JULY 2022 | VOLUME 107 NUMBER 7

Bulletin

ACS AMERICAN COLLEGE OF SURGEONS

Surgeons
Sowing
Hope

Get Ready for Clinical Congress 2022

2023
SAVE THE DATE

ACS QUALITY and SAFETY CONFERENCE

MINNEAPOLIS, MN
JULY 7-13, 2023

ACS AMERICAN COLLEGE OF SURGEONS

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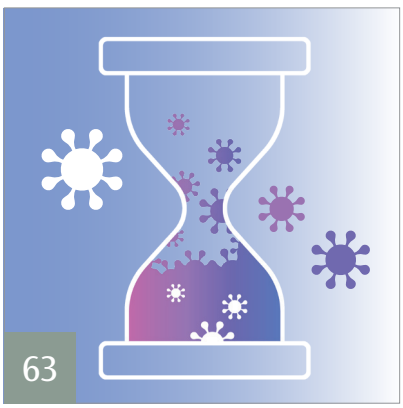

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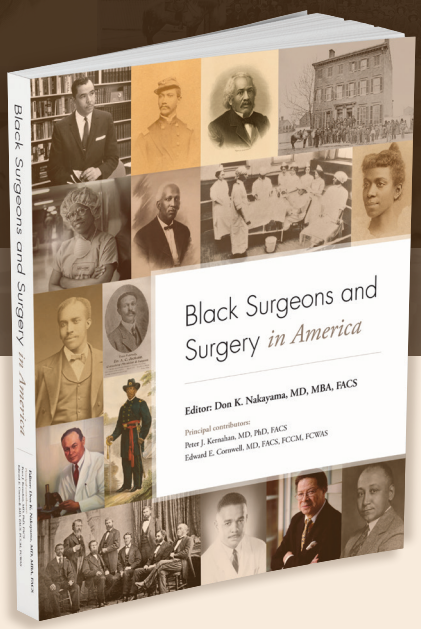

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The Top of the Escalator

by Patricia L. Turner, MD, MBA, FACS

When I think of attending the ACS Clinical Congress, two very distinct memories come to mind. The first occurred several years ago when I stood at the top of an escalator for nearly an hour. Every time I would start to walk away, someone I knew would ascend that escalator, and we would share greetings, catch up on life, discuss a case, or make more formal plans to discuss our careers or our research.

As the ACS returns to in-person meetings once again—first with the Trauma and Cancer centennial meetings and now with the Quality and Safety Conference in Chicago this month and Clinical Congress in San Diego in October—my time at the top of that escalator is very much in my thoughts.

We will once again experience that invaluable personal interaction with our colleagues and friends that, more than ever, will provide an important respite and re-energize us to continue our important work. After nearly 3 years of a pandemic and Zoom calls, we have earned the ability to be re-connected through personal interaction with our colleagues and the collaborative nature of thousands of surgeons gathered together.

As with many medical professions, exhaustion or burnout can affect so many surgeons. The ACS has a series of online resources available to provide support at *facs.org/wellness,* and I am confident that seeing colleagues for the first time in years and discussing best practices with our peers can buoy us as we strive to provide the highest possible quality in all that we do.

For early career surgeons, these in-person gatherings allow interactions with people who could have significant influence over their careers. By attending Clinical Congress, young surgeons can interact with those in similar practices, those who are engaged in similar research, those whose interests align with yours, and those connections may lead to collaboration, a new position, or a new growth opportunity. A discussion at the top of the escalator, in a meeting, or at a networking event could lead to a new research project, faculty position, or mentor in your surgical specialty.

The best of the best in our profession will be at Clinical Congress, everywhere we turn. By attending, you will leave a better surgeon. You will be fulfilled professionally and personally after spending those days being surrounded by our colleagues in surgery. You will feel a renewed commitment to the highest quality and safety for the patients we serve.

Quality and Safety Conference

Because quality and safety are the essential foundations of surgery, the College is especially excited to welcome the entire surgical team to Chicago for this year's Quality and Safety Conference, July 15–18. We will have world-class speakers, discussions about specific quality tools and techniques, sessions on how to manage your data, and opportunities to discuss specific elements at your institution that can enhance surgical quality.

By attending this conference, you will learn how to elevate (escalate if you will) your quality improvement programs and knowledge from good-to-great.

Conference Program Committee Chair **Caroline Reinke, MD, FACS,** has worked with surgeons and the staff team to provide an impressive schedule of events. I look forward to attending and seeing you there.

Expanded Access to Clinical Congress

It is clear the pandemic has changed so much of our world, including the way we learn, work, and collaborate, so for the first time the College is offering a hybrid Clinical Congress for those who cannot attend in person.

To complement the in-person program, some sessions will be livestreamed, and many others will

A discussion at the top of the escalator, in a meeting, or at a networking event could lead to a new research project, faculty position, or mentor in your surgical specialty.

be offered on-demand to both those joining us in San Diego and those attending virtually. Attending remotely will never be as impactful as being surrounded by our brilliant colleagues, but we are nonetheless glad that some level of participation is available to all in the House of Surgery.

Fabrizio Michelassi, MD, FACS, and members of the Clinical Congress Program Committee and ACS staff have organized an outstanding program, with hundreds of educational sessions, compelling lectures, novel research, CME opportunities, and plenty of networking and social events.

Among the many highlights will be the Opening Session on Monday morning, followed by the Martin Memorial Lecture. Immediate Past Executive Director **David B. Hoyt, MD, FACS,** will speak about his illustrious time at the helm of the American College of Surgeons. We will celebrate his legacy throughout the meeting, and those in attendance will have the opportunity to meet with him after he speaks.

Other important highlights include special sessions on how surgeons can collaborate with anesthesiologists to address challenges with Medicare and private payers, surgical lessons learned from the Ukrainian crisis, and a late-breaking panel with surgeons at the front lines of gun violence. Surgeons face complexity every day, and these issues demand that we confront them head on with our collective attention and expertise, including with the fresh eyes of our new Initiates.

Celebrating New Initiates

My second vivid memory of Clinical Congress was Convocation. The Sunday night Convocation is another annual highlight steeped in pomp and circumstance. Nothing compares with being acknowledged and welcomed as a new Fellow of the American College of Surgeons. It is an unforgettable and impactful experience for any surgeon, as it was for me years ago.

This year's Convocation will be particularly meaningful, as we have invited initiates from the classes of 2020, 2021, and 2022. Altogether, we will recognize the collective talents and leadership of 7,000 surgeons as new Fellows of the College.

A more complete list of highlights and activities at Clinical Congress can be found on pages 8–17, along with details about how you can register.

Surgeons as Family (Sometimes Literally)

Being together at conferences unites generations of surgeons. While we often refer to the ACS as a family of surgeons, in this issue we recognize surgeons who are from the same immediate family.

This month's feature on surgical families highlights fathers and daughters. Previous features showcased mothers and daughters and fathers and sons. In an upcoming issue, we will feature surgeon siblings.

As we prepare to carefully and safely celebrate a surgeon family reunion of sorts, the 2022 Clinical Congress and Quality and Safety Conference will be my first as Executive Director. I never would have imagined this years ago standing at the top of that escalator. Meetings and conferences such as these—specifically spending time with my gifted colleagues—afforded me the opportunity to be in this very position. I learned something from every one of those top-of-the-escalator talks, and I wish the same for you.

I am humbled by your confidence in me, and I am excited to see you in Chicago and San Diego. ♦

If you have comments or suggestions, please send them to Dr. Turner at executivedirector@facs.org.

Surgeons
Sowing
Hope

Get Ready for Clinical Congress 2022

by Matthew Fox, MSHC

For the first time since 2019, the American College of Surgeons (ACS) will host its annual Clinical Congress as a live, in-person event, Sunday, October 16, to Thursday, October 20, in San Diego, CA. Select content also will be offered in a virtual format, making it the first hybrid Clinical Congress.

"We are looking forward to welcoming you back to the in-person Clinical Congress 2022 in San Diego," said Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME, MAMSE, Director, ACS Division of Education. "The multidimensional program of this Clinical Congress is very strong and is founded on contemporary educational constructs. The sessions offer unique opportunities to acquire new knowledge and skills that may be applied to surgical practice."

Rich Content and Networking Opportunities

Clinical Congress presents an outstanding opportunity for surgeons to hear from the experts, learn about groundbreaking procedures and research, network with peers from around the globe, and gain both clinical and nonclinical knowledge and skills, which they can put into practice immediately.

The Program Committee, under the leadership of ACS Regent Fabrizio Michelassi, MD, FACS, MAMSE, has developed a cutting-edge scientific program to address critical education and training needs and equip surgeons with the skills they need to achieve the best outcomes in the ever-changing healthcare environment.

"The program this year is very rich, and there will be sessions of interest for everybody, whether they are Panel Sessions, Named Lectures, Meet-the-Expert sessions, or Town Halls," said Dr. Michelassi. "I encourage each of you to come and reestablish those personal and professional connections that we have enjoyed over the years."

The theme of Clinical Congress 2022 is Surgeons Sowing Hope, selected by ACS President Julie A. Freischlag, MD, FACS, DFSVS, MAMSE, who has asked all members of the surgical community to enhance recovery, elevate healing, and spread hope for patients, communities, teams, and themselves. This year's program promises to help surgeons and care teams engender optimism through unbeatable educational programming, with hundreds of sessions across the conference's 5 days.

From the more than 120 Panel Sessions to the 12 Named Lectures to the dozens of Postgraduate Courses and beyond, Clinical Congress 2022 will offer the best surgical education for surgeons at all career levels, along with wellness activities and social events such as the popular Taste of the City.

"We will have an incredible opportunity for networking with colleagues whom we haven't been able to see for almost 3 years," said Patricia L. Turner, MD, MBA, FACS, ACS Executive Director. "Clinical Congress allows you to literally stand in one place and see friends and colleagues from around the world."

New Fellows

A highlight of the annual Clinical Congress is the Convocation ceremony, which confers Fellowship upon surgeons who have successfully met the College's requirements and standards and who are committed to adhering to the ACS motto, "To Heal All with Skill and Trust." The ceremony, on Sunday evening, also will include recognition of Honorary Fellows, presentation of the Distinguished Service Award, installation of ACS Officers and Officers-Elect, and the Presidential Address.

This year, in addition to the 2022 Initiates, Initiates from 2020 and 2021—who were welcomed into Fellowship virtually because of COVID-19—have been invited to participate in this once-in-a-lifetime honor.

Anton Sidawy, MD, MPH, FACS, MAMSE, Chair of the ACS Board of Regents, strongly recommends that Initiates who are able make it to San Diego attend Convocation and Clinical Congress this year. "It's a moment of pride and a moment of celebration. I think it would be great to celebrate it, all of us together, and have as many people as possible come to Clinical Congress," he said.

The expansive Scientific Forum at Clinical Congress offers the opportunity to learn about the latest high-quality, in-progress scientific and academic surgery reports, including updates on late-breaking clinical trials.

Esteemed Named Lecturers

One of the most popular features of Clinical Congress is the series of Named Lectures, which provide attendees with an opportunity to hear internationally renowned surgeons and figures in healthcare share their perspectives and insights on medicine and surgery. This year, 12 lectures will be offered, with a new Metabolic and Bariatric Surgery Lecture added.

"Bariatric and metabolic surgery is so important and widespread today that the Program Committee is making an effort to increase offerings in this particular field—not only for those surgeons who perform the procedures, but also for general surgeons who might be called upon to care for complications," Dr. Michelassi explained.

The Martin Memorial Lecture, delivered immediately after the Opening Ceremony on Monday, will be given by David B. Hoyt, MD, FACS, MAMSE. As the Immediate Past ACS Executive Director, Dr. Hoyt will reflect on the challenges and successes of his 12 years as a leader of the College. Following the lecture, Dr. Hoyt will participate in a meet-and-greet with in-person attendees.

"We will all want to hear Dr. Hoyt's reflections on a career well-served, supporting all of us in the House of Surgery," Dr. Turner said.

The Named Lectures will be presented in-person and livestreamed. Each lecture also will be recorded and made available for on-demand viewing within an hour after the live presentation.

Other Named Lecture highlights include:

- The Scudder Oration on Trauma, delivered by Ronald M. Stewart, MD, FACS, Immediate Past Medical Director of ACS Trauma Programs, who will speak on A Century of Commitment to Optimal Trauma Care: Lessons Learned and Opportunities for the Future

- The Excelsior Surgical Society/Edward D. Churchill Lecture, delivered by David V. Feliciano, MD, FACS, MAMSE, who will recount the Extraordinary Evolution of Surgery for Abdominal Trauma

- The Olga M. Jonasson Lecture, delivered by Omaida C. Velazquez, MD, FACS

Special Sessions

Recent Clinical Congresses have included Special Sessions on timely topics of interest to ACS members, and this year the College will be offering three sessions you won't want to miss.

The ACS Academy of Master Surgeon Educators® session, Advancement and Promotion of Surgery Faculty Based on Educational Accomplishments, will address career progression using the framework of scholarship—discovery, integration, scholarship of application, and scholarship of teaching, as well as educational leadership and other contributions.

The Ukrainian Crisis: Surgical Lessons Learned will feature surgeons who have been directly involved in caring for individuals injured in the ongoing war between Russia and Ukraine. Panelists will offer first-hand accounts of the unique surgical issues in this conflict, with respect to the types of weapons used, the high casualty rate among civilians, and targeting of hospitals by Russian forces.

Surgeons on the Frontline of Violence will examine the ongoing firearm violence epidemic in the US. This session will feature multiple national leaders who will discuss efforts to address this crisis and reduce morbidity and mortality related to firearm injuries.

Multipart Postgraduate Courses

Because the most effective learning requires consistent engagement, this year's conference will use a longitudinal approach to education and offer dozens of multipart Postgraduate Courses—16 Didactic Courses and 16 Skills Courses—that will include preconference work, live and in-person courses at Congress, and a live Zoom panel discussion a few weeks after Clinical Congress.

This multifaceted approach will enable learning activities to be spaced out over an extended period

CLINICAL CONGRESS 2022

Meet your credentialing and board certification/recertification requirements:

- For in-person registrants, up to 245.25 *AMA PRA Category 1 Credits*™ attending live and on-demand sessions by May 1, 2023
- For virtual registrants, up to 196.75 *AMA PRA Category 1 Credits*™ for viewing streaming and on-demand sessions by May 1, 2023
- More than 35 sessions designated as Credit to Address Regulatory Mandates
- More than 100 sessions designated as Credit to Address Accreditation/Verification Requirements
- More than 25 nonticketed sessions (and more than 30 ticketed sessions) offering Self-Assessment Credit

to promote reflection, application, and retention of course content. It also will provide participants with increased opportunities for interaction with the course faculty. Special certificates will be offered for successful completion of these courses to support the professional activities of the attendees.

Didactic Courses will cover topics including emergency general surgery, global health competencies, and general surgery coding. Skills Courses will cover topics such as building a comprehensive anti-reflux center with diagnostic and therapeutic capabilities in a rural setting, fundamentals of oncoplastic breast surgery, and endoscopic management of bariatric surgery complications, among others.

(Note that each Postgraduate Course has an additional charge payable at registration.)

Scientific Forum, Panel Sessions, and More

The expansive Scientific Forum at Clinical Congress offers the opportunity to learn about the latest high-quality, in-progress scientific and academic surgery reports, including updates on late-breaking clinical trials. From research presentations to ePosters, the Scientific Forum offers scientists of all experience levels—from medical students to experienced ACS Fellows—the opportunity to share their promising results at one of the largest surgical meetings in the world.

Scientific Forum sessions take place throughout the conference and are arranged in a specialty-specific format (cardiac surgery, pediatric surgery, and so on).

More than 120 Panel Sessions will feature groups of experts delivering information and updates on a range of topics, from exploring disparities in breast cancer care to sharing surgeons' experiences in navigating professional challenges, including strategies for making a pregnancy work during surgical training.

Of note is the return of Ten Hot Topics in Surgery Panel Sessions on Thursday morning. These popular sessions will include discussion of the most pressing topics in general surgery, advocacy, surgical oncology, and patient safety. Each session will include time for questions and answers.

In addition, Video-Based Education Sessions will showcase detailed surgical procedures, while Meet-the-Expert Sessions and Town Hall Meetings will provide a more informal learning experience that will allow you to engage in conversations with surgeon thought leaders and other colleagues.

A brief outline of Named Lectures, Panel Sessions, and Special Sessions follows on pages 11–17.

Exhibit Hall

Monday through Wednesday, you will be able to visit ACS Central and the Technical Exhibition, where more than 100 companies will display their products, innovations, and services. The exhibition provides an opportunity to explore the surgical marketplace by comparing products firsthand and planning purchases.

Registration opens this month. Continue to check ACS communications channels for the latest information and visit *facs.org/clincon2022*. ♦

MATTHEW FOX is Digital Managing Editor, Division of Integrated Communications, Chicago IL.

Sessions-at-a-Glance by Day

Key to Sessions/Course Codes: NL Named Lecture PS Panel Session SL Special Session

Program subject to change. See facs.org/clincon2022 for a full list of available sessions.

TIME	CODE	SESSION TITLE AND LEADER(S)
SUNDAY, OCTOBER 16		
7:00-3:30	PS001	**8th Annual Excelsior Surgical Society Meeting: Partnerships to Overcome the Peacetime Effect** *Moderator:* Danielle B. Holt, MD, FACS; *Co-Moderator:* Jeremy W. Cannon, MD, FACS
6:00-8:00		**Convocation**
MONDAY, OCTOBER 17		
8:00-9:00		**Opening Ceremony**
9:00-9:30	NL01	**Martin Memorial Lecture	*Reflections*** *Presiding Officer:* E. Christopher Ellison, MD, FACS, MAMSE; *Introducer:* Anthony Atala, MD, FACS, MAMSE; *Lecturer:* David B. Hoyt, MD, FACS, MAMSE
9:45-10:45	NL01A	**Meet and Greet** *Lecturer:* David B. Hoyt, MD, FACS, MAMSE
	NL02	**John H. Gibbon Jr., Lecture	*Trust, Resilience, and the Role of the M&M Conference*** *Presiding Officer and Introducer:* Joseph F. Sabik, MD, FACS; *Lecturer:* Gail E. Darling, MD, FACS, FRCSC
9:45-11:15	PS101	**Diverticulitis 2022: What's New, What's Old, and What You Need to Know!** *Moderator:* Paula Denoya, MD, FACS; *Co-Moderator:* Maher A. Abbas, MD, FACS, FASCRS
	PS102	**Exploring Disparities in Breast Cancer** *Moderator:* Kathie-Ann P. Joseph, MD, FACS; *Co-Moderator:* Preeti D. Subhedar, MD, FACS
	PS103	**Difficult Vascular Injuries that You Can Still Save If You Know What to Do!** *Moderator:* Juan A. Asensio, MD, FACS; *Co-Moderator:* Todd E. Rasmussen, MD, FACS
	PS104	**Skin Cancer Panel: Non-Melanoma Skin Cancer** *Moderator:* Dennis H. Kraus, MD, FACS; *Co-Moderator:* Maie A. St. John, MD, PhD, FACS
	PS105	**Security, I Think We Have a Problem: Danger in the Safest Places** *Moderator:* Sharon L. Stein, MD, FACS; *Co-Moderator:* Debra G. Koivunen, MD, FACS
	PS106	**Robots in Rural Operating Rooms: Not Science Fiction Any Longer!** *Moderator:* Benjamin T. Jarman, MD, FACS; *Co-Moderator:* Jill S. Ties, MD, FACS
11:30-1:00	PS107	**When Treating Appendicitis Is Not Easy** *Moderator:* Randall S. Zuckerman, MD, FACS; *Co-Moderator*: Deepa Magge, MD, FACS
	PS108	**Changing Paradigms for Treatment of Pancreatic and Gastric Cancer: Expansion of Neoadjuvant Therapy** *Moderator:* Victor Zaydfudim, MD, FACS; *Co-Moderator:* Ching-Wei D. Tzeng, MD, FACS
	PS109	**Ultra ERAS: The Next Generation of Enhanced Recovery Programs** *Moderator:* Lawrence Lee, MD, FACS; *Co-Moderator:* Traci L. Hedrick, MD, FACS
	PS110	**Structural Racism: What It Is and What It Means for Surgeons and Their Patients** *Moderator:* Alonso Andrade, MD, FACS; *Co-Moderator:* Brian H. Williams, MD, FACS
	PS111	**The Commission on Cancer: 100 Years of Quality Cancer Care** *Moderator:* Timothy W. Mullett, MD, MBA, FACS; *Co-Moderator:* Daniel J. Boffa, MD, FACS
	PS112	**Disclosure without Fear of Reprisal** *Moderator:* Tina R. Desai, MD, FACS; *Co-Moderator:* John G. Carson, MD, FACS
	PS113	**Antibiotic Stewardship in the Treatment of Surgical Infections** *Moderator:* Clay C. Burlew, MD, FACS; *Co-Moderator:* John E. Mazuski, MD, FACS
	PS114	**Humanitarian Surgical Outreach at Home and Abroad: Reports of the 2021 Volunteerism and Humanitarian Award Winners** *Moderator:* Darrell Boone, MD, FACS; *Co-Moderator:* Manoj Monga, MD, FACS
1:15-2:15	SL01	**ACS Academy of Master Surgeon Educators®: Advancement and Promotion of Surgery Faculty Based on Educational Accomplishments** *Co-Moderator:* L.D. Britt, MD, MPH, DSc(Hon), FACS, FCCM, FRCSEng(Hon), FWACS(Hon), FRCSI(Hon), FCS(SA)(Hon), FRCSGlasg(Hon), MAMSE; *Co-Moderator:* Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME, MAMSE

