgeries (MIS) including traditional laparoscopy, Natural Orifice Transluminal Endoscopic Surgery (NOTES), and robotic surgery. Dr. Lee served as the Director of Robotic Education and Ergonomics Research at the Minimally Invasive Surgical Training & Innovation Center (MISTIC) in the Department of Surgery at Johns Hopkins School of Medicine (JHSOM). As the Assistant Director of Simulation-Based Surgical Education and Training, Dr. Lee provides leadership for a broad range of innovative simulation-based education and training programs of the Division of Education. He is responsible for designing simulation-based programs, providing leadership for the simulation research and development activities, especially those of the Consortium of ACS Accredited Education Institutes, and building and strengthening collaborative relationships with national organizations and the federal government, including the Department of Defense.



Robert B. Lim, MD, FACS, FASMBs

Dr. Robert B. Lim is the Vice-Chair of Education and the residency program director for the Department of Surgery at the University of Oklahoma School of Medicine at Tulsa. He obtained his medical degree from the New York Medical College, completed his residency at the William Beaumont Army Medical Center, and his fellowship in MIS at the Beth Israel Deaconess Medical Center/Harvard Medical School. He served 23 years in the US Army with 6 deployments to the combat zones of Iraq, Syria, and Afghanistan. He currently serves on the Executive Committee of SAGES and has been

a dedicated educator and researcher in the fields of bariatric surgery, obesity, surgical simulation, combat surgery, and surgical education.



Alexander Perez, MD, FACS

Le Roy Hillyer, M.D. Endowed Chair in Surgery Professor of Surgery. Vice Chair of Quality and Medical Director of Value. Chief, Division of Advanced Gastrointestinal and Minimally Invasive Surgery. Adjunct Professor, University of Texas MD. Anderson Cancer Center Surgical Director, Sealy and Smith Laboratory for Surgical Training, Assessment, and Research Program Director, Surgical Simulation and Education Research Fellowship University of Texas Medical Branch, Galveston, TX

Dr. Perez is a surgeon and educator with expertise in the use of advanced techniques and technologies such as minimally invasive surgery and simulation-based education. He is focused on improving the outcomes of patients through patient-centered value and quality improvement and training the next generation of leaders in health care via lifelong education and team wellness. Dr. Perez is a member of the Academy of Master Clinicians at University of Texas Medical Branch and serves in leadership roles in the American College of Surgeons and the Southern Surgical Association.



Carla Pugh, MD, PhD, FACS

Dr. Carla Pugh is a Thomas Krummel Professor of Surgery at Stanford University School of Medicine and Director of the Technology Enabled Clinical Improvement (T.E.C.I.) Center. Her clinical area of expertise is Acute Care Surgery and her research involves the use of simulation, advanced engineering technologies, and artificial

intelligence to develop new approaches for assessing and defining mastery in clinical procedural skills. Dr. Pugh is considered to be a leading, international expert on the use of sensors and motion tracking technologies for performance measurement.

Dr. Pugh obtained her undergraduate degree at U.C. Berkeley in Neurobiology and her medical degree at Howard University School of Medicine. Upon completion of her surgical training at Howard University Hospital, she attended Stanford University to obtain her PhD in Education. Her goal is to use technology to change the face of medical and surgical education.

Dr. Pugh holds multiple patents on the use of sensor and data acquisition technology to measure and characterize hands-on clinical skills. Currently, more than 200 medical and nursing schools are using one of her sensor-enabled training tools for their students and trainees. Her work has received numerous awards from medical and engineering organizations, including the Presidential Early Career Award for Scientists and Engineers from President Barack Obama at the White House in 2011. In 2014, she was invited to give a TEDMED talk on the potential uses of technology to transform how we measure clinical skills in medicine. Recently, Dr. Pugh was inducted into the American Institute for Medical and Biological Engineering (April 2018), the American College of Surgeons Academy of Master Surgeon Educators (April 2019), as well as the American Board of Surgery Council (February 2020). She is also the President-elect for the Society of Black Academic Surgeons (SBAS).

More information about Dr. Pugh and her research can be found [here](#).



Robert V. Rege, MD, FACS

Professor of Surgery at UT Southwestern Medical Center in Dallas, Texas and currently serves as the Associate Dean for Undergraduate Medical Education and Associate Dean of Continuing Education. Dr. Rege continues his clinical practice in surgery,

with a particular interest in gastrointestinal and advanced laparoscopic. Dr. Rege received his M.D. from Hershey Medical School, The Pennsylvania State University in 1975, and remained there for his surgical training. Following residency, Dr. Rege completed a 1-year fellowship in gastrointestinal research at Northwestern University and remained on faculty there from 1983 to 1998. He was recruited to Dallas in 1998 where his expertise was instrumental in development of educational programs of the Southwestern Center for Minimally Invasive Surgery, one of the first seven ACS Accredited Education Institutes. He has been involved with the ACS program to establish accredited educational programs since its inception and currently chairs the committee for the American College of Surgeons Accredited Educational Institutes.



Deborah Rooney, PhD

Dr. Rooney has over 25 years' experience in medical education with nearly 15 years in surgical education. Her dedication to the surgical education community has allowed her to serve as a member of eight ACS AEI committees and subcommittees and as Vice-Chair or Chair for four of these. She has proudly supported the Annual ACS-AEI Consortium Meeting, now the Annual ACS Surgical Summit, since 2009. In the past 12 years, Dr. Rooney has had the great pleasure to both contribute as a presenter of Technical Exhibits presentations and act as moderator a number of times for the Innovations sections. She has also facilitated five workshops. She is grateful and very excited to be program chair for the 2022 ACS Surgical Summit conference.



Ajit K. Sachdeva, MD, FACS, FRCS, FSACME, MAMSE

Dr. Ajit K. Sachdeva is the Founding Director of the Division of Education of the American College of Surgeons. Dr. Sachdeva established this Division, which is responsible for developing and implementing innovative education and training programs for surgeons, surgery residents, medical students, and surgical teams. Major innovative programs launched under Dr. Sachdeva's leadership have established new benchmarks. These include the Academy of Master Surgeon Educators; Program for Accreditation of Education Institutes (Simulation Centers); multidimensional Patient Education Program; Program for Validation and Verification of Surgical Knowledge and Skills; education and training programs to promote expertise and excellence in surgery; cutting-edge simulation-based education and training programs; Fundamentals of Surgery Curriculum; Entering Resident Readiness Assessment Program; and Objective Assessment of Skills in Surgery. Also, transformational redesign of the Surgical Education and Self-Assessment Program and the Annual Clinical Congress has been implemented. He has led several major national research and development projects in surgical education and training. Dr. Sachdeva also serves as Adjunct Professor of Surgery at The Feinberg School of Medicine at Northwestern University.

Prior to joining the College, Dr. Sachdeva was the Leon C. Sunstein, Jr., Professor of Medical and Health Sciences Education and Professor and Vice Chairman for Educational Affairs, Department of Surgery, at the MCP Hahnemann School of Medicine. He also held the positions of Associate Dean for Medical Education and Director of the University's Academic Center for Educational Excellence, and served as Chairman of three successive medical school Education/Curriculum Committees for 12 years. He established a Division of Surgical Education, which was one of the first such Divisions in the country, and a Fellowship Program in Surgical Education.

In addition, Dr. Sachdeva served as Chief of Surgical Services at the Philadelphia