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TIME	CODE	SESSION TITLE AND LEADER(S)
MONDAY, OCTOBER 17, CONTINUED		
2:30-3:30	NL03	**Charles G. Drake History of Surgery Lecture** | ***Dr. Charles G. Drake—A Personal History*** *Presiding Officer and Introducer:* James S. Harrop, MD, FACS; *Lecturer:* James M. Drake, BSE, MBBCh, MSc, FACS, FRCSC
2:30-4:00	PS115	**Colorectal Anastomotic Leak** *Moderator:* Roberto Taruselli Morencio, MD, FACS; *Co-Moderator:* John C. Alverdy, MD, FACS
	PS116	**Contemporary Management of Gallbladder Cancer** *Moderator:* Flavio G. Rocha, MD, FACS; *Co-Moderator:* Shishir Maithel, MD, FACS
	PS117	**Patient Injury and Death: The Surgeon as the Second Victim** *Moderator:* Andrew L. Warshaw, MD, FACS, MAMSE; *Co-Moderator:* Haytham M.A. Kaafarani, MD, FACS
	PS118	**When to Use Molecular FNA Testing for Thyroid Nodules** *Moderator:* Mark E. Zafereo, MD, FACS; *Co-Moderator:* Sally E. Carty, MD, FACS
	PS119	**The Severely Injured Hand: Optimal Care for Optimal Outcomes** *Moderator:* Jennifer F. Waljee, MD, FACS; *Co-Moderator:* Jeffrey B. Friedrich, MD, FACS
	PS120	**A Multicultural Primer on Death and Dying: Improving Goals of Care Discussions for Surgical Patients Facing the End of Life** *Moderator:* Kathleen A. LaVorgna, MD, FACS; *Co-Moderator:* Timothy R. Siegel, MD, FACS
	PS121	**Disorders of Sexual Differentiation: The Lifelong Management of a Pediatric Condition** *Moderator:* Kathleen D. van Leeuwen, MD, FACS; *Co-Moderator:* Emilie K. Johnson, MD, FACS
	PS122	**Using Synoptic Operative Notes: Best Practice for Clinical Care, Research, and Billing for Common Cancer Operations** *Moderator:* Matthew H. G. Katz, MD, FACS; *Co-Moderator:* Matthew J. Weiss, MD, FACS
2:30-5:45	PS123	**Latin America Day** *Moderator:* Natan Zundel, MD, FACS; *Co-Moderator:* Elena L. Gavito, MD, FACS
4:15-5:00	NL04	**I.S. Ravdin Lecture in the Basic and Surgical Sciences** | ***Wearable Technology and the Quantified Surgeon: The Forefront of Precision Surgery*** *Presiding Officer and Introducer:* Juan A. Sanchez, MD, FACS; *Lecturer:* Carla M. Pugh, MD, PhD, FACS, MAMSE
4:15-5:45	PS124	**No Glamor, No Glory, but So Important! Management of Anorectal Emergencies** *Moderator:* Tatiana C. Cardenas, MD, FACS; *Co-Moderator:* Morgan Schellenberg, MD, FACS
	PS125	**Optimizing Outcomes in Complex Abdominal Wall Reconstruction** *Moderator:* Jeffrey E. Janis, MD, FACS; *Co-Moderator:* Ajita S. Prabhu, MD, FACS
	PS126	**Amputation Advances: Emerging Technology** *Moderator:* L. Scott Levin, MD, FACS, MAMSE; *Co-Moderator:* Ian L. Valerio, MD, FACS
	PS127	**Global Engagement** *Moderator:* Girma Tefera, MD, FACS; *Co-Moderator:* Henri R. Ford, MD, FACS
	PS128	**Tips and Tricks of Adrenal Surgery** *Moderator:* Richard A. Prinz, MD, FACS; *Co-Moderator:* Nancy D. Perrier, MD, FACS, MAMSE
	PS129	**Multidisciplinary Management of Pelvic Organ Prolapse** *Moderator:* Liliana G. Bordeianou, MD, FACS; *Co-Moderator:* Roger R. Dmochowski, MD, FACS
	PS130	**Finding the Story: Using Qualitative Methods in Surgical Research** *Moderator:* Pasithorn A. Suwanabol, MD, FACS; *Co-Moderator:* Gretchen Schwarze, MD, FACS
	PS131	**Update: Nonoperative Management of Appendicitis in Children and Adolescents** *Moderator:* Katherine J. Deans, MD, FACS; *Co-Moderator:* Lauren Smithson, MD, FACS
	PS132	**Effective Mentoring across Gender and Cultural Boundaries** *Moderator:* Nancy L. Gantt, MD, FACS; *Co-Moderator:* Lori C. Pounds, MD, FACS
	PS133	**What Is New in Managing Sleep Disorders in Surgical Patients?** *Moderator:* Steven M. Roser, DMD, MD, FACS; *Co-Moderator:* Paul Schalch, MD, FACS

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TIME	CODE	SESSION TITLE AND LEADER(S)
TUESDAY, OCTOBER 18		
8:00-9:00	NL05	**Herand Abcarian Lecture** *Presiding Officer and Introducer:* Eric G. Weiss, MD, FACS; *Lecturer:* David E. Beck, MD, FACS
8:00-9:30	PS201	**Update on the Use of Genomic Profiling in Breast Cancer** *Moderator:* Laurie J. Kirstein, MD, FACS; *Co-Moderator:* Christine Laronga, MD, FACS
	PS202	**Contemporary Management of Lower Gastrointestinal Bleeding** *Moderator:* Bryan K. Richmond, MD, MBA, FACS; *Co-Moderator:* Susan Galandiuk, MD, FACS
	PS203	**Management of Neonatal and Pediatric Inguinal Hernias: Open versus Laparoscopic** *Moderator:* Bethany Slater, MD, FACS; *Co-Moderator:* Lauren Smithson, MD, FACS
	PS204	**Finding the Joy in Surgery** *Moderator:* John D. Mellinger, MD, FACS; *Co-Moderator:* Jennifer E. Rosen, MD, FACS
	PS205	**Reinterventions in Trauma** *Moderator:* Fernando Machado Rodriguez, MD, FACS; *Co-Moderator:* Julio L. Trostchansky, MD, FACS
	PS206	**Comprehensive Care for the Cancer Patient: From Diagnosis to Survivorship** *Moderator:* Susan D. McCammon, MD, FACS; *Co-Moderator:* Timothy W. Mullett, MD, MBA, FACS
	PS207	**Surgical Pain Management in the Setting of Opioid Tolerance and Misuse** *Moderator:* Bridget N. Fahy, MD, FACS; *Co-Moderator:* Jonah Stulberg, MD, FACS
8:00-11:15	PS209	**Spectacular Cases** *Moderator:* Juan C. Paramo, MD; *Co-Moderator:* Mark T. Savarise, MD, FACS
9:45-10:45	NL06	**Excelsior Surgical Society/Edward D. Churchill Lecture** | ***The Extraordinary Evolution of Surgery for Abdominal Trauma*** *Presiding Officer and Introducer:* Danielle B. Holt, MD, FACS; *Lecturer:* David V. Feliciano, MD, FACS, MAMSE
9:45-11:15	PS210	**Update on Gastric Cancer Management** *Moderator:* Lorenzo E. Ferri, MD, FACS; *Co-Moderator:* Yanghee Woo, MD, FACS
	PS211	**Not Everything Anorectal Is a Hemorrhoid** *Moderator:* Heather L. Yeo, MD, FACS; *Co-Moderator:* Ariane Abcarian, MD, FACS
	PS212	**Parastomal Hernias: Prevention, Detection, and Treatment** *Moderator:* Eric M. Pauli, MD, FACS; *Co-Moderator:* Jason F. Hall, MD, FACS
	PS213	**Managing Discrimination and Bias from Patients and Families** *Moderator:* Callisia Clarke, MD, MS, FACS, FSSO; *Co-Moderator:* Mio Kitano, MD, FACS
	PS214	**Real-World Compensation Beyond the RVU** *Moderator:* Christopher K. Senkowski, MD, FACS; *Co-Moderator:* Frank G. Opelka MD, FACS
	PS215	**Contemporary Controversies in Traumatic Brain Injury Management** *Moderator:* Ali Salim, MD, FACS; *Co-Moderator:* Maya Babu, MD, MBA, FACS
	PS216	**"And by the Way, She's Pregnant": What Every Surgeon Should Know About Pre-, Peri-, and Postoperative Considerations in the Pregnant Patient** *Moderator:* Alan D. Garely, MD, FACS; *Co-Moderator:* Cynthia L. Talley, MD, FACS
	PS217	**Choosing Surgery Residents in a Pass/Fail World** *Moderator:* Brian R. Smith, MD, FACS; *Co-Moderator:* Amy N. Hildreth, MD, FACS
	PS241	**Managing Complex Wounds: Acute to Chronic** *Moderator:* Steven D. Wexner, MD, PhD(Hon), FACS, FRCS(Eng), FRCS(Ed), FRCSI(Hon), FRCS(Glasg, Hon), MAMSE; *Co-Moderator:* David J. Welsh, MD, MBA, FACS
11:30-12:30	SL02	**When 1+1 Can Equal 3: How ASA and ACS Can Work Together to Address Our Challenges with Medicare and Private Pay** *Moderator:* Julie A. Freischlag, MD, FACS, FRCSEd(Hon), DFSVS, MAMSE; *Co-Moderator:* Randy M. Clark, MD, FASA
12:45-1:30	NL07	**Scudder Oration on Trauma** | ***A Century of Commitment to Optimal Trauma Care | Lessons Learned and Opportunities for the Future*** *Presiding Officer and Introducer:* Jeffrey D. Kerby, MD, PhD, FACS; *Lecturer:* Ronald M. Stewart, MD, FACS

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TIME	CODE	SESSION TITLE AND LEADER(S)
TUESDAY, OCTOBER 18, CONTINUED		
12:45-2:15	PS218	**Emergency Colon and Rectal Surgery: What All Surgeons Need to Know** *Moderator:* Jennifer S. Beaty, MD, FACS; *Co-Moderator:* Harry T. Papaconstantinou, MD, FACS
	PS219	**Great Biliary Debates** *Moderator:* Dana A. Telem, MD, MPH, FACS; *Co-Moderator:* Leslie M. Kobayashi, MD, FACS
	PS220	**Nutritional and Physical Conditioning Improves Surgical Outcomes in Frail Patients** *Moderator:* Carlos E. Marroquin, MD, FACS; *Co-Moderator:* Cindy J. Kin, MD, FACS
	PS221	**Expert Panel on Prolonged Intubation and Tracheostomy in the COVID-19 Era** *Moderator:* Dennis H. Kraus, MD, FACS; *Co-Moderator:* Lena M. Napolitano, MD, FACS, MAMSE
	PS222	**Managing Retroperitoneal Injuries: As Easy as (Zone) 1-2-3** *Moderator:* Edward C. Osterberg, MD, FACS; *Co-Moderator:* Kenneth L. Mattox, MD, FACS, MAMSE
	PS223	**Ethical Implications of Structural Racism** *Moderator:* Fabrizio Michelassi, MD, FACS, MAMSE; *Co-Moderator:* Andrea A. Hayes, MD, FACS
	PS224	**Updates on Clinical Trials in Thoracic Surgery** *Moderator:* James Huang, MD, FACS; *Co-Moderator:* Karen M. Kim, MD, FACS
12:45-5:00	PS225	**Association of Program Directors in Surgery (APDS) Panels** *Moderator:* Kyla P. Terhune, MD, MBA, FACS; *Co-Moderator:* Jeremy M. Lipman, MD, MHPE, FACS
2:30-3:30	NL08	**Olga M. Jonasson Lecture	*The Authentic Endorsement of Diversity, Equity, and Inclusion in Academic Surgery: A Second Renaissance in Its Inception*** *Presiding Officer and Introducer:* Sharon L. Stein, MD, FACS; *Lecturer:* Omaida C. Velazquez, MD, FACS
2:30-4:00	PS226	**Robots in Colorectal Surgery: Advantages over Open and Laparoscopic Surgery** *Moderator:* Eric G. Weiss, MD, FACS; *Co-Moderator:* Jamie A. Cannon, MD, FACS
	PS227	**The Role of Preoperative Therapy for Patients with Soft Tissue Sarcoma** *Moderator:* Valerie P. Grignol, MD, FACS; *Co-Moderator:* John E. Mullinax, MD, FACS
	PS228	**Mobile Health Introduction and Update: mHealth and Its Impact on You and Your Patients** *Moderator:* Robert A. Meguid, MD, FACS; *Co-Moderator:* Heather L. Evans, MD, FACS
	PS229	**Pretzel Logic: Managing Devastating Pelvic Fractures** *Moderator:* Todd Costantini, MD, FACS; *Co-Moderator:* Zsolt J. Balogh, MD, PhD, FACS
	PS230	**100 Years of the Committee on Trauma: Celebrating Successes and Charting Our New Course** *Moderator:* Jeffrey D. Kerby, MD, PhD, FACS; *Co-Moderator:* Warren C. Dorlac, MD, FACS
	PS231	**Complementary Medicine Approaches to Common Surgical Issues: Pain, Nausea, Flatus, and Anxiety** *Moderator:* Viraj Master, MD, FACS; *Co-Moderator:* Sima P. Porten, MD, FACS
	PS232	**Bias-Free: Avoiding Gender, Racial, and Other Unintended Biases in Reference Letters, Evaluations, and the Interview Process** *Moderator:* Barbara L. Bass, MD, FACS, MAMSE; *Co-Moderator:* Ainhoa Costas-Chavarri, MD, FACS
2:30-5:45	PS233	**Ethics Colloquium: Can I Fire My Patient? The Duty to Care and Limits of Accommodation** *Moderator:* Anne C. Mosenthal, MD, FACS, MAMSE; *Co-Moderator:* Linda G. Phillips, MD, FACS
4:15-5:45	PS208	**Surgeons in Revolution: A History of Surgeons in the Midst of Upheaval** *Moderator:* Don K. Nakayama, MD, FACS; *Co-Moderator:* Theodore N. Pappas, MD, FACS
	PS234	**Advanced Diagnostic and Therapeutic Colonoscopy** *Moderator:* Mark W. Puls, MD, FACS; *Co-Moderator:* Michael D. Sarap, MD, FACS
	PS235	**What Comes First? Priorities for Challenging Injury Combinations in Multiple Trauma** *Moderator:* Jennifer M. Gurney, MD, FACS; *Co-Moderator:* Stephanie L. Bonne, MD, FACS
	PS236	**Strategies to Mitigate Lapses in Professionalism** *Moderator:* Amy L. Halverson, MD, FACS, FASCRS; *Co-Moderator:* Amit R. T. Joshi, MD, FACS
	PS237	**Imaging and Biomarkers to Detect Prostate Cancer** *Moderator:* Kelly Stratton, MD, FACS; *Co-Moderator:* Stephen B. Williams, MD, FACS

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TIME	CODE	SESSION TITLE AND LEADER(S)
TUESDAY, OCTOBER 18, CONTINUED		
4:15-5:45	PS238	**Pregnancy during a Surgical Career: Strategies for Making It Work in Academic and Private Practice** *Moderator:* Nasim Hedayati, MD, FACS; *Co-Moderator:* Amalia Stefanou, MD, FACS
	PS239	**Pediatric Tracheomalacia: State of the Art** *Moderator:* Sanjay R. Parikh, MD, FACS; *Co-Moderator:* Charles J. Smithers, MD, FACS
	PS240	**The "Expert Witness": Friend or Foe?** *Moderator:* L.D. Britt, MD, MPH, DSc(Hon), FACS, FCCM, FRCSEng(Hon), FWACS(Hon), FRCSI(Hon), FCS(SA)(Hon), FRCSGlasg(Hon), MAMSE; *Co-Moderator:* Gerald B. Healy, MD, FACS, FRCSI(Hon), FRCS(Hon), MAMSE
WEDNESDAY, OCTOBER 19		
8:00-9:00	NL09	**Distinguished Lecture of the International Society of Surgery (ISS) | *Sowing Hope Beyond the Borders: Introducing a Program of Safe Laparoscopic Surgery in Mexico*** *Presiding Officer and Introducer:* Raymond R. Price, MD, FACS; *Lecturer:* Eduardo Moreno-Paquentin, MD, FACS
8:00-9:30	PS301	**Oncoplastic Breast Surgery** *Moderator:* Andrea L. Pusic, MD, FACS; *Co-Moderator:* Walton Taylor, MD, FACS
	PS302	**Cystic Tumors of the Pancreas: Different Management Strategies** *Moderator:* Carlos Fernandez-del Castillo, MD, FACS; *Co-Moderator:* Marco Del Chiaro, MD, PhD, FACS
	PS303	**The Failed Fundoplication: Evaluation and Management** *Moderator:* Michael D. Holzman, MD, FACS; *Co-Moderator:* Brant K. Oelschlager, MD, FACS
	PS304	**Use of Virtual Reality and 3-D Imaging in Surgical Planning** *Moderator:* Jay Redan, MD, FACS; *Co-Moderator:* Hisakazu Hoshi, MD, FACS
	PS305	**Improving Surgeon Access to National Institutes of Health and Other Extramural Funding** *Moderator:* Todd K. Rosengart, MD, FACS; *Co-Moderator:* Ankush Gosain, MD, PhD, FACS
	PS306	**Peroral Endoscopic Myotomy (POEM) for Achalasia in Adolescents** *Moderator:* Timothy D. Kane, MD, FACS; *Co-Moderator:* Usman Ahmad, MBBS, FACS
	PS307	**Ethical and Moral Dilemmas in the Disclosure of Surgical Error** *Moderator:* Eric A. Singer, MD, FACS; *Co-Moderator:* Piroska K. Kopar, MD, FACS
	PS308	**Vascular Management of Tumor Resection** *Moderator:* Randall DeMartino, MD, FACS; *Co-Moderator:* Tam T. Huynh, MD, FACS
	PS309	**Maintaining the Passion: Career Possibilities Outside of Surgical Practice** *Moderator:* Christina Cellini, MD, FACS; *Co-Moderator:* Carter K. Lebares, MD, FACS
8:00-11:15	PS310	**Surgical Jeopardy** *Moderator:* Mark W. Bowyer, MD, FACS
9:45-10:45	NL10	**John J. Conley Ethics and Philosophy Lecture | *The Ethics of Belonging*** *Presiding Officer and Introducer:* Linda G. Phillips, MD, FACS; *Lecturer:* Mary L. Brandt, MD, MDiv, FACS
9:45-11:15	PS311	**Diagnosis and Management of the Patients with Suspected Bowel Obstruction** *Moderator:* Jonathan A. Laryea, MB, ChB, FACS; *Co-Moderator:* Dana M. Hayden, MD, FACS
	PS313	**Fournier's Gangrene/Necrotizing Soft Tissue Infections: Multidisciplinary Approach** *Moderator:* Benjamin N. Breyer, MD, MAS, FACS; *Co-Moderator:* Judith C. Hagedorn, MD, FACS
	PS314	**Advances in Thyroid Cancer Management: Predictive Models and Adjuvant Treatments** *Moderator:* Gregory W. Randolph, MD, FACS; *Co-Moderator:* Joseph Scharpf, MD, FACS
	PS315	**Incorporating Anti-Bias and Anti-Racist Training in Surgery** *Moderator:* Shannon M. Foster, MD, FACS; *Co-Moderator:* Erika A. Newman, MD, FACS
	PS316	**The Utility of Fluorescence Techniques in Thyroidectomy and Parathyroidectomy Operations** *Moderator:* Eren Berber, MD, FACS; *Co-Moderator:* Carmen C. Solorzano, MD, FACS
	PS317	**Social Media as a Source of Continuing Surgical Education and Peer Support** *Moderator:* Oscar K. Serrano, MD, FACS; *Co-Moderator:* Sean J. Langenfeld, MD, FACS
	PS342	**Surgeons on the Frontline of Gun Violence Safety Inside and Outside of the Operating Room** *Moderator:* Brendan T. Campbell, MD, MPH, FACS; *Co-Moderator:* Peter T. Masiakos, MD, FACS