Veterans Affairs Medical Center. He planned and directed the expansion of tertiary care services at the medical center, staffed by two medical schools (University of Pennsylvania School of Medicine and MCP Hahnemann School of Medicine). Dr. Sachdeva established a Regional Network Health Care Program for Women Veterans for which he received the Gold Medal in Excellence in Government Awards Program, National Performance Review Award of the Vice President of the United States, and Award of the Deputy Secretary, Department of Veterans Affairs. Dr. Sachdeva has been inducted as a Founding Member of the American College of Surgeons Academy of Master Surgeon Educators and as Member of the Academy of Fellows of the Society for Academic Continuing Medical Education. He was awarded the Distinguished Educator Award (a Lifetime Achievement Award) by the Association for Surgical Education, and the Margaret Hay Edwards, MD, Achievement Medal for Outstanding Contributions to Cancer Education by the American Association for Cancer Education. Dr. Sachdeva has received the Award for Outstanding Contributions to Healthcare Simulation from the Society for Simulation in Healthcare, the Frances M. Maitland Award from the Alliance for Continuing Medical Education, the Theodore A. McGraw, MD, Medal from The Detroit Surgical Association, the Norman B. Kahn, Jr., MD, Award for Exceptional Contributions to the Council of Medical Specialty Societies, and Recognition of Excellence Medallion from the Society of American Gastrointestinal and Endoscopic Surgeons. He has also received the Lindback Award for Distinguished Teaching, the Blockley-Osler Award for Excellence in Clinical Teaching, the Board of Trustees' Award for Teaching Excellence, and several Golden Apple Awards for Teaching Excellence. Dr. Sachdeva has delivered presentations and conducted courses on educational topics in the United States, Canada, Europe, Australia, and Japan.

He has been the recipient of major educational grants and has published more than 100 peer-reviewed articles on surgical and medical education topics. Dr. Sachdeva is a member of the American Surgical Association and has served as a representative of this association to the Council of Faculty and Academic Societies of the Association of American Medical Colleges. He has chaired the Committee on Surgical Education of The Society of

University Surgeons, and also served as Member of the Board of Governors of the American College of Surgeons. Dr. Sachdeva has served as Chairman of the Scientific Review Group Education Subcommittee (Study Section) of the National Cancer Institute, National Institutes of Health. In addition, he has served as a member of the Executive Committee of the Board of Directors of the Accreditation Council for Continuing Medical Education, and as a member of the Board of Directors of the Accreditation Council for Graduate Medical Education.

Dr. Sachdeva has served as President of the following national organizations; Association for Surgical Education; American Association for Cancer Education; Council of Medical Specialty Societies; Society for Academic Continuing Medical Education; and Alliance for Clinical Education.



Randy Steadman, MD, MS

Randy Steadman, MD, MS, was appointed Chair of the Department of Anesthesiology and Critical Care at Houston Methodist Hospital in 2020. In 2021 he was appointed Associate Executive Director of MITIE, the Methodist Institute for Technology, Innovation & Education. Prior to his move to Houston, he served in the Department of Anesthesiology and Perioperative Medicine at UCLA Health, most recently as Professor and Vice Chair for Education. He was the founding director of the UCLA Simulation Center, which has served undergraduate and graduate trainees, and the continuing professional development community, since 1996. As Chair of the ASA Editorial Board on Simulation-Based Training he helped develop endorsement criteria for simulation programs and built a national network of over 50 simulation programs during his ten-year tenure. His clinical work is directed toward the perioperative care of patients undergoing liver and abdominal organ transplantation. His publications and research activities focus on liver transplantation, simulation-based training and assessment, and the development of serious games for medical training. He is a diplomate

of the American Board of Internal Medicine and the American Board of Anesthesiology.



Dimitrios Stefanidis, MD, PhD, FACS, FASMBS, FSSH

Dr. Stefanidis is a professor of surgery with tenure, the Vice Chair of education, and Chief of minimally invasive and bariatric surgery of the department of surgery at Indiana University School of Medicine. He also serves as the surgical director of our American College of Surgeons Accredited Education Institute (ACS-AEI), and directs education and simulation research in the department. At the national level, he is president-elect of the Association for Surgical Education, serves on the board of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES), and the Institute for Surgical Excellence, an Associate Member of the ACS Academy of Master Surgeon Educators, and co-chairs the research and development committee of the ACS-AEI. He has a strong interest in improving surgical training and optimizing surgical performance using simulation, has obtained several competitive research grants, and published more than 200 peer-reviewed papers and several book chapters.