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TIME	CODE	SESSION TITLE AND LEADER(S)
WEDNESDAY, OCTOBER 19, CONTINUED		
11:30-12:30	SL03	**The Ukrainian Crisis: Surgical Lessons Learned** *Moderator:* M. Margaret (Peggy) Knudson, MD, FACS; *Co-Moderator:* Jeffrey D. Kerby, MD, PhD, FACS
12:45-1:45	NL11	**Commission on Cancer Oncology Lecture	*Addressing and Decreasing Healthcare Disparities in Cancer Care and Accomplishments of the CoC on Its 100-Year Anniversary*** *Presiding Officer and Introducer:* Timothy W. Mullett, MD, MBA, FACS; *Lecturer:* Edward E. Partridge, MD, FACS
12:45-2:15	PS318	**Unique Challenges in Hernia Surgery** *Moderator:* Geoffrey Chow, MD, FACS; *Co-Moderator:* Tatiana C. Cardenas, MD, FACS
	PS319	**Optimal Management of Colorectal Cancer with Synchronous Liver Metastases: A Debate and Case-Based Discussion** *Moderator:* Rebecca A. Snyder, MD, FACS; *Co-Moderator:* Patricia Sylla, MD, FACS
	PS320	**Contemporary Management of Antithrombotic Agents in Surgical Patients** *Moderator:* Andrea T. Obi, MD, FACS; *Co-Moderator:* Leila Mureebe, MD, MPH, FACS
	PS321	**Diversity in Surgical Residency** *Moderator:* Akpofure P. Ekeh, MBBS, FACS; *Co-Moderator:* Yee Wong, MD, FACS
	PS322	**Multimodal Management of Desmoid Tumors** *Moderator:* Christina L. Roland, MD, FACS; *Co-Moderator:* Chandrajit P. Raut, MD, FACS
	PS323	**Advances in Deep Vein Thrombosis Management** *Moderator:* Nicolas J. Mouawad, MD, FACS; *Co-Moderator:* Patrick E. Muck, MD, FACS
	PS324	**Old and Injured: The Reality of Surgery at the End of the Career** *Moderator:* Stanley W. Ashley, MD, FACS, MAMSE; *Co-Moderator:* William Doscher, MD, FACS
	PS325	**The ACS International Scholars and Travelers 2022** *Moderator:* Georgios Tsoulfas, MD, PhD, FACS; *Co-Moderator:* Haytham M. A. Kaafarani, MD, FACS
2:30-3:30	NL12	**Metabolic and Bariatric Surgery Lecture	*Don't Stop Now*** *Presiding Officer and Introducer:* Matthew M. Hutter, MD, MPH, FACS; *Lecturer:* Bruce D. Schirmer, MD, FACS, MAMSE
2:30-4:00	PS326	**Colon Cancer: Is It Ever Routine?** *Moderator:* Emre Gorgun, MD, FASCRS, FACS; *Co-Moderator:* Elisabeth C. McLemore, MD, FACS, FASCRS
	PS327	**Acute Hepatobiliary Emergencies** *Moderator:* Pedro G. R. Teixeira, MD, FACS; *Co-Moderator:* Janet E. (Betsy) Tuttle, MD, FACS
	PS328	**Decision-Making in Complex Surgical Oncology Patients with Advanced Gastrointestinal Malignancy: Operative Implications on Palliation, Quality of Life, and Survival** *Moderator:* Eric C. Feliberti, MD, FACS; *Co-Moderator:* Carl R. Schmidt, MD, FACS
	PS329	**Management of GYN Problems Encountered by the General Surgeon at the Time of Surgery** *Moderator:* Charles A. Leath, MD, FACS; *Co-Moderator:* John H. Stewart, MD, FACS
	PS330	**Mutational Profiling and the Use of ctDNA as a Biomarker for Patients with Locoregional and Metastatic Colorectal Cancer** *Moderator:* Ching-Wei D. Tzeng, MD, FACS; *Co-Moderator:* Valentine N. Nfonsam, MD, FACS
	PS331	**Domestic Surgical Volunteerism** *Moderator:* Scott A. Leckman, MD, FACS; *Co-Moderator:* Sandra L. Freiwald, MD, FACS
	PS332	**Coping with Conflicted Commitment to Surgeon Health** *Moderator:* Catherine J. Hunter, MD, FACS; *Co-Moderator:* Linda G. Phillips, MD, FACS
	PS333	**How Private Equity May Create Disruption and Financial Conflict in Delivering Appropriate Surgical Care** *Moderator:* Jacob Moalem, MD, FACS; *Co-Moderator:* Eric A. Singer, MD, FACS
	PS334	**Metabolic Surgery: Update on Clinical Outcomes and Underlying Mechanisms** *Moderator:* Luke M. Funk, MD, FACS; *Co-Moderator:* Tammy Kindel, MD, FACS

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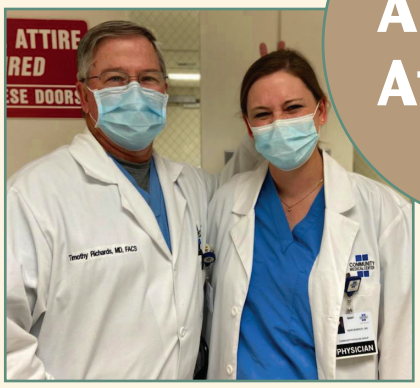
TIME	CODE	SESSION TITLE AND LEADER(S)
WEDNESDAY, OCTOBER 19, CONTINUED		
4:15-5:45	PS335	**Gastric Cancer Screening and Management around the World** *Moderator:* Christy Y. Chai, MD, FACS; *Co-Moderator:* Kazumi Kawase, MD, PhD, FACS
	PS336	**Diabetic Limb Salvage: It Takes a Village** *Moderator:* Kelly Kempe, MD, FACS; *Co-Moderator:* Wei Zhou, MD, FACS
	PS337	**Aorto-Esophageal and Cardio-Esophageal Fistulae** *Moderator:* Erin A. Gillaspie, MD, FACS; *Co-Moderator:* Ravi K. Ghanta, MD, FACS
	PS338	**Traumatic Injuries of the Skin and Soft Tissues: Not Just a Flesh Wound** *Moderator:* James C. Jeng, MD, FACS; *Co-Moderator:* Daniel M. Chase, MD, FACS
	PS339	**Colorectal Disorders: Transitioning Pediatric Patients to Adulthood** *Moderator:* Rebecca M. Rentea, MD, FACS; *Co-Moderator:* Alessandra Gasior, DO, FACS
	PS340	**Know Your Worth: Tips for Understanding and Negotiating a Surgical Employment Contract** *Moderator:* Jayme D. Lieberman, MD, FACS; *Co-Moderator:* Megan E. McNally, MD, FACS
	PS341	**A Surgical Quality Improvement Program Can Help Your Rural Hospital to Have High Surgical Quality Despite Low Volumes** *Moderator:* David J. Welsh, MD, MBA, FACS; *Co-Moderator:* Mark W. Puls, MD, FACS
THURSDAY, OCTOBER 20		
8:00-9:30	PS401	**Ten Hot Topics in General Surgery** *Moderator:* Kenneth W. Sharp, MD, FACS, MAMSE; *Co-Moderator:* E. Christopher Ellison, MD, FACS, MAMSE
	PS402	**Ten Hot Topics in Advocacy** *Moderator:* Patrick V. Bailey, MD, FACS; *Co-Moderator:* William G. Cioffi Jr., MD, FACS
	PS403	**Using Big Data to Advance Surgical Science: Sources, Methods, and Pitfalls** *Moderator:* Alex B. Haynes, MD, FACS; *Co-Moderator:* Zara Cooper, MD, FACS
9:45-11:15	PS404	**Ten Hot Topics in Surgical Oncology** *Moderator:* Douglas S. Tyler, MD, FACS; *Co-Moderator:* Sandra L. Wong, MD, MS, FACS
	PS405	**Ten Hot Topics in Patient Safety** *Moderator:* Juan A. Sanchez, MD, FACS; *Co-Moderator:* Anthony D. Yang, MD, MS, FACS
	PS406	**To Resect or Not: Management Strategies in the Spectrum of Clostridium Difficile-Associated Disease (CDAD)** *Moderator:* Brian S. Zuckerbraun, MD, FACS; *Co-Moderator:* David B. Stewart, MD, FACS



A Family Affair:

Father-Daughter Surgeons Share a Love of Healing

by
Diane S. Schneidman, MA

"It's nice to have someone you can talk to who understands what you're going through. Even if you have a really understanding spouse, they are never going to fully understand what you do, especially if they aren't in medicine."

—Tarin Worrest, MD

Editor's note: This is one of several feature stories in the *Bulletin* series on surgeon families. If you are interested in sharing stories about your dual-surgeon family or know of colleagues who have two or more surgeons in the family, contact Diane Schneidman, Editor-in-Chief, at dschneidman@facs.org.

More and more women are pursuing a career in surgery. For the women surgeons in this article, their surgeon fathers—either through nature or nurture—had some impact on their choice of profession.

Drs. Herand Abcarian and Ariane Abcarian

Somewhere in the back of her mind, Ariane Abcarian, MD, FACS, always knew she would probably become a surgeon like her father—Herand Abcarian, MD, FACS, former chair of colon and rectal surgery, John H. Stroger Jr. Hospital of Cook County (formerly Cook County Hospital), past-chairman, department of surgery, University of Illinois-Chicago (UIC), and professor emeritus at UIC.

"I would accompany my dad on rounds and sometimes hang out at the nurses' station or the lounge, but every now and then, I would get to go into a patient's room, and I just thought that was the coolest thing," she said. She particularly valued how appreciative her father's patients were of his work.

Nonetheless, "I really didn't decide on surgery until I was in medical school. I went to Eastern Virginia Medical School [Norfolk, VA], and ACS Past-President L.D. Britt, MD, MPH, FACS, was my advisor, so I probably didn't have much choice," Dr. Ariane Abcarian said.

"I told her, 'If you pick L.D. Britt as your advisor, you have one path only, and that's surgery,'" added Dr. Herand Abcarian. "He and I go back a long way. He was my resident at Cook County Hospital."

Because Ariane had a range of interests and talents, including art and history, Dr. Herand Abcarian cautiously advised her on pursuing a career in medicine and particularly surgery. "I told her, 'It is a calling. You have to love medicine with your heart and soul,'" he said.

"Once she got to medical school, she would call me during her rotations, and say, 'I can't stand medicine,'" Dr. Herand Abcarian said. "I would tell her, 'I do a lot of things during the day, but the one place I truly enjoy myself is in the operating room (OR). If you're not going to enjoy being in the OR, then you are going into the wrong business.' You have to love surgery, and that's what she agreed to commit to."

Dr. Ariane Abcarian said she and her father operated together several times when she was in training at UIC and Stroger Hospital.

"It's been lucky that he maintained his privileges and volunteered his time. I got to learn a lot," Dr. Ariane Abcarian said.

"In reality, I've always tried to stay out her way. I did not want to be overbearing and interfere with her judgment or decision-making by injecting my ideas. Even in the OR, she was the surgeon, and I was the assistant. She made the decisions, and I helped her do the case," Dr. Herand Abcarian said.

Both Drs. Abcarian share an affinity for certain cases. "I love anal fistulas. I don't know if that's because of nature or nurture," Dr. Ariana Abcarian said.

Throughout his career, Dr. Herand Abcarian has been involved in developing educational programs for the American College of Surgeons and always was selected to lead courses on anal-rectal fistulas. In fact,

Photos opposite, clockwise from top left:

Drs. Ariane Abcarian and Herand Abcarian after a case at John H. Stroger Jr. Hospital of Cook County.

Dr. Megan Lundgren on her surgical rotation as a medical student, with Dr. Eric Lundgren.

Drs. Zewditu Awfaw and Ingida Asfaw performing open-heart surgery at Detroit Medical Center.

Dr. Richards and Dr. Worrest at Community Medical Center.

Drs. Ariane Abcarian and Herand Abcarian at Cook County Hospital when she was a resident at UIC

Drs. Ariane Abcarian and Herand Abcarian performing surgery at John H. Stroger Jr. Hospital of Cook County; Margot Abcarian, RN (center), is the scrub nurse

he edited a book on the topic, *Anal Fistula: Principles and Management*.

"People started to refer their most difficult anal fistula cases to me—ones where the patient had undergone five or six operations without success," he said. "I still did colon cases, but I enjoyed complex fistulas the most, and I think Ariane has somewhat inherited that."

Dr. Ariane Abcarian still sees her parents often and continues to seek their advice. "My husband is not in medicine, so just having my dad available to be a sounding board and understand what it's like to be a surgeon and what I'm going through is really great," she said.

One generational shift that both Drs. Abcarian have observed is the emphasis on work-life equilibrium. "I don't think my parents had the benefits of work-life balance at all. He had so many accomplishments that came at a tremendous personal cost," Dr. Ariane Abcarian said. Her father and mother (a nurse at Stroger) "sacrificed a lot for their training and their patients. I think that now, surgeons have a little more ability to create that balance."

"Things have changed, and I believe they have changed for the better. My life was not all fun. It was very hard, and it was hard for my wife to raise our kids while I was away building a career or building a name internationally," added Dr. Herand Abcarian.

Dr. Richards and Dr. Worrest

Like Dr. Herand Abcarian, Timothy B. Richards, MD, FACS, a general surgeon who recently stopped operating but continues to serve as director of growth and outreach at Community Medical Center, Missoula, MT, tried to avoid pushing his daughter into surgery.

"First, you have to know my daughter. She was going to make her decision no matter what I said," Dr. Richards explained.

"There was a while when my parents tried to convince me to be a lawyer. When I decided to go to medical school, they tried to steer me to go into interventional radiology," said Tarin Worrest, MD, a minimally invasive and robotic surgeon at Community Medical Center.

Her father's advice was based on experience. "I've had a good run for the past 37 years, but it's not always been easy. There are certain sacrifices that you have to make when you decide to become a surgeon," Dr. Richards said.

"When you go into general surgery residency, you know it's probably one of the more unpleasant residencies that people go through—at least it was for me. One of the things we tried to instill in all our kids is that the job doesn't define me," added Dr. Richards, who was a US Army surgeon for 11 years before moving into private practice.

Dr. Worrest said what drew her to surgery was a love of anatomy and the joy of seeing patients get well quickly. "I liked knowing where the different structures are, and I really liked fixing things," Dr. Worrest said. "I tell people surgery can give you very immediate gratification. You have a bad gallbladder, a surgeon takes out the gallbladder, and you feel much better. I am doing something directly for the patient—putting my hands on them and working with them directly."

Dr. Timothy Richards (left) and Dr. Tarin Worrest at Dr. Worrest's white coat ceremony, Georgetown University School of Medicine, Washington, DC

Drs. Richards and Worrest at a meeting of the Society of American Gastrointestinal and Endoscopic Surgeons

Dr. Worrest's graduation from Georgetown University Medical School, with her father (left) and uncle, cardiothoracic surgeon Kenneth Richards, MD, FACS (right)

Her father offered a similar explanation for choosing surgery, adding that like his daughter, he continues to appreciate the changes in technology.

"I loved the innovations in surgery. We have all the cool gadgets and are always coming up with new procedures that can be done in less time," Dr. Richards said. For example, he started doing laparoscopy soon after its introduction and doing robotic-assisted operations before he retired from operating.

Having a surgeon parent does have its challenges, though. "When I was in medical school, he had this bad habit of drilling me over the phone," Dr. Worrest said. "My mom had to tell him to stop."

Even so, she said, "I still call him when I have done a really interesting case. He actually gave me my first consult when I first started in Missoula and had a complex patient."

"Now we talk a lot about the business side of medicine, which is something they don't really teach you in medical school or in residency," Dr. Worrest said. "Nobody teaches you how to build a referral base, for example. So, that's something he's helped me with."

"It's nice to have someone you can talk to who understands what you're going through. Even if you have a really understanding spouse, they are never going to fully understand what you do, especially if they aren't in medicine," Dr. Worrest said. "My husband, who is in sales, isn't really going to understand what I'm going through if I had a really difficult case or a patient had a poor outcome. It's nice to have someone who knows what that's like."

In addition, Drs. Worrest and Richards believe in, and are committed to, helping patients far from Missoula. "We've done some mission work in Guinea, West Africa. I fixed hernias in the middle of the jungle. Tarin went over there before she was a surgeon. It would be kind of cool to see her go back because that is the greatest place to operate on people who really need it and don't have healthcare," Dr. Richards said.

"I was still in high school at the time, and my job was to sterilize the instruments. That was my first time working adjacent to an OR, so I got to see a lot of patients with large hernias," Dr. Worrest said.

Drs. Ingida Asfaw, Sofya Asfaw, and Zewditu Asfaw

Ingida Asfaw, MD, FACS, a cardiothoracic surgeon at the Detroit Medical Center, MI, and its affiliate hospitals in the city, is no stranger to mission work. He is a past-recipient of the ACS Volunteerism Award for his work in his native Ethiopia and other developing nations.

Dr. Ingida Asfaw and his wife instilled in their daughters—Sofya Asfaw, MD, FACS, a trauma and critical care surgeon at the Cleveland Clinic, OH, and Zewditu Asfaw, MD, a cardiothoracic and critical care surgeon in Detroit—a commitment to serving others, regardless of the profession they chose.

"First and foremost, I'm extremely proud of my daughters and that they are in the specialty of surgery. They are serving humanity and the community. That alone is a wonderful position to have," Dr. Ingida Asfaw said. "In my effort to help them grow and choose the profession they liked I would tell them, 'Medicine is a noble profession. If that is what you want to do, I'll help you in any way possible to achieve your wishes and your goals and purpose in life.'"

From left: Dr. Ingida Asfaw (second from left) with his 2013 ACS/Pfizer International Volunteerism Award plaque, flanked by (from left): Drs. Zewditu Asfaw, Elizabeth Asfaw, and Sofya Asfaw

Drs. Sofya Asfaw (left) and Ingida Asfaw on the ACS shuttle bus at the 2019 Clinical Congress in San Francisco, CA

Dr. Sofya Asfaw can't recall a time when she wanted to be in any other profession. "For as long as I can remember, I always wanted to be a surgeon—actually a cardiothoracic surgeon like my father. That ended up being my sister, and I ended up being a trauma surgeon," she said. "I can say without a shadow of a doubt it was because of the big role model I had in front of me."

In contrast, Dr. Zewditu Asfaw said she originally wanted to be a lawyer, but "I joke that I inherited his bad genes. I did everything I could to fight the urge to go into cardiothoracic surgery. A lot of it was because I saw how hard my dad worked. When we were younger, he wasn't home as much as he or we would have wanted him to be."

"It wasn't just about him not being home as much as we would have liked, but also seeing what surgery entails—knowing what the lifestyle is like," added Dr. Sofya Asfaw. "I had questions about whether I could be present as a surgeon, as a mother, and do it all. That's definitely something we had to keep in mind, knowing how hard our father worked and knowing that he tried to make it to as much as he could, but there were certainly times when he couldn't make it to ballet recitals and other events. Balancing that with being a woman in surgery was definitely a consideration."

"He was very realistic with us," Dr. Zewditu Asfaw noted. "He would say, 'You know, as a female, going into surgery, it's going to be harder. You're going to be away from your family. If you're going to have children, you're going to have to juggle motherhood and surgery. So, make sure that is absolutely what you want to do.'"

Both sisters say one challenge they have faced in residency and practice as the daughters of a highly regarded surgeon is that patients and colleagues often ask if they are related to Dr. Ingida Asfaw.

"When I moved back home to Detroit, I started residency at the hospital where my dad was a very beloved attending," Dr. Zewditu Asfaw said. "I think every time I stepped into an elevator, people would ask me if I knew Dr. Asfaw because they saw my badge. By my chief year, I would say, 'I am Dr. Asfaw. Are you asking about my dad?'"

"People at the Cleveland Clinic will stop me and ask, 'Do you know Dr. Asfaw? He trained me,' or 'I worked with him.' I can't escape it, and I'm in another state," Dr. Sofya Asfaw added.

Dr. Zewditu Asfaw said she felt particular pressure to live up to her father's reputation when she was a cardiothoracic fellow at The University of Chicago, IL. "I felt like I always had to be 'on' because I didn't want to disappoint him. I still feel that way—like if I don't do things exactly the same way he does, it will disappoint him. But I've learned that as long as I'm happy, he's happy," she said.

"When your father is a surgeon and chief of staff of a hospital, it's a lot to live up to and some big shoes to fill, so sometimes you start to feel inadequate. You're always supposed to do better than your parents, but when your parents are the best, it's hard to do better than that," Dr. Sofya Asfaw added.

However, the sisters agree that the advantages of being descendants of an esteemed surgeon far outweigh the occasional disadvantages.