Robert Sweet, MD, FACS, MAMSE

Dr. Sweet is a Professor of Urology, Surgery and Bioengineering at the University of Washington and the Founding Medical Director of the UW Medicine Kidney Stone Center.

Dr. Sweet founded and led the University of Minnesota’s SimPORTAL and cofounded the University of Washington’s ISIS which was renamed the University of Washington of the Washington, Wyoming, Alaska, Montana and Idaho Institute for Simulation Technologies (WISH) when he assumed the Executive Director position. He is the PI for all programs

in the Center for Research in Education and Simulation Technologies (CREST) including the “Advanced Modular Manikin” project. CREST programs have been funded by the Department of Defense, NIH and industry and has led to the development of numerous healthcare simulation training devices and curricula. Effective January 1, 2020, a Division of Healthcare Simulation Sciences, uniting WISH, CREST and healthcare simulation academic programs under a formal academic unit, was established at the University of Washington with Dr. Sweet now serving as the Founding Division Head.

Dr. Sweet is an “Arthur Smith Award” winner and is the Principal Investigator of numerous simulation research and development projects. Seattle Business Magazine Awarded him and his programs the 2019 “Leaders in Health Care, Achievement in Medical Technology” Gold Award.

Dr. Sweet has served in leadership positions in simulation and education within the American College of Surgeons, the Society for Laparoendoscopic Surgeons, the Endourology Society and the American Urological Association. Dr. Sweet helped develop the Surgical Simulation Fellowship Accreditation Program for the American College of Surgeons (ACS) Division of Education and started two such programs at the Universities of Minnesota and Washington. He is most proud of the accomplishments of his graduating fellows.

For his contributions to surgical education, in October 2018, Dr. Sweet was inducted as a Member of the American College of Surgeons Academy of Master Surgeon Educators™ Inaugural class and he was the recipient of the 2019 American Urological Association Distinguished Contribution Award.



Patricia L. Turner, MD, MBA, FACS

Dr. Patricia L. Turner is the Executive Director of the American College of Surgeons and a clinical associate professor at the University of Chicago Medicine. She was previously director of the Division of Member Services

at the American College of Surgeons, and prior to joining the College, Dr. Turner spent eight years in full-time academic practice on the faculty of the University of Maryland School of Medicine, where she was the surgery residency program director. Roles in national professional organizations or institutions include member of the Board of Directors of the Council of Medical Specialty Societies, Wake Forest Baptist Medical Center, and OceanFirst Bank (OCFC), chair of the American College of Surgeons' Delegation to the AMA House of Delegates, chair of the Society of Black Academic Surgeons Foundation Fund, past-chair of the AMA Council on Medical Education, past-chair of the Surgical Section of the NMA, and past-president of the Society of Black Academic Surgeons.

A graduate of the University of Pennsylvania and the Bowman Gray School of Medicine at Wake Forest University, Dr. Turner continued her training as an intern and resident in surgery at Howard University Hospital in Washington, DC. Her fellowship training in minimally invasive and laparoscopic surgery was completed at the Mount Sinai School of Medicine, Weill-Cornell University School of Medicine, and Columbia University School of Medicine in New York City. Her MBA was completed at the University of Maryland Robert H. Smith School of Business. Dr. Turner is board-certified in surgery, is a Fellow of the American College of Surgeons, and member of the American Surgical Association, Southern Surgical Association, Southeastern Surgical Congress, Society of University Surgeons, Association of Women Surgeons, Latino Surgical Society, and an honorary member of the Asociación Colombiana de Cirugía.



Kevin B. Weiss, MD, MPH

Chief Sponsoring Institutions and Clinical Learning Environments Officer

Dr. Kevin Weiss is the Chief Sponsoring Institutions and Clinical Learning Environments Officer at the Accreditation Council for Graduate Medical Education (ACGME). He oversees Sponsoring Institutions (SI) and the Clinical Learning Environment Review (CLER), including serving as Co-Chair for the CLER Evaluation Committee (CEC). Dr. Weiss came to the ACGME from the American Board of Medical Specialties (ABMS), where from 2007 to 2012 he served as President and CEO. Under Dr. Weiss' leadership, ABMS-International was established, with its first international collaboration in Singapore.