"When I was pregnant with my son, I couldn't stand for long periods of time. If it wasn't for my dad, my son

"[Our father] was very realistic with us. He would say, 'You know, as a female, going into surgery, it's going to be harder. You're going to be away from your family. If you're going to have children, you're going to have to juggle motherhood and surgery. So, make sure that is absolutely what you want to do.'"

—Zewditu Asfaw, MD

probably would not be here. My dad would come into the hospital and OR before me and might open the patient. I would take a break to go sit down, and he would start the case. It was like I was the attending, and he was the fellow," Dr. Zewditu Asfaw said.

"He's very open to learning, which is sort of unique," she added. "Some of the little spats we would have in the OR were about me wanting to do certain things a certain way, but he would let me take the lead and show him how I learned to do things in the fellowship. For an older surgeon, that's amazing."

"That's all a dad could want—for his children to do better, to do great things, to be innovators." Dr. Ingida Asfaw said. "I was very open to learning. I was in my early 80s and having her by my side helping to provide service to an urban and indigent population was a great joy to me."

Drs. Sofya and Zewditu Asfaw said their father is just one role model they have had. "This article is about us and our dad, but our mom [Elizabeth Asfaw, PhD] ran her own clinical lab in a time when it was the only Black, female-run laboratory in Detroit, if not the entire state of Michigan. She was a working mother and was on boards working with domestic violence victims, and she and my dad are both very passionate about giving back to Ethiopia," Dr. Zewditu Asfaw said.

"We have to give credit where credit is due, and that is to my mother who keeps us all together. There is absolutely no way my sister, my brother [who leads an affiliate of United Healthcare], and my dad could do what we do without her," Dr. Sofya Asfaw said. "She runs back and forth between states to take care of our children, so we can be surgeons and be sure the children are growing and thriving. There's no way we'd even be having this conversation if she didn't exist."

Drs. Eric Lundgren and Megan Lundgren

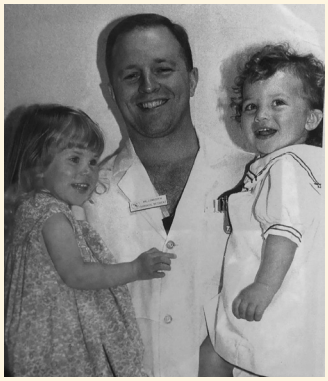
Like other daughters in this article, Megan Lundgren, MD, a minimally invasive and bariatric surgeon at Penn Highlands Healthcare, DuBois, PA, said she did not always plan to go into surgery. She considered a few other options in college but decided to go to medical school. "In medical school, I got to watch my dad operate while on my surgery rotation my fourth year," Dr. Megan Lundgren said. "It was probably my favorite rotation that I did during medical school."

Her father, Eric Lundgren, MD, FACS, a general surgeon at Penn Highlands Healthcare, also wasn't sure he wanted to be a surgeon when he went to college, both because of and despite the fact that his father was a respected general surgeon in DuBois.

"My dad [Wilbert Lundgren, MD] was a general surgeon, and I realized what a hard life it is, but I also realized how much he enjoyed what he did. Ultimately, I was fortunate enough to get into medical school, and I've never looked back. I think my kids saw how much I loved what I did and still love it. That's the influence we placed on our kids," said Dr. Eric Lundgren, whose wife is a nurse. "We just wanted them to work hard and have a productive life no matter what they chose."

DuBois is a small, rural town where most people know each other. "For the first 10 or 15 years of my practice, I felt compelled to fill the shoes of my dad. I can't tell you how many times I had patients tell me, 'I would have let your dad cut off my head and sew it back on.' I could have only hoped to glean the respect that my dad had in this community," he said.

"There were certainly times when I was growing up and I'd be at the baseball park or the grocery store, and someone would lift up their shirt and say, 'Oh, your dad took my gallbladder out,' or 'Your grandfather operated on me. These scars are from him,'" added Dr. Megan Lundgren.



Dr. Eric Lundgren as a surgical resident with his daughters (Megan Lundgren, right)

Three generations of general surgeons and Jefferson graduates at Dr. Megan Lundgren's graduation from Thomas Jefferson University Medical School, from left: Drs. Eric Lundgren, Wilbert Lundgren, and Megan Lundgren

"A lot of times, I'd see that my dad was one the heroes of our town because he really was the busiest and one of the only surgeons in town. As a community-based general surgeon, he feels a very strong commitment to the community as a whole," she added.

"I didn't know that I would be coming back to my hometown to practice surgery, but it certainly has a different feel" from training at a large academic medical center, said Dr. Megan Lundgren, a graduate of Thomas Jefferson University Medical School, Philadelphia, PA—her father's and grandfather's alma mater—who did her residency at Thomas Jefferson and her fellowship at the Cleveland Clinic.

Dr. Megan Lundgren's husband is a colon-rectal surgeon at Penn Highlands Healthcare, so family dinners, which occur almost nightly, tend to center on surgery. "It might be a little annoying for my mom and 4-year-old daughter because we do talk about surgery whenever we're together," she said.

Both Drs. Lundgren say they lean on each other and respect each other's opinions. "My first big case here, I called my dad over to come help me, and we frequently will even step in to get cases done faster."

"For us, being a family of surgeons, I think it's a legacy, and I'm particularly proud of the legacy," Dr. Eric Lundgren said. "It's just a very busy life, and in order to do it right, you have to obsess over it and totally delve into it to be what the community needs."

Dr. Megan Lundgren said keeping her family name and upholding its legacy worked to her advantage. "When I came back here, I was just starting a bariatric surgery program, and I think one reason I got so busy and got so many referrals was because of the last name Lundgren, because there are so many generations of surgeons here. I've actually had patients say, 'I trust you because I trust your dad.'

"It's sort of a relief to have my dad around. He has 31 years of experience, and it's good to have someone you can call who you can trust," she added.

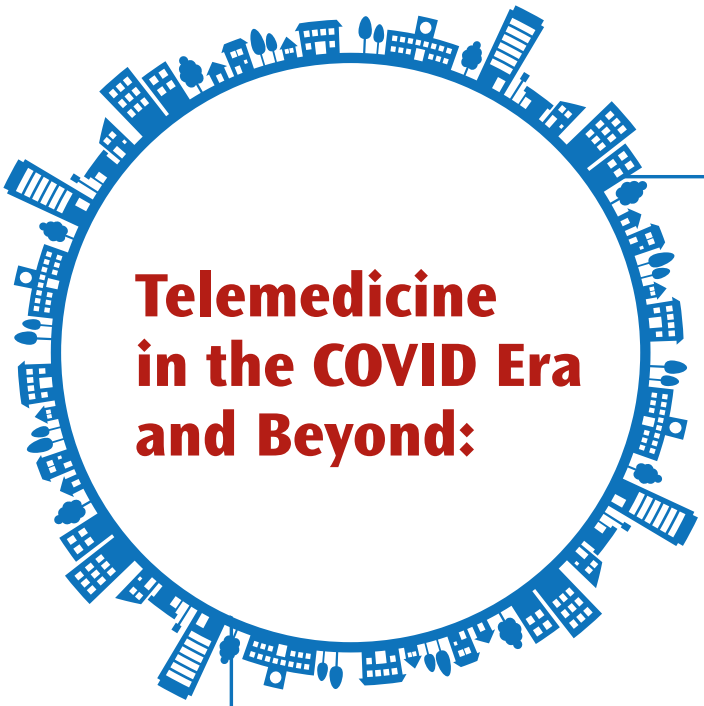
Despite her admiration for her family's heritage, "I still don't want the lifestyle that my dad had. He's still busier than I am. He has 4 days a week of two ORs a day. My block times and cases are much more limited than that just because he does so many different types of operations," Dr. Megan Lundgren said.

For example, if her daughter's daycare center schedules an event, she can block out time on her schedule to attend because she's an employed surgeon. "I will never be as busy as he's been, and that will be on purpose," she said.

"Most people of my kids' generation are subspecializing, so they have a limited scope. Now that doesn't mean they won't get horribly busy, but a lot of people look for niches now—not only to excel in that niche, but also so they can have a life outside of their practice, and that's being smart," Dr. Eric Lundgren added.

"I'm learning so much from Megan and my son-in-law. The camaraderie is great because I really didn't have that once my dad retired. It's nice to have another surgeon to talk to. I've been missing that for many years here. It's really nice when I'm between cases and I look up and either Megan or my son-in-law is there. It brightens my day." ♦

DIANE SCHNEIDMAN is Editor-in-Chief, *Bulletin of the American College of Surgeons*, Division of Integrated Communications, Chicago, IL.



Telemedicine in the COVID Era and Beyond:

Overcoming Barriers to Improve Access to Care

by Russell Woo, MD, FACS,
Annabel Barber, MD, FACS,
David Tom Cooke, MD, FACS,
Heather Evans, MD, FACS,
Sundeep Keswani, MD, FACS,
John Kirby, MD, FACS,
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HIGHLIGHTS

- Describes how the COVID-19 pandemic led to wider adoption of virtual care for surgical patients
- Provides case studies that highlight different advantages of telehealth, including improved access to care
- Issues a call for further study regarding the patient experience and medical education

The public health crisis that the COVID-19 pandemic ignited has led to the rapid implementation of telemedicine as a means of delivering surgical care. This abrupt and global change required flexibility and intense collaboration between surgeons, patients, healthcare systems, and technology partners.

Following the stay-at-home orders in the early phase of this public health emergency, the demand to maintain safe access to surgical care drove the increased adoption of remote video and telephone visits. Factors that have always affected the care of surgical patients, particularly our most vulnerable populations—geography, socioeconomic disparity, patient disability, and time constraints—became even more problematic during the pandemic, and the lessons learned have the potential to improve the practice of surgery as a whole.

Although surgery is a hands-on specialty, telemedicine defined as "remote provision of clinical healthcare services through telecommunications technology" has emerged as a surprisingly useful tool in the delivery of surgical care.

Although surgery is a hands-on specialty, telemedicine defined as "remote provision of clinical healthcare services through telecommunications technology" has emerged as a surprisingly useful tool in the delivery of surgical care. Areas such as preoperative workup, advanced consultation, informed consent, and other preparations for a procedure can be facilitated or enhanced by virtual care. In addition, patients can receive a substantial amount of their preoperative care via telemedicine, enabling them to minimize travel time to the advanced centers of care where the actual procedure will be performed.

This article describes the application of telemedicine as a means of improving access to quality surgical care through clinical vignettes and case studies.

Case 1: A Telemedicine-Based ICU Program to Manage a Patient in Septic Shock

A 45-year-old male with insulin-dependent diabetes mellitus and a body mass index of 60 kg/m^2 arrived at an outlying hospital emergency department (ED) in diabetic ketoacidosis and septic shock from Fournier's gangrene. This facility has a virtual/electronic intensive care unit (eICU) program. Because of a lack of beds and his instability, the patient could not be transferred to a larger hospital. He was resuscitated and then brought to the operating room (OR) for surgical debridement. The eICU assisted in managing the patient from the ED through postoperative care via 24/7 live, secure audio/video and data stream linkage.

The eICU helped expand the local ED's capabilities to complete the patient's resuscitation, surveil his wound for serial debridements, and wean his drips as he responded to treatment. Although the patient initially improved in the first 6 hours after the operation, his overall trajectory declined overnight, and an urgent dressing change showed tissue necrosis.

In concert with the surgeon, the patient went back to the OR for further debridement for source control as well as imaging to ensure that further tissue spaces were not becoming involved in the tissue necrosis/infection. This imaging allowed his return to the OR to occur under more planned circumstances. The patient came back to the ICU and underwent dressing changes such that his diabetic ketoacidosis and sepsis resolved. During postoperative days 2–3, the eICU supervised his sedation holidays and early spontaneous breathing trial so that he could be extubated. The eICU team met with the family members at the bedside so that all stayed informed, even during off hours.

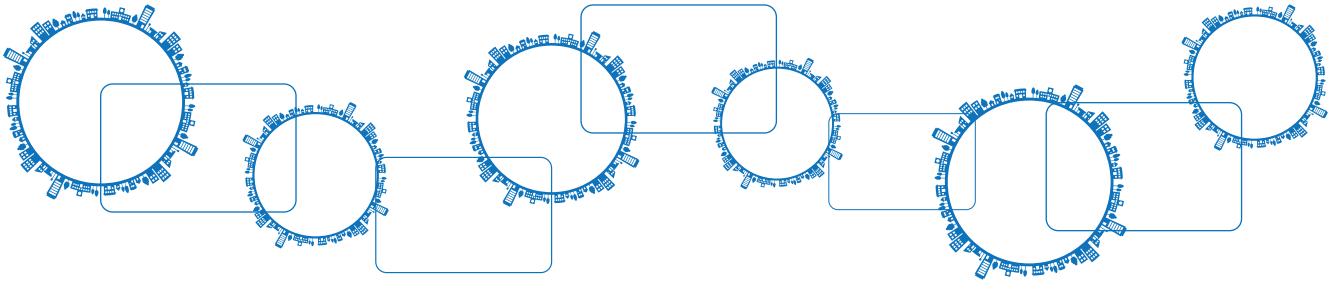
Summary

The eICU transformed a difficult situation into a success story. Even without logistical issues limiting transfer, telemedicine contributed to an earlier initial debridement and timelier serial debridement. Goal-directed resuscitation, protective lung strategies, serial operations, sedation holidays, and spontaneous breathing trials could be coordinated. The clinical change detected by the eICU prompted an earlier dressing change that allowed a planned return to the OR.

Conclusion

This application of telemedicine in the form of an eICU program allowed a multihospital system to work more effectively. This technology empowered the care team to achieve quality of care goals for a patient with a challenging metabolic syndrome and multiple comorbidities. In this era of pandemic shortages, it allowed us to avoid a transfer and maintain infectious disease isolation of patients.

Future pandemics may involve infectious agents that increase the value of the eICU for remote, touchless care to benefit patients, staff, and systems. It could open the door for how telemedicine might be applied intraoperatively when an operating surgeon could have someone with more familiarity with a specific issue consult remotely. If such an option seems overly optimistic or medicolegally risky, it is already happening in real time for complex, critically ill ICU patients



via eICU processes. These eICU programs can allow higher levels of oversight for not only direct care of both individual patients and groups of patients, but also managing transfers. Attention and continued study of telemedicine, as well as the eICU's value versus its costs, are warranted for its full development.

Case 2: Telemedicine for Treatment of Esophageal Cancer

A middle-aged Latino male who is a commercial transportation driver living in a rural California town was diagnosed with adenocarcinoma of the mid-esophagus during the COVID-19 pandemic. His job status was such that prolonged absences related to healthcare appointments were difficult to arrange.

Telemedicine provided an opportunity for socially distanced access to healthcare services in California through deregulation of outpatient evaluation and management rules during the pandemic.* Hence, telemedicine was an opportunity for this patient to be treated in a timely manner at a high-volume surgery center, despite socioeconomic and geographic challenges.

Summary

The patient presented with an esophageal mass. He had a long history of reflux disease and recent dysphagia to solids as well as unintentional weight loss. Once diagnosed with stage 3 adenocarcinoma of the mid-esophagus, a treatment plan was recommended consisting of trimodality therapy with concurrent chemoradiation followed by surgery. His neoadjuvant chemoradiation was performed within his local community, and surgery was scheduled at our center, which is more than 300 miles from his residence and the only high-volume center for esophagectomy in the region.

Because of limited financial resources, he could not travel to our center for frequent in-person clinic visits and preoperative assessments. The pandemic-related deregulation around telemedicine, such as audio-only visits reimbursable by health insurance, facilitated his treatment at our institution.* We performed two telemedicine visits (audio-only), a new patient visit, and a post-neoadjuvant therapy restaging visit. We then performed an in-person final preoperative visit the day before surgery, after making local lodging arrangements for him and his spouse.

After a negative COVID-19 nasal swab test, the next day we performed an uncomplicated successful minimally invasive robot-assisted three-hole esophagectomy. He stayed near our institution for his first postoperative visit. Subsequent visits have been via telemedicine.

Telemedicine and its expansion through new policies were essential in the surgical treatment of this patient. As illustrated by his experience, telemedicine has proven beneficial for preoperative assessment and diagnosis, evaluation after surgery, and follow-up visits.[†‡] The rapid adoption of telemedicine during the COVID-19 pandemic demonstrates its status as a now-essential ambulatory care tool.

Conclusion

This patient's story highlights the intersection of socioeconomic status, health, and innovation. Notably, the telemedicine appointments allowed our patient to schedule his visits during his breaks at work. This flexibility led to an equitable approach to providing care; he did not have to choose between tending to his health and earning a living wage on days when he had appointments. This case underscores telemedicine's effectiveness in facilitating the surgical needs of patients who often are underserved in medicine.

*Volk J, Palanker D, O'Brien, Goe CL. States' actions to expand telemedicine access during COVID-19 and future policy considerations. *Commonwealth Fund*. June 23, 2021. Available at: https://www.commonwealthfund.org/publications/issue-briefs/2021/jun/states-actions-expand-telemedicine-access-covid-19. Accessed May 10, 2022.

[†]Asiri A, AlBishi S, AlMadani W, ElMetwally A, Househ M. The use of telemedicine in surgical care: A systematic review. *Acta Inform Med*. 2018;26(3):201-206.

[‡]Hands LJ, Jones RW, Clarke M, Mahaffey W, Bangs I. The use of telemedicine in the management of vascular surgical referrals. *J Telemed Telecare*. 2004;10(1_suppl):38-40.

[T]elemedicine was an opportunity for this patient to be treated in a timely manner at a high-volume surgery center, despite socioeconomic and geographic challenges.

Case 3: Telemedicine Facilitates Timely, Convenient Surgery

A 49-year-old male professional in South Carolina with a past medical history significant for solid pseudopapillary tumor of the pancreas underwent a Whipple operation at a tertiary referral center prior to the start of the COVID-19 pandemic. Postoperatively, he traveled more than 500 miles to follow up with his surgical oncologist every 3 months, but the pandemic's travel restrictions made this practice impossible.

The patient used telemedicine not only to engage with his surgeon, who detected a postoperative complication, but also to initiate a new surgical consultation closer to his home. Additional video visits and patient portal messaging facilitated a complete preoperative workup and treatment within 1 month of diagnosis.

Summary

In March 2020, many states initiated lockdown measures, limiting travel and closing businesses to the public. Many medical centers shuttered in-person clinics to curtail the transmission of COVID-19, and for several months telehealth visits were the only outpatient access for nonemergency clinical care. During this time, our patient discovered that he had pain in his upper abdomen. As the pandemic triggered more travel restrictions, he obtained follow-up computed tomography (CT) imaging in his local community and engaged with his surgeon via remote video visits.

He was found to have a complex incisional hernia and initiated self-referral to a hernia specialist in his region whom he found via a web search, at an institution where elective surgery was continuing. The patient digitally transmitted his CT scan images and operative reports to the herniologist, facilitating a comprehensive review of past medical and surgical history before an initial video visit consultation. During this visit, the hernia surgeon used a commercially available telemedicine platform to review the images from the abdominal CT scan with the patient and to discuss options for surgical treatment of the incisional hernia. The patient was able to correlate his symptoms and a physical demonstration of an upper abdominal wall bulge with the findings on the CT scan. The surgeon recommended a complex abdominal wall reconstruction because of the width of the hernia, including the need for possible bilateral component separation.

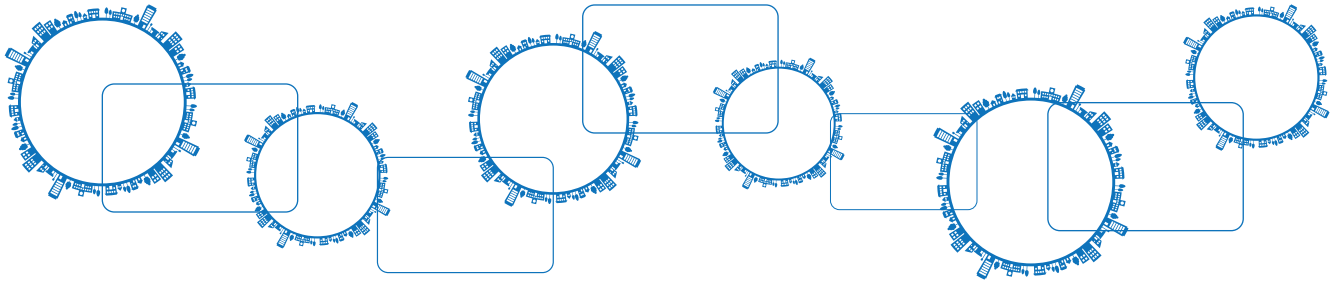
The patient's wife accompanied him during the visit, which they completed at home, and both of them had the opportunity to ask questions about the surgical plan, potential complications, estimated hospital length of stay, and expectations for postoperative recovery.

After the visit, the patient engaged further with the hernia surgeon via the patient portal to clarify pre- and postoperative logistics. Within a month, the hernia surgeon met the patient in the preoperative holding area and completed a written informed consent process before undertaking a successful abdominal wall reconstruction.

The patient was discharged to home on postoperative day 3 with two drains in place, necessitating a single in-person clinic visit within a week of discharge to remove the drains. A subsequent 2-week follow-up visit was completed at the patient's home via video conference. The patient indicated that he was highly satisfied with the care he received, especially because he was able to avoid traveling and missing work for the initial consultation and postoperative follow-up.

Conclusion

Telemedicine was used to facilitate timely care of a complication during travel restrictions brought about by the COVID-19 pandemic. Not only was a full preoperative workup possible, but the therapeutic relationship was established before the initial in-person encounter between surgeon and patient on the day of surgery. Use of telemedicine for new consultation not only is possible, but some patients prefer it for the convenient and timely coordination of care. Although not all preoperative consultations may be possible via telemedicine, telehealth is an essential component of state-of-the-art patient-centered surgical care.



Case 4: Telemedicine Allows Efficient Workup and Surgical Planning for a Patient with Geographic Challenges

A 38-year-old woman who lives 435 miles away from the treating facility was diagnosed with idiopathic gastroparesis and pancreatic divisum and referred for consideration for placement of a gastric neurostimulator device. The surgeon is the sole provider in the state who has institutional review board approval to place gastric stimulators, as this surgeon has been granted a humanitarian exemption from the US Food and Drug Administration.

Summary

Initially, this patient and her husband drove 7 hours for evaluation. Subsequent telemedicine visits with the patient were carried out to further evaluate her response to nonoperative therapy. As her referring physician suspected, she did not adequately respond to medical therapy. The patient kept records in a symptom diary daily for 6 weeks in an effort to optimize her medical treatment regimen (prokinetics, antiemetics). This patient had one in-person and three virtual visits over 5 months preoperatively. She and her husband flew to the city where the medical center is located for an outpatient robot-assisted laparoscopic insertion of gastric simulator and pyloroplasty. The couple spent that night in a hotel and flew home without incident after a telemedicine postoperative visit the following day. Her follow-up visits have been conducted via telemedicine and she has done very well. She has been weaned from prokinetics and rarely needs antiemetics.

Conclusion

Telemedicine offered this patient, as well as others in similar circumstances, the opportunity to consult, review tests, and evaluate nonoperative therapy over time. Surgical scheduling and informed consent discussions easily can be done virtually. A brief preoperative in-person visit on the day of surgery offers another opportunity to review the procedure, answer patient and family questions, and plan for follow-up. This visit provides an opportunity to improve surgeon and patient confidence. Virtual follow-up is arranged at the time of surgery. Telemedicine is highly suited for the care of gastroparesis in patients with geographic barriers to obtaining specialty care.

The Upside of the Pandemic

By necessity, the COVID-19 pandemic resulted in the broad and rapid implementation of telehealth processes to facilitate the care of surgical patients. With this collective experience, it has become apparent that telehealth can play a role in individual practices that benefits providers, administrators, and patients. Individual practice circumstances, as outlined in these vignettes, will dictate the details of how telehealth can be safely and effectively used as well as the ongoing value that this technology may provide. Issues in topics for future investigation include the nuances of how telehealth encounters are arranged, organized, and integrated into existing surgical clinics; how billing and regulatory factors practically influence the continued use of telehealth; and how telehealth affects quality of care, patient experience, and medical education. ♦

Note

For up-to-date information regarding billing and coding aspects of telehealth, visit the US Department of Health and Human Services resource site at *telehealth.hhs.gov/providers/billing-and-reimbursement*.

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Surgeon's Perseverance
Significantly Impacts Rural Patient Care

Dr. Molt

by Thomas J. McFeeley

Patrick Molt, MD, FACS, was one of the first babies born at the small-town Fairfield Memorial Hospital in its 72-year history. Today, Dr. Molt serves at the hospital's chief of surgery and president of the hospital's governing board.

A recently opened surgical pavilion at the hospital—the largest expansion in the Fairfield, IL, facility's history—features the Patrick Molt Surgical Services Department.

This is the story not only of improved healthcare in rural America, but also the pinnacle of a doctor-gone-home story that showcases how leadership qualities of surgeons can and do make remarkable impacts.

"Here's a guy who is in big-city practice, doing big-time oncologic surgery, and he just decides to come home," said Tyler G. Hughes, MD, FACS, Secretary of the American College of Surgeons. "To develop a surgical center like he has, with all new bricks and mortar, is an inspiration. This will be a legacy to what one person who dedicates themselves to a community can accomplish."

This is a legacy of not only bricks and mortar but also of the impact just one surgeon leader can make on his or her community—today and generations beyond.

"We set up our own rural health clinic—literally in two double-wide trailers behind the hospital."

—Patrick L. Molt, MD, FACS

How It Started…

Dr. Molt was born in 1952, just over a year after the hospital opened in Fairfield, the county seat of Wayne County, population 20,000. He was born into a 100-year grain and livestock farming family and had to run the farm with his brother at age 15 after their father died. Dr. Molt's father dreamed of becoming a physician, but serving in World War II ruined that dream, one that Dr. Molt took up.

After graduating summa cum laude as an undergraduate at Washington University in St. Louis, MO, he was big-city bound, earning his medical degree at Mount Sinai School of Medicine in New York, NY.

Dr. Molt's postgraduate training also took place in New York, his internship and residency in general surgery at Mt. Sinai and his fellowship in surgical oncology at Memorial Sloan Kettering Cancer Center. He went on to work as assistant chief of surgical oncology and chief of surgical oncology at Westchester Medical Center and St. Agnes Hospital, both in White Plains, NY, just north of New York City.

All the while he was teaching surgery at Mount Sinai, Cornell University, New York Medical College, and Rush Medical College.

With that impressive training, education, and positions of leadership, Dr. Molt was an unqualified success. But "the business of surgery," including managed care, profitability, and related concerns, was taking its toll.

"I was an early adopter of burnout," he said.

Because professional success does not necessarily equate to personal satisfaction or happiness, Dr. Molt was getting restless in the late 1990s. His future constantly tumbled in his mind.

"I wondered if I was meant to continue to do surgery or something else entirely," he said. "What I saw was that moving back to a rural area would solve a lot of the issues that I had, because everyone in those days was saying, 'I need to cut my overhead and increase my volume.' [Returning to a rural setting] for a surgery practice was one way to cut your overhead and increase your volume."

As it sometimes does, fate intervened. Dr. Molt received a call from his brother, back home in Fairfield.

"He said, 'You know, the hospital back here just lost their surgeon.' And I responded 'Really? Gee, well maybe I should come back and talk to people about that.' So I came back home and talked to the hospital board and they were enthusiastic to have me, and I was enthusiastic to find a new situation.

"So, I came home."

How It Went…

Dr. Molt returned to his hometown and a struggling hospital. With little reinvestment in the hospital in roughly the last 20 years, Dr. Molt's challenge was significant.

"At that time, 1974 was the last time there had been any expansion, and they realized they needed to modernize the operating rooms (ORs). They needed to modernize the emergency room (ER). At the time, the ER was about 150 square feet—enough space for two stretchers and a small desk. And that was about it," he said.

The struggling hospital soon enlisted new leadership, and Dr. Molt, the chief of surgery, focused on his patients. In current models of surgical training and practice, surgeons learn many procedures and usually decide in which surgical discipline they will specialize. Dr. Molt enjoyed no such luxury upon returning home.

"Anyone who needed just about any surgery, I was their guy. I was busy just going to work, seeing my patients and performing the procedures that they needed. There was little room for anything else."

Meanwhile new hospital leadership, including chief operating officer Katherine Bunting-Williams, PhD, RN, MSN, was planning an expansion project that included renovation of the inpatient care areas and construction of two new ORs and a five-bed ER.

Dr. Molt's leadership was almost immediately a critical element of the hospital's growth. He was named chief of staff in 2003, has served on the

Fairfield Memorial Hospital Surgical Pavilion

hospital's board of directors since 2008, and became its president in 2015.

One of the first steps to growth was establishing a rural health clinic.

"We do things country-style here," Dr. Molt said. "We set up our own rural health clinic—literally in two double-wide trailers behind the hospital. We have subsequently established three other clinics: two in our county and one in the next county over, which does not have a hospital."

Through these expansions into the community, Fairfield Memorial derives most of its income—85%—from outpatient services.

How It's Going…

As the health of the community and its hospital has improved over the last 2-plus decades, Dr. Molt's impact has been obvious. But growth happens on a continuum, and the best performing hospitals target incremental growth.

When the leadership of Fairfield Memorial Hospital gathered a couple of years ago to discuss strategic planning, the key to the facility's growth quickly became obvious—through surgery.

"We looked at our mission, we looked at access to care, we looked at what we are doing well and that could be sustainable," said Dr. Bunting-Williams. "We needed something that would give us a good return for the efforts that we are doing to care for our patients."

The hospital increased access to healthcare by opening a 7-day-a-week urgent care center to serve Fairfield and Wayne County. With an increasing population and after 2 years of the pandemic, the next step would be the largest expansion in hospital history—72,000 square feet of new and renovated space to expand the ORs and a variety of other services.

The recently completed building includes:

- Nine slots in the ER, more than double the current capacity
- Three urgent care exam rooms
- Two new ORs
- Space for orthopaedics, urology, general surgery, and pain management, including 28 exam rooms
- A third-floor, 31-bed intermediate and long-term care wing

At a cost of approximately $20 million, the hospital remains focused on the expansion of healthcare services that are not available in Wayne County and the surrounding towns.

For example, with the expansion from two to four ORs, the hospital has welcomed Dr. Kory Blank, an orthopaedic surgeon who, like Dr. Molt, has returned home. Also, Lauren Williams, MD, another local resident who is finishing her postgraduate work at Rush Medical Center in Chicago, soon will join the team.The hospital recently hired a full-time urologist.

The Impact of a Surgeon's Leadership

The state of rural surgery is well-known. Dr. Hughes's work on the Advisory Council for Rural Surgery revealed to him that about one in 10 early career surgeons chooses to practice in a rural setting. At the same time, rural populations are seeing an influx of older and retiring residents who are leaving urban settings. Providing quality healthcare in small communities can be a significant challenge.

Much like those residents, surgeons often make the same move. Tired of competing with hundreds of other physicians for patients and procedures, weary of continuing to fight insurance companies, eager to

Dr. Molt and Bunting-Williams at the Surgical Pavilion ribbon-cutting ceremony

practice medicine more simply, many mid-career surgeons choose to return to the roots of medicine.

"Being a rural surgeon reminds you of why you went into medicine in the first place," said Dr. Hughes. "If you're in a city you might develop a nice relationship with a patient for 5 or 6 weeks, and then they are gone. The chance of seeing a patient you've performed surgery on is one in a million. In a small community, you can hardly throw a rock without hitting a patient of yours. You can't get to the checkout in Walmart without a former patient saying, 'Hey, doc, what do you think of this?'"

Rural physicians tell countless stories of patients bringing fresh fruit from the garden or, like one of Dr. Hughes's patients, freshly baked Christmas cookies every year. The highly personal aspect of practicing medicine in rural communities can feel like a 180-degree switch from an urban setting.

But often, the job goes beyond the physician-patient relationship. A rural doctor who is a leader, as Dr. Molt has been in Fairfield, establishes important relationships with other physicians to help their development, to say nothing of the growth of a hospital, clinic, or health system.

"Dr. Molt has the ability to help us grow through leadership of the other medical staff," said Dr. Bunting-Williams. "Dr. Molt often has sit-downs with other doctors, asking them how he can help grow their practice and about whether their work-life balance is where it should be. Because he is in these positions of leadership, our medical staff is growing rapidly. His leadership with the medical staff is a proven entity here, and we're very proud to have him."

The soft-spoken and humble Dr. Molt describes this leadership as "kind of fatherly talks" with other medical professionals. As he notes, if you have 50 surgeons on staff and one leaves or underperforms, there are 49 others to collectively help the team. But if you have a limited staff, you must shepherd each of them individually.

"When you have a small staff, as we do—we have a single orthopaedic surgeon, we have a single urologist, we have a small number of primary care physicians—we really have a big investment in our staff. And it's important to us that we see to it that they continue to be healthy and happy in their practices so they can keep our community as happy and healthy as possible," said Dr. Molt.

"I've come home to take care of my people"

Just after Dr. Bunting-Williams heaped praise on Dr. Molt for working most every weekend to check that patients were receiving proper care and treatment and answering all their questions, Dr. Molt quickly swatted away those accolades. He made sure to mention that providing quality care sometimes means moving patients along to minimize wait times for others in line.

"Please don't make me out to be warm and fuzzy; if you want warm and fuzzy, get a kitten," he said.

But earlier in the interview, Dr. Molt gave an assessment of his own success. Perhaps warm and fuzzy would be a bit dramatic to describe his answer, but reflective and slightly emotional would accurately describe his answer.

"The thing that has enabled me to succeed as well as I have is that I really, actually care for the patients. When I came back, one of the things that I said to one of my acquaintances was, you know, I've come home to take care of my people," he said, voice breaking slightly and pausing. "And I think people know that. I really, really care about their welfare." ♦

THOMAS McFEELEY is Speechwriter, Division of Integrated Communications, Chicago, IL.

The COT at 100:

Evolution and Promulgation of ATLS and Surgical Skills Training

by Rachel M. Russo, MD,
Shailvi Gupta, MD, FACS,
Eileen M. Bulger, MD, FACS,
Sharon M. Henry, MD, FACS,
Kimberly T. Joseph, MD, FACS,
Katie Strong, MSEd, MA,
and Jeffrey D. Kerby, MD, PhD, FACS

HIGHLIGHTS

- Describes the development of the ATLS Course and summarizes its global expansion
- Identifies future content topics for the ATLS Course, including the effects of social determinants of health on trauma care
- Summarizes the evolution of COT surgical skills training courses, including ATOM, ASSET, and BEST

Since its founding in 1913, the American College of Surgeons (ACS) has recognized that education and skills training are paramount to quality care. The ACS Committee on Trauma (COT) has adhered to this principle through a range of programs designed to ensure necessary and effective care for the injured patient.

This article highlights some of the training courses that the ACS COT has promulgated over the past 100 years, starting with the Advanced Trauma Life Support® (ATLS®) Program.

ATLS

Since its inception in 1978, ATLS has been the model for trauma education for all levels of providers and has set the standard as the premier educational offering of the COT. ATLS provides physicians and other healthcare professionals with a concise and structured approach to assess and manage patients with multiple injuries.

As the care for the injured patient has evolved over the past 40 years, the basic tenets of ATLS remain relevant. These include promptly identifying injury, prioritizing and addressing immediate life threats, performing an efficient secondary survey when possible, arranging for access to definitive care, and communicating in a standardized fashion. At the time that ATLS was conceived, standards for the evaluation and management of injured patients were nonexistent, only a few cities had organized trauma centers, and state trauma systems had yet to be developed.

An Innovative Approach to Avoiding Tragic Outcomes

The need for a course to teach initial trauma care was realized by James K. Styner, MD, FACS, after he and his children survived a tragic plane crash flying home to Lincoln, NE. His wife died at the scene. Dr. Styner extricated his four children from the aircraft and searched for help. They were eventually taken to a rural local hospital. The covering general practitioners at the hospital had little experience in managing patients with multiple injuries. They prioritized obtaining skull x-rays and suturing lacerations over a comprehensive assessment of the children.

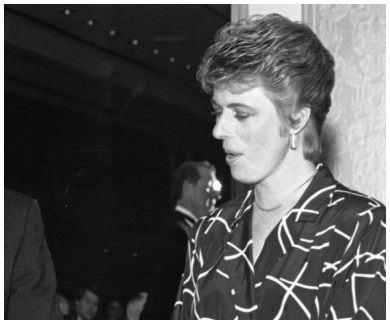
Reflecting on this event, Dr. Styner questioned the state of early injury care, saying, "When I can provide better care in the field with limited resources than my children and I received at the primary facility, there is something wrong with the system and the system has to change." Ronald Craig, MD, a family physician and friend of Dr. Styner, became his sounding board, noting, "You have to train them before you can blame them."

This experience and Dr. Craig's advice became the impetus for the development of a course to teach the basics of trauma care. Nurses from the Lincoln Mobile Heart Team, including Irvene Collicott, RN (née Hughes), who in 1982 became the Program Manager for ATLS, were essential to the development of the course. The ABCDE (airway, breathing, circulation, disability, and exposure) algorithm was developed by the consensus of content experts (see Table 1, page 37). ATLS focused on trauma as a surgical disease and aimed at identifying and treating the greatest life threat first. It was presumed this approach would result in vastly improved patient outcomes.

With the help of the Lincoln Medical Education Foundation and Southeast Nebraska Emergency Medical Services, a pilot ATLS course was developed. At the invitation of then-COT Chair C. Thomas "Tommy" Thompson, MD, FACS, and Paul E. "Skip" Collicott, MD, FACS, a vascular surgeon from Lincoln, NE, subsequently presented the course to the leadership at the annual COT meeting in spring 1979. Later that year, an inaugural course for COT region chiefs took place in Lincoln, NE.


Dr. James Styner


Dr. Ronald Craig


Irvene Collicott


Dr. Paul "Skip" Collicott

The ACS Board of Regents approved the course in 1980, and agreed to invest $80,000 to develop course materials. The course was disseminated nationally through the infrastructure of the Regional COT Committees beginning in 1980. The first courses outside the US took place in 1981 in Vancouver, BC, and Toronto, ON. The ATLS Subcommittee was formed to provide oversight and support enhancement and advancement of the new course. Within 2 years, ATLS became the standard for the initial evaluation and management of patients with trauma in the US and Canada.

Going Global

The ATLS Course continued to expand within North America in the early and mid-1980s. As the course became more popular, healthcare providers in an increasing number of countries requested the opportunity to participate. Much effort was required to ensure uniformity of the course regardless of location. Mexico was added to the ATLS family in 1986. Several countries in South America soon after expressed interest in participating in the program.

ATLS expanded to Europe through the Royal College of Surgeons, and to Australia through the Royal Australasian College of Surgeons in 1988. With growing interest in ATLS outside of North America, the COT recognized that to have a more significant impact on trauma worldwide, global regional leadership was necessary. A global ATLS committee was formed and met jointly at the annual ACS Clinical Congress.

Latin America was the first area to formalize a structure of regional committees as Region 14. Others followed suit: Region 15 encompassed Europe and Southern Africa, and Region 16 was composed of Australia and Asia. In 2011, Region 17 was established to serve the Middle East and North Africa.

The promulgation process was subsequently adopted under ATLS International Chair John B. Kortbeek, MD, FACS (2009–2014), with the support of COT Chair John Fildes, MD, FACS (2006–2010). Dr. Kortbeek proposed heavily relying on the regional structure to decrease the cost of local course-site development. This approach decreased the number of faculty traveling from the US and the need for stakeholders to travel to the US for training. Subsequent ATLS International Chairs Karen J. Brasel, MD, FACS (2014–2018), and Sharon M. Henry, MD, FACS (2018–2022), expanded its reach.

A strong global regional structure has given a voice to the global ATLS family in matters of policy and content updates. ATLS has now been translated into 10 languages: Spanish, Portuguese, French, German, Greek, Indonesian, Italian, Mandarin, Mongolian, and Romanian. At present, ATLS programs have been offered in 86 countries, providing a common "language" among multidisciplinary trauma providers (see Figure 1, page 38).

More than half of the courses presented annually take place outside the US and Canada, and the global community participates in all aspects of course design, revision, and oversight. The combined efforts of committed leaders from around the world have successfully advanced the quality of the course by ensuring that course content is relevant in all countries and systems that possess at least a minimal degree of infrastructure to support trauma care. The collaborative efforts also created the goodwill necessary to encourage and promote further global expansion and trauma system development.

Ongoing Refinements

ATLS for medical students was created in 1999 in the form of a Trauma Evaluation and Management (TEAM) course to address the trauma training gap in medical schools. This course can be modified to meet local needs and can function as an introduction to trauma training in regions that lack the infrastructure to support full ATLS promulgation.

TABLE 1. ABCDE ALGORITHM

Airway with restriction of cervical spine motion
Breathing
Circulation, stop the bleeding
Disability or neurologic status
Exposure (undress) and Environment (temperature control)

ATLS has progressed through the years (from its origins of didactic lectures and slides), embracing and adapting to changes in technology as well as developments in educational theory and simulation. As scientific evidence has evolved to influence practice, new information and consensus-based updates are added to the content through revision processes that occur approximately every 4 years.

The influence of educators to enhance the learning experience, as well as promoting a more open and adult learner-oriented feedback, has refined delivery of the course and elevated the educational experience. The role of the educators in program oversight was formalized with the development of the Senior Educator Advisory Board in 2010. The development of the ATLS app also has allowed the program to adopt new platforms.