Dr. Weiss has devoted his medical career to issues of health care quality, equity and access to care, and enhancing training experiences for physicians and other providers in health care improvement. Since the 1990s, Dr. Weiss has conducted US and international epidemiological and health services research projects related to guideline implementation, chronic care management, outcomes measurement, quality improvement, and health care equity. Dr. Weiss served as a member of the Board of Regents for the American College of Physicians, and as a member of the Board of Directors for both ABMS and the Educational Commission for Foreign Medical Graduates. Dr. Weiss completed his clinical training in internal medicine at Cook County Hospital in Chicago. He has a Master's degree in public health from the University of Illinois School of Public Health and a Master's degree in health services administration from Harvard University School of Public Health. He completed his post-doctoral fellowship in epidemiology at the Centers for Disease Control's National Center for Health Statistics. Dr. Weiss is certified in internal medicine by the American Board of Internal Medicine (ABIM). He also serves as a Professor of Medicine at the Feinberg School of Medicine at Northwestern University.

**SAVE
THE
DATES**

**Surgeons and
Engineers:
A Dialogue on
Surgical Simulation**

Wednesday, March 1, 2023



**Annual ACS
Surgical Simulation
Summit**

**Thursday, March 2
– Saturday, March 4, 2023**

Swissotel | Chicago, IL

**SAVE
THE
DATES**



Annual ACS Surgical Simulation Summit (formerly known as the Annual Meeting of the Consortium of ACS-Accredited Education Institutes)

PAST KEYNOTE SPEAKERS

14TH ANNUAL MEETING | March 11-12, 2021 | Virtual

Keynote Address

Leading When Everyone Is Watching

Julie Ann Freischlag, MD, FACS, FRCS, Ed(Hon), DFSVS, Chief Executive Officer, Wake Forest Baptist Health and Dean, Wake Forest School of Medicine

13TH ANNUAL MEETING | October 21, October 28,

November 4, 2020 | Virtual

No keynote address, only research presentations were featured

12TH ANNUAL MEETING | March 15-16, 2019 | Chicago, IL

Keynote Address

Patient Safety: Making a Difference—It's Not Rocket Science

James Bagian, MD, PE, Founding Director of the Center for Healthcare Engineering and Patient Safety, and Professor in the Department of Anesthesiology and the College of Engineering at the University of Michigan

11TH ANNUAL MEETING | March 16-17, 2018 | Chicago, IL

Keynote Address

Surgical Simulation: Prologue to Continuous Improvement

James B. Peake, MD, LTG (Ret), FACS, Senior Vice President, CGI Federal, and Immediate Past President, American Telemedicine Association, Jonestown, TX

10TH ANNUAL MEETING | March 17-18, 2017 | Chicago, IL

Keynote Address

Transforming Health Professions Education: To Dare Mighty Things

Jeffrey P. Gold, MD, FACS, Chancellor, University of Nebraska Medical Center

9TH ANNUAL MEETING | March 7-8, 2016 | Chicago, IL

Keynote Address

Evolving Medical Education to Maximize Learning Impact

Graham T. McMahon, MD, MMSc, President and Chief Executive Officer, Accreditation Council for Continuing Medical Education

8TH ANNUAL MEETING | March 13-14, 2015 | Chicago, IL

Keynote Address

ABMS Board Certification: What Will Career-Long Assessment Look Like?

Lois Margaret Nora, MD, JD, MBA, President and CEO of the American Board of Medical Specialties (ABMS)

7TH ANNUAL MEETING | March 21-22, 2014 | Chicago, IL

Keynote Address

Education Meets the Transformation of Healthcare: Collision or Confluence?