The 10th edition of the ATLS Course launched in 2017–2018 and was accompanied by a mobile-learning platform. The COVID-19 pandemic necessitated that we take advantage of technology to reach not only places that are geographically remote, but also sites that, pre-COVID, could train large numbers of learners in person. The pandemic required that we use technology not only for basic meetings, but also to provide effective and interactive education.

The use of mobile ATLS (mATLS) online modules has dramatically increased during the pandemic as more sites are employing the mATLS or hybrid courses as their primary program. Other sites are taking advantage of the online modules to begin training learners until they can resume in-person courses. The next step in education for ATLS may be incorporating enhanced reality platforms to augment aspects of the course.

The Future of ATLS

In the future, ATLS should more fully embrace the global issues that affect our patients but are not part of the traditional core content, adding information on:

- Injury and violence prevention
- Trauma-informed care in the emergency setting
- Issues related to trauma recovery, including post-traumatic stress and postintensive care syndromes
- Principles of palliative care in the emergency setting
- The effects of social determinants of health on trauma care

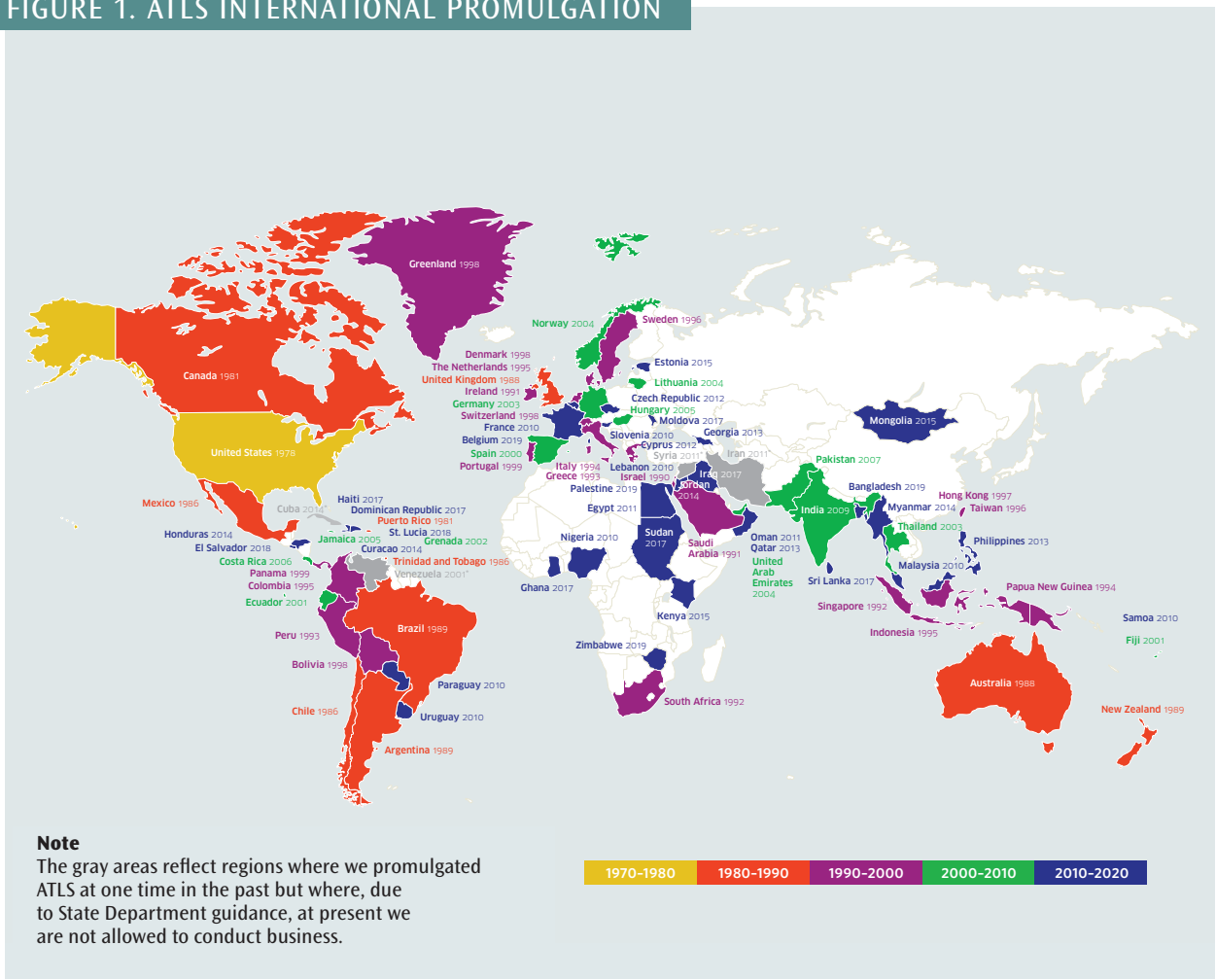
Although ATLS was developed to address life-threatening physical injuries in emergency settings, it cannot exist in a vacuum—nor can our practitioners. ATLS, as the COT's prototype educational offering, must provide learners with the tools they need to be effective advocates for policies that help our patients survive not just physical trauma, but all the antecedents and sequelae of that trauma so that it meets the goal of our new Global Trauma Education Fund: Trauma Knowledge for All.

Surgical Skills Training

With diminishing operative experiences available in trauma surgery, the COT Executive Committee recognized the need for a surgical skills course to provide surgeons with the proper skillset to treat complex, multiply injured patients.

The first official record of the committee's intention to develop such a course can be found in the 2001 COT annual report, where it is listed as one of the objectives for the Subcommittee on Education. In 2003, COT Chair J. Wayne Meredith, MD, FACS, MCCM, created a task force under the oversight of Demetrios Demetriades, MD, PhD, FACS, Chair of the Subcommittee on Education. Lawrence N. Diebel, MD, FACS, who had developed a cadaver-based

FIGURE 1. ATLS INTERNATIONAL PROMULGATION



Note
The gray areas reflect regions where we promulgated ATLS at one time in the past but where, due to State Department guidance, at present we are not allowed to conduct business.

operative trauma course in Detroit, MI, was asked to lead this task force with assistance from Gregory J. Jurkovich, MD, FACS. The panel was charged with planning and executing an ACS COT-sponsored operative skills course. Over the next 3 years, the task force developed the Operative Exposure course, a cadaver-based course centered on 10 lifesaving procedures. This course later became known as the Anatomically Based Surgery for Trauma Course and was a precursor to the Advanced Surgical Skills for Exposure in Trauma (ASSET) course established in 2010.

The Advanced Trauma Operative Management (ATOM®) course was developed by Lenworth M. Jacobs Jr., MD, MPH, FACS, in 1998, with the first course offered in 2001. Leveraging the efforts of Dr. Diebel's task force, the COT formed an Ad Hoc Committee on Surgical Skills, with Fred A. Luchette, MD, FACS, appointed as first chair. Under his leadership, ATOM formally transitioned as a COT educational course.

It subsequently became clear that trauma surgeons would require both a broad skill set in open surgery and novel endovascular hemorrhage control techniques. With the increasing use of the resuscitative endovascular balloon occlusion of the aorta (REBOA) technique, the COT Executive Committee determined it could help formalize and promulgate training for appropriate practitioners. In 2016, the Basic Endovascular Skills for Trauma (BEST) course, developed by Megan Brenner, MD, FACS, at the R Adams Cowley Shock Trauma Center, University of Maryland Medical Center, Baltimore, came under the umbrella of the Surgical Skills Committee of the COT.


Dr. Lenworth Jacobs Jr.


Dr. Fred Luchette


Dr. Mark Bowyer


Dr. Megan Brenner

ATOM

The idea for a standardized operative simulation course was inspired by Dr. Jacobs's experience with the Definitive Surgical Trauma Care (DSTC) course in South Africa. Dr. Jacobs also drew inspiration from simulation training of aircraft pilots.

The goal of the ATOM course was to include common injuries that every trauma surgeon is likely to encounter. The course was developed with a series of trial runs between 1998 and 2000, during which actual clinical cases in the operating room were recreated to establish what was reproducible and tolerable for the porcine model. Karyl J. Burns, RN, PhD, a medical educator, was essential in establishing valid educational methods and measurements in the course, whereas trauma fellows helped standardize everything from the clinical scenarios featuring a series of injuries to the lectures and test questions.

The first course was offered in June 2001 at Hartford Hospital, University of Connecticut, and over the next 2 years care was taken to collect data from residents, fellows, and attending surgeons who participated in the course. A panel of 20 national experts who had taken the course was established to further evaluate and enhance the educational goals and requirements of the ATOM course. Dr. Jacobs, Ronald I. Gross, MD, FACS, and Stephen S. Luk, MD, FACS, subsequently edited the textbook. The COT eventually embraced ATOM in a 5-year transition plan for the Ad Hoc Surgical Skills Committee to oversee the course in 2007, with Dr. Jacobs as the first ATOM Course Director.

Dr. Jacobs always believed that the ATOM course had the potential to have a long-lasting impact. His most memorable experience of developing the course was seeing the increase in self-confidence among residents and fellows who completed the course. The global development of the course was also meaningful. In his words, "I have learned more from teaching than I have taught."

ASSET

With the creation of the Ad Hoc Committee on Surgical Skills in 2005, work continued to implement an in-house COT-sponsored high-quality, cadaveric, anatomically based trauma course. Under the leadership of Dr. Luchette as Chair of the Ad Hoc Committee on Surgical Skills and the addition of then-US Air Force State Chair Colonel Mark W. Bowyer, MD, FACS, the committee reviewed all existent cadaver-based exposure courses, including the International Association for Trauma and Intensive Care's DSTC course and the Definitive Surgical Trauma Skills course, developed jointly by the Royal College of Surgeons of England and the Uniformed Services University of Health Sciences (USUHS), as well as the US military's Emergency War Surgery Course to prepare surgeons for combat.

Over the next year-and-a-half, an extensive list of life- and limb-saving skills that were considered essential for all surgeons caring for victims of trauma were developed, and a modified Delphi approach was enlisted to finalize the list of skills that should be included in a trauma exposure course. The final skills selected included exposure and control of every major blood vessel from the chin to the toes, as well as thoracotomies, fasciotomies, and intra-abdominal damage-control procedures.

The course consists of a brief case in the lab highlighting specific injuries, with interactive discussion of next steps followed by a few slides of relevant anatomy and a brief video demonstrating the desired skill. After each segment of the presentation, students then are expected to perform the skill in a time-pressured manner with the help of faculty.

The beta ASSET course, initially the Anatomically Based Surgery for Trauma course, was conducted March 11, 2008, in Washington, DC, at USUHS. Further beta courses then were offered across the US, and the name of the course was officially changed

ATLS LEADERSHIP

James K. Styner, MD, FACS,
author, developer, pioneer

ATLS Chairs

- Paul E. Collicott, MD, FACS (1978–1987)
- Max L. Ramenofsky, MD, FACS (1987–1992)
- Brent E. Krantz, MD, FACS (1992–1996)
- Richard M. Bell, MD, FACS (1996–1999)
- Steven N. Parks, MD, FACS (1999–2003)
- Christoph R. Kaufmann, MD, FACS (2003–2007)
- John B. Kortbeek, MD, FACS (2007–2009)
- Karen J. Brasel, MD, FACS (2009–2014)
- Sharon M. Henry, MD, FACS (2014–2018)
- Kimberly T. Joseph, MD, FACS (2018–2022)
- John P. Sutyak, MD, FACS (2022–present)

International ATLS Course Directors

- Christoph R. Kaufmann, MD, FACS (2007–2009)
- John B. Kortbeek, MD, FACS (2009–2014)

Global ATLS Course Directors

- Karen J. Brasel, MD, FACS (2014–2018)
- Sharon M. Henry, MD, FACS (2018–2022)
- Danny Westerband, MD, FACS (2022–present)

to ASSET. With the ASSET manual, written tests, policies, and procedures, as well as lab slides finalized, the ASSET course officially was launched at the March 2010 COT meeting. The first global course took place in Toronto in August 2010. The ASSET course curricula have undergone rigorous validation, and studies to date have shown that participants show marked improvement over baseline in selected vascular exposures after taking the course.

Dr. Bowyer became the second Chair of the Ad Hoc Committee on Surgical Skills (2010–2018) and served as a special consultant for global courses (2019–2021). Under his leadership, the ASSET course was promulgated to more than 180 sites in 19 countries.

With the help of more than 120 trauma surgeons, the original manual has been updated and revised to include skills such as REBOA, cricothyroidotomy, and vascular shunting in the standard course. In addition, the revised manual will include skills for rural, humanitarian, and military surgeons, with chapters on damage-control ophthalmology, neurosurgery, orthopaedics, cesarean section, and management of postpartum hemorrhage, amputations, and burns.

Since 2017, the US military, under Dr. Bowyer's leadership, has been working to adapt and expand the original ASSET course to better meet the needs of military surgeons who may be required to perform a variety of skills not typically performed by general surgeons, particularly when subspecialists are unavailable. This effort has led to the development of an expanded ASSET course called ASSET+ (ASSET Plus), which has been developed and fielded through the cooperation of the COT, USUHS, and the Military Health System Strategic Partnership of the ACS. ASSET+ will replace the Emergency War Surgery Course for all active-duty surgeons. The German, Swedish, Hungarian, and Estonian militaries also have incorporated the ASSET course into combat-readiness training for their surgeons.

BEST

As trauma surgeons continued to look for ways to manage patients with exsanguinating, noncompressible torso hemorrhage, and in 2009 an increasing number of clinical reports emerged about the use of REBOA. At the same time, Dr. Brenner had

The Surgical Skills Committee of the COT continues its mission to promote and advance the care of the injured patient with high-quality, contemporary surgical courses that can be adapted for an array of audiences and cultures.

just finished her trauma fellowship at the R Adams Cowley Shock Trauma Center, where trauma leaders, too, were very interested in the clinical applications and indications of endovascular hemorrhage control. After completing endovascular and vascular fellowships, she realized that there was a lack of succinct REBOA techniques courses for civilian trauma surgeons. With support from Thomas M. Scalea, MD, FACS, Dr. Brenner developed the course as a natural progression from their shared clinical experience. She routinely incorporated clinical lessons into the course using simulation modules that included perfused cadavers.

The first BEST course for the surgical faculty at Shock Trauma took place in 2013. In 2014, the course was opened to the surgical community and, because of wide interest, one course was offered each month for several years. In 2015, Dr. Brenner was selected as one of the first participants in the COT's Future Trauma Leaders program. In 2016, as technology was evolving rapidly for REBOA, BEST officially joined the COT and the Surgical Skills Committee.

The Future

The Surgical Skills Committee of the COT continues to promote and advance the care of the injured patient with high-quality, contemporary surgical courses that can be adapted for an array of audiences and cultures. The committee members look forward to exploring new educational approaches including simulation and virtual reality with the goal of ensuring the best possible skills training for surgeons who provide care to patients with life-threatening injuries. To ensure that surgical residency programs around the globe can incorporate these critical skills training courses, the courses are widely available for practicing surgeons, and are readily available as just-in-time training for surgeons preparing to deploy into combat zones.

ATOM Course Directors

- Lenworth M. Jacobs Jr., MD, MPH, FACS (2007–2010)
- Sharon M. Henry, MD, FACS (2010–2014)
- Ronald I. Gross, MD, FACS (2014–2018)
- Jody M. Kaban, MD, FACS (2018–present)

ASSET Course Directors

- Mark W. Bowyer, MD, FACS (2008–2018)
- Eric J. Kuncir, MD, FACS (2018–2021)
- Daniel J. Grabo, MD, FACS (2021–present)

BEST Course Director

- Megan Brenner, MD, FACS (2016–present)

Past Chairs

Ad Hoc Committee on Surgical Skills

- Fred A. Luchette, MD, FACS (2005–2010)
- Mark W. Bowyer, MD, FACS (2010–2018)

Surgical Skills Committee

- Neil G. Parry, MD, FACS (2018–present)

TABLE 2.
PROMULGATION OF SELECTED ACS COT EDUCATIONAL COURSE OFFERINGS

	ATLS 2004–2021	ATOM 2004–2020	ASSET 2008–2021	BEST 2016–2021
Total Courses	51,427	1,214	1,043	144
Total Students Trained	779,847	5,829	6,492	817
Total Countries	86	16	17	6
Total US States/CAN Provinces	All	28	39	25

Together ATLS, ATOM, ASSET, and BEST represent four of the COT's many educational course offerings. To date, more than 1,214 ATOM courses, 1,043 ASSET courses, and 144 BEST courses have been offered throughout the world, and more than 1 million providers have been trained in ATLS worldwide (see Table 2, this page). ♦

Acknowledgements

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PROFILES IN ACS LEADERSHIP:

A Few Questions for Danielle Saunders Walsh, MD, FACS, FAAP

Editor's note: The *Bulletin of the American College of Surgeons* (ACS) publishes a series of articles profiling leaders of the College. The series is intended to give readers a look at the person behind the surgical mask and inspire members to consider taking on leadership positions within the organization and the institutions where they practice.

This month's profile features Danielle Saunders Walsh, MD, FACS, FAAP, Chair of the American College of Surgeons (ACS) Board of Governors. She is a pediatric surgeon and founder of Pirate Surgery in Greenville, NC. This month, Dr. Walsh begins serving as vice-chair of surgery for quality and innovation at the University of Kentucky College of Medicine, Lexington.

Why did you decide to become a surgeon, specifically a pediatric surgeon?

When I was a third-year medical student at the University of South Florida College of Medicine, Tampa, I had finished my medicine clerkship and thought I would be an internist, but that ended quickly. On the first day of my surgery clerkship, I wound up in the operating room (OR) with an orthopaedic surgeon at 3:00 am doing an open fracture. I had this excitement level that was unsurpassed by anything I had done before. At that moment I knew that if I was going to be in a hospital for the next 40 years at 3:00 am, it had to be because I was in the OR. So, I fell in love that day and never really turned back from surgery.

My decision to transition to pediatric surgery was made shortly thereafter. I realized how much I enjoyed helping children, and, combined with my love of surgery, pediatric surgery felt like the perfect fit.

I think, too, that in a subconscious way pediatric surgery was probably tied to my childhood. My sister was diagnosed with neuroblastoma at 9 months of age, and she ultimately ended up having surgical resection at Memorial Hospital—now Memorial Sloan Kettering in New York, NY. She was enrolled in an experimental protocol for chemotherapy after neuroblastoma resection and was randomized to the arm that proved to have the best survival rate. That arm became the

Research—and by that I mean defining a problem, exploring solutions, and adding to our body of scientific knowledge—is fantastic. Having the inquiring mind of a researcher as you go through your career is very important.

standard treatment for neuroblastoma for the next decade, and I think there's a part of me that knew that pediatric surgery and surgical research played a role in her survival.

Do you do a lot of research now?

As a resident at Massachusetts General Hospital, Boston, I was offered a fully funded research fellowship in the field of my choice. Then I spent 2 years as a fellow in a lab at Children's Hospital of Philadelphia, PA, doing fetal surgery research and I enjoyed that learning process immensely. As I moved into practice, I did more clinical research on common pediatric surgical problems. As a recent program director at East Carolina, more of my publications have been in the area of surgical education. Now I'm much more into scholarly work surrounding quality and informatics.

Research—and by that I mean defining a problem, exploring solutions, and adding to our body of scientific knowledge—is fantastic. Having the inquiring mind of a researcher as you go through your career is very important.

Who were some of your mentors and role models along the way?

Some people have a single mentor for the bulk of their career, and others choose mentors at various points and various aspects of their career. I'm more of the latter.

I received some of my most influential mentorship through my work with the Association of Women Surgeons (AWS). As a resident in the research lab, I applied for an AWS research grant, and when I received and accepted the grant, I found myself at a table surrounded by women who were leaders in the association. Past-Vice-Chair of the ACS Board of Regents Leigh Neumayer, MD, FACS, was one of them. She was president of the AWS that year, and we talked about how residents have a different perspective and different needs than practicing surgeons. She thought it would be a good idea to put a resident on the AWS Executive Council and asked if I would like to take on that role. So, I was the first resident representative on the AWS council.

That was a pivotal point in my career. It gave me perspective on how organizations work and how professional organizations can influence and advance careers. It gave me exposure to women like Patricia Numann, MD, FACS, who went on to be President of the ACS, and many other surgeons who have gone on to be leaders of the College. For example, Annesley "A.J." Copeland, MD, FACS, was an AWS president and is now an ACS Regent.

I can't emphasize enough how important my work in professional organizations has been in terms of putting me in contact with mentors at various stages of my career. They all have provided different kernels of advice that made me who I am.

Describe your journey to becoming Chair of the Board of Governors.