Darrell G. Kirch, MD, President and CEO of the Association of American Medical Colleges (AAMC)

6TH ANNUAL MEETING | March 15-16, 2013 | Chicago, IL

Keynote Address

Intentional Practice in GME: A Role for Simulation

Thomas J. Nasca, MD, MACP, Chief Executive Officer, Accreditation Council for Graduate Medical Education (ACGME), and Chief Executive Officer of ACGME International

5TH ANNUAL MEETING | March 16-17, 2012 | Chicago, IL

Keynote Address

Challenges in Health Professional Education

George E. Thibault, MD, President, Josiah Macy Jr. Foundation

4TH ANNUAL MEETING | April 29-30, 2011 | Chicago, IL

Keynote Address

The Role of Simulation in Improving Surgical Care Quality and Patient Safety

Carolyn M. Clancy, MD, Director, Agency for Healthcare Research and Quality (AHRQ)

3RD ANNUAL MEETING | March 12, 2010 | Chicago, IL

Keynote Address

Hollywood Special Effects: Can We Bring These Computer Graphics to Surgical Simulation?

John C. Textor, Chairman, Digital Domain

ACCREDITED EDUCATION INSTITUTES

The Program for Accreditation of Education Institutes is proud to acknowledge our 100 accredited centers from 12 countries.

ARIZONA

Banner Simulation System
Phoenix, AZ

CALIFORNIA

USC Surgical Skills Simulation and Education Center
Los Angeles, CA

UC Irvine Surgical Education Center (SEC)
Orange, CA

Huntington Hospital Skills Lab
Pasadena, CA

UC Davis Center for Simulation and Education Enhancement
Sacramento, CA

UCSF Surgical Skills Center
San Francisco, CA

Stanford Department of Surgery Education Institute
Stanford, CA

Naval Medical Center San Diego Bioskills and Simulation Training Center
San Diego, CA

Women's Guild Simulation Center for Advanced Clinical Skills, Cedars Sinai Health System
Los Angeles, CA

UCLA Center for Advanced Surgical and Interventional Technology (CASIT)
Los Angeles, CA

COLORADO

Rocky Vista University's Institute of Medical and Surgical Simulation
Parker, CO

CONNECTICUT

Center for Education, Simulation, and Innovation (CESI), Hartford Hospital
Hartford, CT

DELAWARE

Christiana Care Health System Virtual Education and Simulation Training (VEST) Center
Newark, DE

FLORIDA

USF Health Simulation Consortium
Tampa, FL

AdventHealth Nicholson Center
Celebration, FL

GEORGIA

Carlos and Davis Center for Surgical Anatomy and Technique (CSAT) of Emory University
Atlanta, GA

HAWAII

Tripler Medical Simulation Center
Tripler Army Medical Center, HI

ILLINOIS

Northwestern Simulation
Chicago, IL

UIC Health Sciences Simulation Consortium
Chicago, IL

University of Chicago Simulation Center
Chicago, IL

Grainger Center for Simulation and Innovation
Evanston, IL

Jump Trading Simulation and Education Center
Peoria, IL

Rush Center for Clinical Skills and Simulation
Chicago, IL

INDIANA

Indiana University Department of Surgery Surgical Skills Center
Indianapolis, IN

Parkview Mirro Advanced Medical Simulation Lab
Fort Wayne, IN

IOWA

UIHC Center for Procedural Skills and Simulation
Iowa City, IA

KANSAS

University of Kansas School of Medicine-Wichita
Wichita, KS

LOUISIANA

LSU Health-New Orleans School of Medicine, Learning Center
New Orleans, LA

Tulane Center for Advanced Medical Simulation and Team Training
New Orleans, LA

LSUHSC-Shreveport Clinical Skills Center
Shreveport, LA

MARYLAND

National Capital Region Simulation Consortium
Bethesda, MD

James and Sylvia Earl SAIL Center
Annapolis, MD

MASSACHUSETTS

Carl J. Shapiro Simulation and Skills Center
Boston, MA

Neil and Elise Wallace STRATUS Center for Medical Simulation
Boston, MA

MGH Learning Laboratory
Boston, MA

Lahey Center for Professional Development and Simulation
Burlington, MA

Baystate Simulation Center
Springfield, MA

MICHIGAN

University of Michigan Clinical Simulation Center
Ann Arbor, MI

Henry Ford Health System Center for Simulation, Education, and Research
Detroit, MI

Beaumont Health Applebaum Surgical Learning Institute
Royal Oak, MI

Simulation and Education Center at Providence Hospital
Southfield, MI

St. Joseph Mercy Oakland Simulation Center
Pontiac, MI

MINNESOTA

University of Minnesota, M Simulation
Minneapolis, MN

Mayo Clinic Multidisciplinary Simulation Center
Rochester, MN

MISSOURI

Washington University Institute for Surgical Education (WISE)
St. Louis, MO

NEBRASKA

University of Nebraska Medical Center - iEXCEL
Omaha, NE

NEW JERSEY

Institute of Bioskills Training and Innovation (IBTI)-Atlantic Health System
Morristown, NJ

NEW MEXICO

BATCAVE Healthcare Simulation Program, University of New Mexico
Albuquerque, NM

NEW YORK

Hospital for Special Surgery
New York, NY

NYU Department of Surgery Surgical Skills Laboratory
New York, NY

Weill Cornell Medicine Skills Acquisition and Innovation Laboratory (SAIL)
New York, NY

NORTH CAROLINA
Carolinas Simulation Center
Charlotte, NC

Duke University Medical Center, Duke Surgery AEI
Durham, NC

Learning Institute of North Carolina
Chapel Hill, NC

Wake Forest Baptist Health
Winston Salem, NC

OHIO
OhioHealth Learning
Columbus, OH

Cleveland Clinic Simulation and Advanced Skills Center
Cleveland, OH

Clinical Skills Education and Assessment Center at The Ohio State University College of Medicine
Columbus, OH

The University of Toledo Interprofessional Immersive Simulation Center
Toledo, OH

OKLAHOMA
University of Oklahoma College of Medicine Clinical Skills Education and Testing Center
Oklahoma City, OK

OREGON
OHSU Simulation
Portland, OR

PENNSYLVANIA
Rector Clinical Skills and Simulation Center of Jefferson University
Philadelphia, PA

William Maul Measey Institute for Clinical Simulation and Patient Safety, Temple University
Philadelphia, PA

Lehigh Valley Health Network Surgery Education Center
Allentown, PA

Medical Skills Learning Center-Conemaugh Memorial Medical Center
Johnstown, PA

Penn State Milton S. Hershey Simulation Center
Hershey, PA

Simulation at Penn Medicine
Philadelphia, PA

TENNESSEE
University of Tennessee Center for Advanced Medical Simulation
Knoxville, TN

Vanderbilt University Medical Center
Nashville, TN

TEXAS
BAMC Simulation Center
Ft. Sam Houston, TX

Baylor University Medical Center Academic Simulation Program
Dallas, TX

The Houston Methodist Institute for Technology, Innovation, and Education (MITIE)
Houston, TX

UT Southwestern Simulation Center
Dallas, TX

Texas A&M/Baylor Scott and White Surgical Skills Program
Temple, TX

University of Texas Medical Branch Laboratory for Surgical Training, Assessment, and Research (LSTAR)
Galveston, TX

UTAH
Utah Center for Innovation and Simulation in Education
Salt Lake City, UT

VERMONT
Clinical Simulation Laboratory at the University of Vermont
Burlington, VT

VIRGINIA
EVMS / Sentara Center for Simulation and Immersive Learning
Norfolk, VA

Inova, Advanced Surgical Technology and Education Center (ASTEC)
Falls Church, VA

Naval Medical Center, Portsmouth
Portsmouth, VA

VCU Center for Human Simulation and Patient Safety
Richmond, VA

WASHINGTON
Andersen Simulation Center
Tacoma, WA

WWAMI Institute for Simulation in Healthcare (WISH)
Seattle, WA

WASHINGTON, DC
Howard University Health Sciences Simulation & Clinical Skills Center
Washington, DC