When I moved to East Carolina University, Greenville, NC, in 2011, Michael Rotondo, MD, FACS, was the chair of surgery. He already was heavily involved in the ACS Committee on Trauma (COT) and went on to become chair of the COT and Medical Director of ACS Trauma Programs. I told him I was interested in becoming a leader in the College. He recommended that I start with the state chapter.

Within the first year, I realized that the North Carolina Chapter Council did not have an AWS representative and that the ACS had recommended that each chapter council have an AWS representative. I approached the council and offered to fill that role and was immediately put into the position. Over the next 5 or 6 years I managed to move up through the leadership ranks in the state chapter to become its president and, ultimately, a Governor.

Dr. Walsh in the OR with resident Elliott Overman, MD

Dr. Walsh and JR LaPlante, director of tribal relations, Avera Healthcare, and a member of the Cheyenne River Sioux Tribe met to discuss culturally competent surgical care for Native Americans

As in any other organization, if you show an interest, you participate, and you show up, other opportunities open. Nancy Gantt, MD, FACS, Past-Vice-Chair of the Board of Governors, was overseeing the Quality Pillar when I was active as a Governor and asked if I would be interested in following her in that position, and that led to the honor of serving as the Chair of Board of Governors. Dr. Gantt is another great AWS mentor.

What makes being an ACS Governor such an exciting prospect for people?

The Governors enjoy connecting with other members of the College. When you're a Governor, ACS members feel like they can speak with you about their concerns and that you understand how the College works. Governors serve as a bridge between the members and the Officers, Regents, and Executive Director. The Board of Governors is the ACS House of Representatives. People feel a willingness to reach out to us, and that's really rewarding.

There's nothing better than taking a surgeon who has a problem or a need and connecting her or him with an ACS resource that can help fix it. Surgeons are fixers, so being a Governor is just a variation of that in your career.

What advice do you offer to young surgeons and residents who want to achieve leadership roles in their institutions or surgical societies?

Say "yes" when offered an opportunity. If you see a problem or an issue, volunteer to fill that void. When people see your passion and your hard work, they'll usually keep pushing you along into higher-level roles.

The biggest mistake I see people make is seeming uninterested in stepping out of the clinical frame of their practice into the professional organization frame of the greater House of Surgery. There's so much more that getting involved in a professional organization can offer you in terms of reward and benefit, and I hope that young surgeons take on that challenge of exploring other opportunities.

In addition to the ACS and AWS, I've been active in other associations for most of my career. David Rattner, MD, FACS, was one of my attendings, and as former president of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) encouraged me, back when I was a resident, to get involved

Shopping at a surgical conference (from left): ACS YFA Chair Yewande Alimi, MD, Maria Alteri, MD, FACS, and Dr. Walsh

Dr. Walsh on the family boat with her children

in this new professional organization that was focused on minimally invasive surgery. I've enjoyed watching the organization grow. Its focus is a bit more clinical- and guideline-oriented than the ACS. The opportunity to serve in committee chair positions and, ultimately, on SAGES's Board of Governors educated me in ways that helped me prepare for a bigger role in the College.

Tell me about your work with quality and healthcare informatics.

As we've moved into the present decade we've realized the value of using outcomes data to identify areas of opportunity to fix process pathways and standardize care. Informatics and data analysis are the tools that will transform surgical practice over the next 10–20 years as we continue working to improve quality. I think the promise of using artificial intelligence and large databases to identify gaps and patients at higher risk offers opportunities to prevent complications, including well before the patient has made it into the OR, and those tools are really going to drive improved patient care.

In this last year, I became board certified in clinical informatics because I truly believe that the next great advancements in surgical care are going to be based in the digital world. Setting yourself up to identify what you love, what you're passionate about, and how it might impact your career is a critical part of developing a multidecade career.

How do you achieve work-life balance?

I'm in the category of people who aren't quite sure that there is such a thing as work-life balance. There are only different points of balance at different times in your career. Earlier in my career, I had a young daughter and adopted a son, so I cut my work hours to 75% full-time. I needed to do that so I could have protected time to spend with my young children. When they were old enough that they didn't need me as much, I grew far more focused on what was happening in the hospital and became a program director and "adopted" 34 residents.

I'm now in a phase of my life where my parents have health problems. My father's in hospice, and I've slowed down my career again in order to focus on caring for elderly parents while still having a son in high school. When my parents don't need me as much, I look forward to accelerating my career probably for one more phase before enjoying time with my husband. I think that surgeons need to hear that it's okay to change the percentages of your work and your focus at various stages of your life and to do it intentionally.

Many people burn out because they view their current job situation as the only way that they can be a

A group of East Carolina surgery residents after an evening of sewing OR hats; from left: Caitlin Takahashi-Pipkin, DO, Tia Sutton, MD, Brandon Peine, MD, and Scarlett Hao, MD

surgeon. While that is true for some, thinking creatively about how you could restructure your time, how you could lower your clinical time and explore other opportunities, is not always at the forefront of the mind of someone who is fatigued.

That's part of where surgical organizations come into play. When you go to dinner at a conference, you can hear all the different ways that people run their practices and learn a lot about how you can continue to be both professionally and personally satisfied.

How do you promote your own well-being?

My family bought a boat a few years ago, and the most relaxing thing in the world is being on the boat with my family, out on the water with no cell phone reception. When I'm home and need to be more connected, I love having the whole family gather in the kitchen to prepare our dinner and dessert.

I just started learning to knit and like doing that on plane trips and when sitting in hotel rooms. I sew my own OR hats and, in fact, when I was a program director I would bring all of the residents over to my house, and multiple attendings and residents would bring sewing machines, and we sewed hats for each other. So, you can learn to combine personal time and personal joys with your profession and friends.

What are some of the ways the College has helped surgeons maintain their well-being during these past few years?

When I first started my surgical career, the surgeons who were valued the most were the people who spent the most hours in the hospital, worked the hardest, did the highest number of cases, and never went home. I think that the most important contribution the College has made over the past 3 years is to redefine what it means to be the "best" surgeon. The College has consistently sent the message that it's okay to take care of yourself, to put time into yourself and your personal life in order to be a better surgeon.

Over the years, I heard so many lectures about surgeons having the highest suicide rate and surgeons who became alcoholics and abused medications to survive in an environment where they were valued for working 24/7. I think it's better that now surgeons can admit when they are too tired to do a case and need to hand it over to their partner or reschedule or when they need to take a vacation.

The College has said it's okay to not be okay—that sometimes we need to slow down and change our priorities. I think that the College is right to do that, and I hope our leaders continue along that pathway of redefining what excellence is and ensuring it includes surgeons who are happy, healthy, and balanced. ♦

ACS Cancer Research Program:

ALLIANCE A021806:

A Phase III Trial of Perioperative vs. Adjuvant Chemotherapy for Resectable Pancreatic Cancer

by Akhil Chawla, MD, Rebecca A. Snyder, MD, MPH, FACS, and Cristina R. Ferrone, MD, FACS

Oncologists continue to debate the use of preoperative (neoadjuvant) chemotherapy in patients with resectable pancreatic cancer. Potential benefits and shortcomings of neoadjuvant chemotherapy for pancreatic cancer have been well documented.[1,2]

Unclear Benefit in Survival

For resectable pancreatic cancer, recent data also have shed light on the lower-than-expected survival outcomes seen in patients receiving multiagent neoadjuvant chemotherapy.[3] Data from the SWOG (formerly known as the Southwest Oncology Group) S1505 phase II trial demonstrated a median overall survival time of only 22.4 months in patients treated with mFOLFIRNOX and 23.6 months in patients treated with gemcitabine and nab-paclitaxel.[3]

These outcomes were strikingly lower than the median overall survival time of 54.4 months seen in the PRODIGE (Partenariat de Recherche en Oncologie Digestive) 24/CCTG PA.6 trial for patients with good performance status who were randomized after R0/R1 resection to receive mFOLFIRINOX in the postoperative or adjuvant setting.[4] Furthermore, only 25% of patients treated with neoadjuvant mFOLFIRINOX in the SWOG S1505 trial demonstrated a significant or complete pathologic response on histologic analysis.[3]

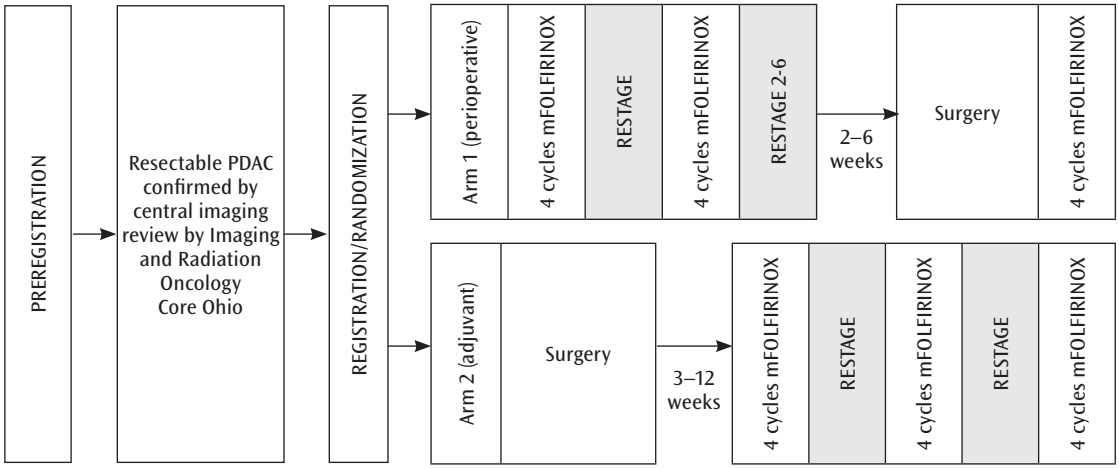
A noteworthy 36% of all patients did not reach surgery because of disease progression during neoadjuvant therapy.[5] These results have raised questions regarding the neoadjuvant treatment strategy for technically resectable patients and have added significant equipoise to the issue.

Latest Trial Seeks to Improve Outcomes

ALLIANCE A021806 (NCT 04340141), a randomized phase III trial to evaluate the use of perioperative therapy in resectable pancreatic cancer, opened to accrual in July 2020. This landmark study aims to better understand the role of perioperative therapy in resectable pancreatic cancer. Patients will be randomized to treatment with perioperative mFOLFIRINOX (perioperative arm) or upfront surgery followed by postoperative mFOLFIRINOX (adjuvant arm). Patients randomized to the perioperative arm undergo eight cycles of neoadjuvant mFOLFIRINOX followed by a curative-intent resection. These patients then will receive four additional cycles of mFOLFIRINOX in the postoperative setting. Patients randomized to the adjuvant arm undergo 12 cycles of adjuvant mFOLFIRINOX following pancreatectomy (see Figure 1, page 49). This study team plans to enroll 353 patients with resectable pancreatic cancer from the US and Canada.

To qualify for trial enrollment, patients must have biopsy-proven pancreatic adenocarcinoma and imaging must demonstrate resectable disease as defined by the National Comprehensive Cancer Network definition of resectable pancreatic cancer. This definition includes pancreatic

FIGURE 1. SCHEMA FOR ALLIANCE A021806



cancer in any location within the pancreas without evidence of involvement of the celiac artery, common hepatic artery, superior mesenteric artery, or, if present, a replaced right hepatic artery. Splenic arterial involvement is permitted. Venous involvement of less than or equal to 180° of the portal vein and/or superior mesenteric vein vessel wall with patency of the portal vein/splenic vein confluence also is permitted.

Patients must not have definitive evidence of distant metastases. Patients must have good performance status (ECOG 0 or 1) and be candidates to receive mFOLFIRINOX. All patients who are eligible for the trial undergo a prospective central radiologic eligibility review as a method of quality control to confirm that patients enrolled in the trial fall within a consistent definition of resectable pancreatic cancer.

Opportunity to Improve

The primary endpoint of the trial is 2-year overall survival. The trial also will compare clinical outcomes such as disease-free survival, margin-negative resection rates, tolerability of chemotherapy, and health-related quality of life. To date, accrual has been robust; however, the need for continued support of this trial will be important in order to standardize treatment for this patient population. It is anticipated that the results of this trial will be practice-changing and will establish the standard of care for patients with resectable pancreatic cancer.

For more information, contact study cochairs Cristina Ferrone (CFerrone@mgh.harvard.edu) and Akhil Chawla (Akhil.Chawla@northwestern.edu). ♦

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The Joint Commission

A Look at The Joint Commission:

Study Examines Effect of Palliative Care Consultation on Readmission Rates and Hospital Costs

by Lenworth M. Jacobs Jr., MD, MPH, FACS

Palliative care—a specialty approach that provides services to aid in the quality of life for patients with serious or painful illnesses, such as cancer or organ failure—has been underused in surgical care, despite having support from leading organizations such as the American College of Surgeons (ACS).

In fact, the ACS Task Force on Surgical Palliative Care and the Committee on Ethics in 2005 released a Statement of Principles of Palliative Care, which stated[1]:

> Palliative care aims to relieve physical pain and psychological, social, and spiritual suffering while supporting the patient's treatment goals and respecting the patient's racial, ethnic, religious, and cultural values. Like all good patient care, palliative care is based on the fundamental ethical principles of autonomy, beneficence, nonmaleficence, justice, and duty.
>
> Although palliative care includes hospice care and care near the time of death, it also embraces the management of pain and suffering in medical and surgical conditions throughout life. If palliation is taken to apply solely to care near the time of death, or "comfort measures only," it fails to include the life-affirming quality of active, symptomatic efforts to relieve the pain and suffering of individuals with chronic illness and injury. In this respect, palliative care is required in the management of a broad range of surgical patients and is not restricted to those at the end of life.
>
> The tradition and heritage of surgery emphasize that the control of suffering is of equal importance to the cure of disease.

Palliative care infrequently is considered for or applied to all the patients who require it. It is increasingly important to understand the relevance and importance of addressing palliative care concepts with patients and their families. Palliative care is becoming critically important for those patients who languish in intensive care units and on medical and surgical floors where the caregiver, the patient, and the family struggle to arrive at a management solution that is in their best interests.

Study Encourages Further Use of Palliative Care

To further understand this issue, a group led by John S. House, a fourth-year medical student at the University of Arkansas for Medical Sciences, conducted a study looking into the barriers to integrating palliative care into surgical care, as well as learning what quality improvements might be gained by incorporating those services for surgical patients. The study, "The Impact of Palliative Medicine Consultation on Readmission Rates and Hospital Costs in Surgical Patients Requiring Prolonged Mechanical Ventilation," was published in the May 2022 issue of *The Joint Commission Journal on Quality and Patient Safety*[†].

"Postsurgical patients requiring prolonged mechanical ventilation have increased mortality and costs of care; outcomes from adding palliative care services to this population have been poorly investigated," the authors

*Task Force on Surgical Palliative Care and the Committee on Ethics. Statement of Principles of Palliative Care. American College of Surgeons. Available at https://www.facs.org/about-acs/statements/50-palliative-care. Accessed May 26, 2022.

†House JS, Hyde CR, Corwin HL, et al. The Impact of Palliative Medicine Consultation on Readmission Rates and Hospital Costs in Surgical Patients Requiring Prolonged Mechanical Ventilation. *Jt Comm J Qual Patient Saf.* 2022 May;48(5):280-286.

Palliative care is becoming critically important for those patients who languish in intensive care units and on medical and surgical floors where the caregiver, the patient, and the family struggle to arrive at a management solution that is in their best interests.

wrote. "The objective of this study was to determine the impact of palliative medicine consultation on readmission rates and hospitalization costs in postsurgical patients requiring prolonged mechanical ventilation."

The authors used the Nationwide Readmissions Database (NRD) to research cases involving adults ages 18 and older from 2010 to 2014 who underwent a major operation that required mechanical ventilation for more than 96 consecutive hours and survived until discharge. They also identified patients among those records who received a palliative medicine consultation during hospitalization.

The study found:

- Of 53,450 patients, 3.4% received a palliative care consultation
- Patients who received a consultation had a lower readmission rate (14.8% versus 24.8%, $p < 0.001$) and lower average cost of hospitalization during the initial admission ($109,007 versus $124,218, $p < 0.001$)

Ultimately, the authors concluded that despite low use of palliative care in surgical patients, "palliative care consultation in postsurgical patients requiring prolonged mechanical ventilation was associated with lower cost and rate of readmission." They noted, however, that more research was needed to determine how to integrate palliative care services into surgical care.

The study authors wrote in a subsequent Improvement Insights blog post published by The Joint Commission[‡]:

> "Our study was only possible with the NRD. The NRD is compiled from the Healthcare Cost and Utilization Project State Inpatient Databases which are fairly unique federal-state-industry partnerships and have a vast amount of data related to US hospital admissions. The National Inpatient Sample has been extensively used in surgical research, but few publications use the NRD, which allows for tracking of hospital admissions and re-admissions across a calendar year.
>
> We were curious to see how helpful the NRD would be in addressing a clinically relevant question. We were delighted to see that it could be used in a meaningful fashion to extract and interpret nationwide clinical data. While it has its pitfalls, as discussed at length in the limitations section of our paper, we hope this study inspires other researchers to use it.
>
> We look forward to tracking the application of palliative care across nationwide cohorts as more and more recent data becomes available. We believe future research that identifies which specific surgical populations could benefit most from the involvement of palliative care could be valuable as criteria to effectively identify these patients are currently lacking. Additionally, we hope that palliative care is integrated into daily practices in the surgical ICU—involving bedside surgical teams and palliative care teams, as well as additional resources and training for these teams.

The full study is available at *jointcommissionjournal.com/article/S1553-7250(22)00006-X/fulltext*. ♦

Disclaimer

The thoughts and opinions expressed in this column are solely those of Dr. Jacobs and do not necessarily reflect those of The Joint Commission or the American College of Surgeons.

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Foundation Donations at Work:

Chapter Initiatives Fund Supports Local Efforts to Advance the College's Mission

by Diane S. Schneidman, MA

Chapters of the American College of Surgeons (ACS) play an integral role in supporting the residents, fellows, and surgeons who train and practice in their states and cities. Many of the valuable activities the chapters offer can be conducted using funds collected through chapter dues, but others are dependent on deeper pockets.

With this thought in mind, the ACS Foundation launched the Chapter Initiatives Fund in conjunction with its 1913 Legacy Campaign, which celebrated the College's Centennial. The Chapter Initiatives Fund provides members with the opportunity to contribute to the many worthwhile efforts that their chapters undertake. The Tennessee and the North Dakota Chapters have amassed considerable support—$30,000 and $20,000, respectively—and are putting the funds to effective use.

Tennessee Chapter Initiatives Fund

The Tennessee Chapter started its fund in 2018, according to ACS Regent Kenneth Sharp, MD, FACS, a Past-President of the Tennessee Chapter and member of the Foundation Board of Directors.

"The idea was that a state chapter can start this fund to support the mission of the chapter. You can use these funds to do whatever is going to help your chapter," Dr. Sharp said. "The Tennessee Chapter raised several thousand dollars the first year."

One way that the chapter was able to become the leader in the Chapter Initiatives Fund was that Dr. Sharp became a champion of the program and would explain to chapter members that all contributions to the fund are tax-deductible. He also offered to match all donations of up to $250, according to Wanda McKnight, Tennessee Chapter Administrator.

"I wanted to use the funds that the Tennessee Chapter has raised to encourage young surgeons in the state of Tennessee to join our chapter," Dr. Sharp said. "We're like every other chapter in America in that we've got 1,100 or 1,200 members of the College in our state, but we've only got 300 or 400 who are members of the chapter.

The Chapter Initiatives Fund provides members with the opportunity to contribute to the many worthwhile efforts that their chapters undertake. The Tennessee and the North Dakota Chapters have amassed considerable support—$30,000 and $20,000, respectively—and are putting the funds to effective use.

"The idea was that a state chapter can start this fund to support the mission of the chapter. You can use these funds to do whatever is going to help your chapter. The Tennessee Chapter raised several thousand dollars the first year."

—Kenneth Sharp, MD, FACS

"My thought was, 'Let's do something that gets young surgeons interested and engaged in their state chapter,'" he added. "I figured we could send young surgeons to the Leadership & Advocacy Summit or to Clinical Congress and pay for their travel expenses and registration fees."

For the chapter's first initiative, it gave a young woman surgeon from eastern Tennessee a $2,200 traveling scholarship to attend the 2019 Clinical Congress in San Francisco, CA, at which she was inducted into the College. "That was enough to cover her airfare, hotels, meals, and registration," Dr. Sharp said.

More recently, the chapter sent three young surgeons to the 2022 ACS Leadership & Advocacy Summit this April in Washington, DC, and will be sending one or two more to Clinical Congress 2022 in San Diego, CA, McKnight said.

In addition, the chapter is establishing a scholarship with support from Meharry Medical College, Nashville, in memory of alumna Dorothy Brown, MD, FACS. This fund will provide $500 to a medical student who is underrepresented in medicine to travel to another Tennessee university and explore additional educational opportunities in the state.