MedStar Simulation Training and Education Lab (MedStar SiTEL)
Washington, DC

WISCONSIN
UW Health Clinical Simulation Program
Madison, WI

BRAZIL
IRCAD America Latina
Barretos, Brazil

BULGARIA
Medical Simulation Training Center at Medical University of Plovdiv
Plovdiv, Bulgaria

CANADA
Canadian Surgical Technologies & Advanced Robotics (CSTAR)
London, ON

Steinberg Centre for Simulation and Interactive Learning
Montreal, QC

University of Toronto Surgical Skills Centre at Mount Sinai Hospital
Toronto, ON

FRANCE
Research Institute Against Digestive Cancer (IRCAD)/ Institute of Image-Guided Surgery
Strasbourg Cedex, France

GREECE
Medical Physics Lab-Simulation Center (MPLSC), University of Athens
Athens, Greece

ITALY
EndoCAS
Pisa, Italy

SAUDI ARABIA
King Saud University, Clinical Skills and Simulation Center (CSSC)
Riyadh, Kingdom of Saudi Arabia

SPAIN
Hospital virtual Valdecilla
Santander, Spain

SWEDEN
Center for Advanced Medical Simulation and Training (CAMST) at Karolinska University Hospital
Stockholm, Sweden

Practicum Clinical Skills Centre
Skåne, Sweden

UNITED ARAB EMIRATES
Mohammed Bin Rashid University of Medicine and Health Sciences
Dubai, United Arab Emirates

UNITED KINGDOM
Division of Surgery, Imperial College
London, England

ACS-AEI-ACCREDITED FELLOWSHIP PROGRAMS

The Fellowship Program of the Consortium of ACS Accredited Education Institutes was established to improve the quality of surgical care by developing leaders and scholars in surgical education, simulation, and training. Only AEIs are eligible to apply for fellowship accreditation. We'd like to congratulate the AEIs below for meeting the accreditation standards and investing in the future of simulation-based surgical education and training.

CALIFORNIA

Naval Medical Center San Diego
Diego Bioskills and Simulation
Training Center
San Diego, CA

Stanford Department of Surgery
Education Institute
Stanford, CA

UC Davis Health, Center for
Virtual Care
Sacramento, CA

UCSF Surgical Skills Center
San Francisco, CA

INDIANA

Indiana University Department of
Surgery Surgical Skills Center
Indianapolis, IN

MARYLAND

National Capital Region
Simulation Consortium
Bethesda, MD

MASSACHUSETTS

Lahey Center for Professional
Development and Simulation
Burlington, MA

MGH Learning Laboratory
Boston, MA

MICHIGAN

Beaumont Health Applebaum
Simulation Learning Institute
Royal Oak, MI

MINNESOTA

Mayo Clinic Multidisciplinary
Simulation Centers
Rochester, MN

The University of Minnesota,
M Simulation
Minneapolis, MN

MISSOURI

Washington University Institute
for Surgical Education (WISE)
St. Louis, MO

OHIO

Cleveland Clinic Simulation and
Advanced Skills Center
Cleveland, OH

OhioHealth Learning
Columbus, OH

TENNESSEE

University of Tennessee Center
for Advanced Medical Simulation
(UTCAMS)
Knoxville, TN

TEXAS

The Houston Methodist Institute
for Technology, Innovation and
Education (MITIE)
Houston, TX

University of Texas Medical
Branch Laboratory for Surgical
Training, Assessment and
Research (LSTAR)
Galveston, TX

VERMONT

Clinical Simulation Laboratory at
the University of Vermont
Burlington, VT

WASHINGTON

WWAMI Institute for Simulation
in Healthcare (WISH)
Seattle, WA

ACS-AEI COMMITTEES

The work of the ACS-AEI Consortium is largely done voluntarily through its committee structure. The enthusiasm, dedication, and tireless efforts of our volunteers strengthen the AEI community and further the field of simulation-based surgical education and training. Below is a listing of all AEI committees and committee chairs. To learn more about our committees and to view the full membership roster of each committee, visit facs.org/education/accreditation/aei/consortium/get-involved.

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Administration and Management Committee

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