North Dakota Chapter Initiatives Fund

The North Dakota Chapter intends to use its funds to offer STOP THE BLEED® (STB®) training, according to Mary O. Aaland, MD, FACS, Past-Governor of the ACS, who also serves on the Foundation's Board of Directors.

"We have 53 counties in North Dakota, and each county has a public health nurse or a county nurse, and we would like to work with the county seats to provide them with instructor training and kits," which cost roughly $1,000 each. "Then, anybody can simply check out the instructor kit and use it to teach bleeding control at the local church or school and other public places. We really want to get all the rural citizens trained in STOP THE BLEED®," she said.

To lead this effort, Dr. Aaland is partnering with a surgical resident who is a volunteer paramedic "because I want to get young people enthused about this," she said. The initiative will launch in two counties where Dr. Aaland has already done STB training.

"I've taught more than 1,400 people already, but in the last year, COVID put me behind," she said. "I partnered with the Future Business Leaders of America, and we taught the entire high school in Strasburg, ND." In addition, she is bringing the training to other rural North Dakota towns to train local farmers as well as volunteer firefighters and emergency medical service personnel.

"Hopefully, then we will get local leaders involved to support the volunteers," she said. "That's the strategy."

Dr. Aaland wants to continue training children and adolescents in bleeding control because many rural youths go to their grandparents' house after school. Because many older adults are on anticoagulants, it is important that young people know how to stop bleeding if an older relative experiences a kitchen accident or trips and falls, because the nearest trauma center may be many miles away.

The instructor kits that the North Dakota Chapter is distributing contain a note

"A lot of rural kids say, 'I'm just a poor farm kid. I could never be a surgeon,' and I say, 'I was just a poor farm girl, too, and I am a surgeon. If I did it, so can you.'"

—Mary O. Aaland, MD, FACS

stating that the materials are officially approved by the ACS and the Department of Defense and donated by the ACS North Dakota Chapter. The goal is to help the ACS and the chapter gain name recognition, Dr. Aaland said.

She also hopes that after young people undergo STB training, they will be encouraged to pursue a career in medicine or surgery. "A lot of rural kids say, 'I'm just a poor farm kid. I could never be a surgeon,' and I say, 'I was just a poor farm girl, too, and I am a surgeon. If I did it, so can you,'" Dr. Aaland said.

"It's part of my commitment to the communities and also because I'm very proud to be a member of the College," she added.

Details About the Fund

The fund is run under the auspices of the ACS Foundation, which holds contributions for the benefit of the respective chapter to use for:

- Scholarships
- Educational grants to cover portions of travel and accommodation expenses to attend the Clinical Congress and other national and international programs
- ACS Research Scholarships and Fellowships
- International Guest Scholarships
- Initiatives that advance the College's mission

A Chapter Initiatives Fund may be started with an initial deposit of $500, and once it reaches a principal balance of $2,000, funding for these efforts are advanced from the chapter's coffers as appropriate.

A Chapter Fund Award Committee may submit a request to the ACS Foundation for monies to support an initiative. At present, 11 other US chapters have established Chapter Initiative Funds:

- Connecticut
- Florida
- Georgia
- Indiana
- Louisiana
- New York
- Pennsylvania
- South Dakota (also a top fundraiser, with $20,000)
- South Texas
- Virginia
- Wisconsin

In addition, the North Carolina Chapter plans to start a Chapter Initiatives Fund this year.

"The Foundation makes it really simple to deposit and withdraw funds," McKnight said. And because unused monies will be redirected to the College's Greatest Needs Fund, "it's a win-win for everyone."

To establish a Chapter Initiative Fund, contact Shane Hollett, Executive Director, ACS Foundation, at shollett@facs.org, and Luke Moreau, Manager, Domestic Chapter Services, at lmoreau@facs.org. ♦

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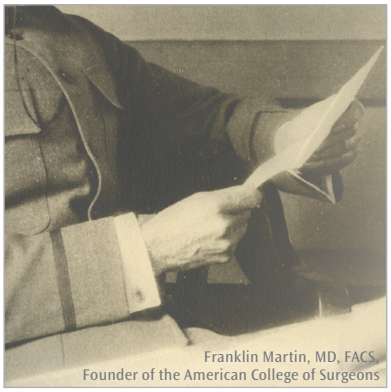

Franklin Martin, MD, FACS, Founder of the American College of Surgeons

From the Archives:

The Leader Named Pack

by Aron D. Wahrman, MD, MBA, MHCDS, FACS

Personal memorabilia helps connect us to our surgical forebears. One book in my collection possesses a particularly meaningful bookplate.

George T. Pack, MD, FACS (1898–1969), seemed to live, practice, and accomplish in excess of the 70 years his natural life allotted. As a student at The Ohio State University, Columbus, he gave a lecture, which Milton Winternitz, MD, the dean of Yale Medical School, New Haven, CT, attended. Impressed, he hired Dr. Pack to teach, only discovering later that the young lecturer was still an undergraduate. This situation was rectified when Dr. Pack received a medical degree from Yale in 1922.

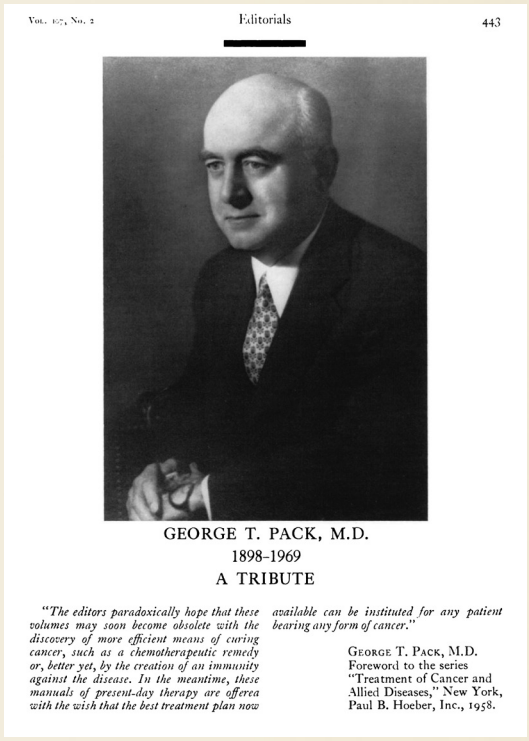
Dr. Pack's initial training and interests were in pathology and radiotherapy, but he pursued surgical residency at the University of Alabama, Birmingham, and then Memorial Hospital (now Memorial Sloan Kettering) in New York, NY. Early in his career he wrote a seminal text on burns, but his energy and evolving expertise in cancer attracted the attention and support of James Ewing, MD, the famed pathologist at Cornell Medical School, New York, NY. Dr. Pack was put in charge of the gastric and mixed tumor services. His clinical productivity and prolific authorship made him internationally known, and he leveraged his reputation to form the Pack Medical Group and an eponymous Foundation at Memorial, ultimately training 45 fellows.

Surgical Oncologist to World Leaders

Even 40 years after his death, articles detailing his knowledge of President Franklin D. Roosevelt's putative melanoma and his involvement with Eva Perón, first lady of Argentina, have appeared in the lay and professional press.[1-3] Dr. Pack operated on Perón twice after she was diagnosed in 1950 with advanced cervical cancer at age 30.

For political reasons, President Juan Perón hid Dr. Pack's involvement and the diagnosis from both his wife and the public. Dr. Pack entered and left the operating room while she was under anesthesia. She ultimately succumbed in 1952 despite surgery, radiotherapy, and chemotherapy and became a mythic figure to some.

The George Pack bookplate



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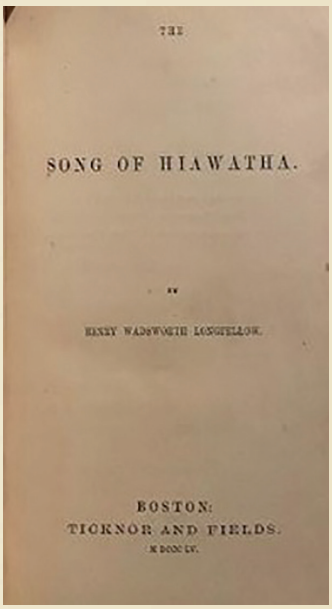
GEORGE T. PACK, M.D.
1898–1969
A TRIBUTE

"The editors paradoxically hope that these volumes may soon become obsolete with the discovery of more efficient means of curing cancer, such as a chemotherapeutic remedy or, better yet, by the creation of an immunity against the disease. In the meantime, these manuals of present-day therapy are offered with the wish that the best treatment plan now available can be instituted for any patient bearing any form of cancer."

GEORGE T. PACK, M.D.
Foreword to the series
"Treatment of Cancer and
Allied Diseases," New York,
Paul B. Hoeber, Inc., 1958.

The Smith and Wallace bookplates



First edition (1855) of Henry Wadsworth Longfellow's epic poem

Left: Dr. Pack. Reprinted from Ariel, IM. George T. Pack, MD, 1898–1969, a tribute. © *Am J Roentgenol Radium Ther Nucl Med.* 1969;107(2):443-446.

I have acquired a number of Dr. Pack's clinical works over the years. In familiarizing myself with his life and contributions, I came across an interesting obituary by his colleague Irving Ariel, MD,[4] which sheds light on Dr. Pack's personal life, noting his love of both farming and poetry.

I was, thus, particularly gratified to acquire a book from Dr. Pack's library bearing his distinct bookplate (designer/artist unknown). The volume is a beautifully rebound first edition (1855) of Henry Wadsworth Longfellow's epic poem, "The Song of Hiawatha." The book bears two other bookplates, publisher Ormond G. Smith and noted bibliophile Walter Thomas Wallace. Wallace's extensive collection was auctioned in 1920, and likely Smith owned this book before Dr. Pack, perhaps giving it to him.

Bookplates, an area of collection and scholarship in their own right, often bear a family or institutional crest, artistic theme, or quote meaningful to the owner. Great artists, such as Rockwell Kent and Alphonse Mucha, often would receive commissions to design a meaningful bookplate, or "ex libris."

The Pack bookplate, here affixed to a nonmedical volume, is replete with icons and symbols surrounding the crab, the symbol for the zodiac sign Cancer. They represent Dr. Pack's devoted care of cancer patients, his lifelong quest for the perfect combination of therapies, and his dissemination of knowledge. The plate still speaks volumes—wordlessly but understandable in any language—to those ongoing aspirations today. ♦

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ACS President Julie Freischlag, MD, FACS (left), presents Dr. Atala with the Jacobson Innovation Award medallion

Regenerative Medicine Pioneer Dr. Anthony Atala Receives 2022 ACS Jacobson Innovation Award

Anthony Atala, MD, FACS, of Winston-Salem, NC, was presented with the 2022 Jacobson Innovation Award of the American College of Surgeons (ACS) at a dinner held in his honor June 10 in Chicago, IL. He is the George Link Jr. Professor and Director of the Wake Forest Institute for Regenerative Medicine (WFIRM) and the W. H. Boyce Professor and Chair of Urology at the Wake Forest University School of Medicine, both in Winston-Salem.

The international surgical award from the ACS honors living surgeons who are innovators of a new development or technique in any field of surgery. It is made possible through a gift from Julius H. Jacobson II, MD, FACS, and his wife Joan. Dr. Jacobson is a general vascular surgeon known for his pioneering work in the development of microsurgery.

"I am truly humbled and honored to receive this award," Dr. Atala said. "The things that were accomplished [for myself] with this research are not really important. What is important is what we do for our patients, and—more important—what we do for each other."

A Career of Innovation

Dr. Atala is a pediatric urologist, researcher, professor, and mentor who is renowned for developing foundational principles for regenerative medicine research, which holds great promise for people who require tissue substitution and reconstruction. Dr. Atala and his team successfully implanted the world's first laboratory-grown bladder in 1999.

His remarkable work has expanded, and today, WFIRM is a leader in translating scientific discovery into regenerative medicine clinical therapies. He currently leads an interdisciplinary team of more than 450 researchers and physicians. Beyond many other world firsts, WFIRM also has developed 15 clinically used technology-based applications, including muscle, urethra, cartilage, reproductive tissues, and skin. The Institute is working on more than 40 tissues and organs.

Through Dr. Atala's vision, ingenuity, and leadership, the WFIRM team has developed specialized 3-D printers to engineer tissues. This work is accomplished by using cells to create various tissues and organs, including miniature organs called organoids, to create body-on-a-chip systems. Dr. Atala and his team also discovered a stem cell population derived from both the amniotic fluid and the placenta, which are being used for clinically relevant research applications.

Dr. Atala's theory is that every cell within the human body should be capable of regeneration. What reproduces naturally inside the body should also have the same capabilities of reproduction outside of the body. According to Dr. Atala, "The key

Dr. Atala (second from left) with, from left (all MD, FACS): ACS First Vice-President Quan-Yang Duh, ACS Executive Director Patricia L. Turner, ACS Board of Regents Chair Anton N. Sidawy, and ACS Regent Fabrizio Michelassi

Dr. Atala with his wife Katherine Atala, MD, and son Zachary

benefit to the approach of cell and tissue regeneration is that a patient will not reject their own cells or tissue, which is always a concern related to traditional organ match transplantation."

Honors and Awards

Dr. Atala's innovative work has been recognized as one of *Time* magazine's Top 10 Medical Breakthroughs in 2007, *Smithsonian's* 2010 Top Science Story of the Year, and *US News & World Report's* honor as one of 14 top Pioneers of Medical Progress in the 21st Century. He has been named by *Scientific American* as one of the world's most influential people in biotechnology, by *Life Sciences Intellectual Property Review* as one of 50 Key Influencers in the Life Sciences Intellectual Property arena, and by *Nature Biotechnology* as one of the Top 10 Translational Researchers in the World.

Dr. Atala was elected to the Institute of Medicine of the National Academies of Sciences (now the National Academy of Medicine) in 2011, and inducted into the American Institute for Medical and Biological Engineering. In 2014, he was inducted into the National Academy of Inventors as a Charter Fellow and has been a strong and thoughtful contributor to the ACS Scientific Forum and Research Committee. He presented the prestigious Martin Memorial Named Lecture at the ACS Clinical Congress in 2010, titled Regenerative Medicine: New Approaches to Health Care.

Other honors include being the recipient of the US Congress-funded Christopher Columbus Foundation Award, which is bestowed on a living American who is working on a discovery that will significantly affect society; the World Technology Award in Health and Medicine for achieving significant and lasting progress; the Edison Science/Medical Award; and the Smithsonian Ingenuity Award.

A National Leader in Regenerative Medicine

Throughout his distinguished career, Dr. Atala has led or served on several national professional and government committees, including the National Institutes of Health Working Group on Cells and Developmental Biology, the National Institutes of Health Bioengineering Consortium, and the National Cancer Institute's Advisory Board. He is a founder of the Tissue Engineering Society, the Regenerative Medicine Society, the Regenerative Medicine Foundation, the Alliance for Regenerative Medicine, the Regenerative Medicine Development Organization, the Regenerative Medicine Manufacturing Society, and the Regenerative Medicine Manufacturing Consortium.

A Prolific Author and Inventor

Dr. Atala is the editor-in-chief of *Stem Cells-Translational Medicine* and *BioPrinting*. He is an author or coauthor of more than 800 journal articles and has applied for or received more than 250 national and international patents.

To view more photos from the dinner reception, scan the QR code.

To watch the award presentation, go to *https://youtu.be/9kG-ohAvd1o* or scan the QR code. ♦

Dr. Eileen Bulger

ACS Calls for Urgent, Bipartisan Action to Address Firearm Violence

On June 2, leaders from the American College of Surgeons (ACS) gathered to call for bipartisan solutions to reduce the rising numbers of deaths and serious injuries that are arriving in trauma centers on a daily basis because of firearm violence.

During an ACS news conference at its Washington, DC, office, surgeons outlined important attainable steps that can be taken to accelerate an effective response to reduce firearm violence.

"Firearm violence is a growing public health crisis that must be immediately addressed. This is a public health crisis, not a political debate. The ACS is committed to crafting solutions that save lives and minimize preventable death," said ACS Executive Director Patricia L. Turner, MD, MBA, FACS. "We are unwilling to wait for another tragedy to befall another community when we believe we have a series of actions that will have an impact."

She explained that trauma surgeons are practical problem solvers who see and live through this crisis every day treating patients who are victims of attempted suicides and homicides, and who suffer other grievous injuries from firearms. "We must be an integral part of the solution to reduce the rising number of deaths we see every year." Dr. Turner said the ACS wants to work with and educate legislators about firearm injury prevention "so that we can incorporate what we know in a data-driven way."

FAST Recommendations Provide Common Ground

The ACS Committee on Trauma convened the Firearms Strategy Team (FAST) in 2017 consisting of highly regarded trauma surgeons, many of whom are firearm owners. Their singular mission was to develop an effective strategy to reduce firearm injury, death, and disability. The recommendations, first introduced in 2018 and renewed in 2022, are the product of broad consensus.

The recommendations made by FAST cover 13 areas and include background checks, registration, licensure, firearm education and training, safe storage practices, red flag laws, addressing mental health issues, and more research to better inform an approach going forward and to help address the root causes of violence. The full-text article appears in the *Journal of the American College of Surgeons* at *bit.ly/3OgEmE3*.

"These comprehensive recommendations provide a road map to a solution and can have an immediate impact on saving lives," said Eileen M. Bulger, MD, FACS, Medical Director of ACS Trauma Programs and one of the leaders who helped develop the FAST recommendations.

From the Frontlines

Trauma surgeon Ronald M. Stewart, MD, FACS, provided a front-line perspective of the crisis. Dr. Stewart, chair of the department of surgery at University Hospital, San Antonio, TX, explained he has been in the unfortunate position of caring for victims from two of the largest mass shootings in modern US history—Sutherland Springs First Baptist Church and the Uvalde School shooting—and described the injuries inflicted by high-velocity weapons as "horrific." The patients he treated

Dr. Ronald Stewart

Dr. Patrick Bailey

Dr. Jeffrey Kerby

"ACS COT has proven that people who significantly differ in their views on firearms can and will enthusiastically work together to reduce unnecessary death and suffering from firearm-related injury and intentional violence."

—Ronald M. Stewart, MD, FACS

all have a long road ahead to deal with both the physical and emotional impact of this shooting. "This moment of crisis will have a lifetime of impact on these innocent souls. Our teams are working to facilitate healing in a way that minimizes long-term effects," he said.

Dr. Stewart, a former Chair of the ACS COT, credited decades of work from the COT in setting organized, regional trauma systems of care that make real lifesaving difference in communities. "In many ways, South Texas has a model trauma and emergency healthcare system built on the ACS model." He also pointed out that newer recommendations to administer whole blood quickly to seriously injured shooting patients are now a factor in saving lives. He commended ACS trauma leaders for advocacy work in educating and training people who are bystanders to control serious bleeding through its STOP THE BLEED® program as another lifesaving measure that's made an impact on improving survival. But he pointed out that these are treatments, "and treatment is not enough; these tragedies are preventable. We can prevent these atrocities."

As for the severity of the problem, he noted that in 2020 firearm injuries became the leading cause of death among children and adolescents.

Dr. Stewart believes that the "ACS COT has proven that people who significantly differ in their views on firearms can and will enthusiastically work together to reduce unnecessary death and suffering from firearm-related injury and intentional violence."

Broad Support for Consensus Recommendations to Reduce Firearm Violence

Patrick V. Bailey, MD, MLS, FACS, a pediatric surgeon and the Medical Director of the ACS Division of Advocacy and Health Policy, observed that the FAST recommendations were developed through "a very deliberative process that included the participation and perspective of other surgeons who like me were also gun owners, but who seek to reduce the impact of gun violence on our country." Dr. Bailey does not believe these recommendations "pose an undue

Dr. Patricia Turner addresses the crowd, with Drs. Eileen Bulger and Jeffrey Kerby looking on

burden on the rights of individual gun owners" and said that he hopes these recommendations will be viewed by a US Congress that comes together in a bipartisan way to "enact substantive legislation directed at mitigating gun violence."

Other Initiatives Provide Pathways

Other advocacy work initiated by the ACS COT that was highlighted at the briefing included a brief overview by Dr. Bulger of the Improving Social Determinants to Attenuate Violence (ISAVE) workgroup. ISAVE presents strategies for trauma centers to address the root causes of violence. The work that came out of the COT's 2019 Medical Summit on Firearm Injury Prevention also was highlighted. The Summit included active participation by 44 professional organizations that gathered to identify collaborative ways to address the firearm violence problem. The organizations developed recommendations based on a consensus of all participating groups.

At the close of the summit, a comprehensive public health and medical approach emerged that included focusing on recognizing firearm injury as a US public health crisis and taking a comprehensive public health and medical approach to address it, researching the issue using a disease model, engaging firearm owners and at-risk communities to develop firearm injury prevention programs, and empowering the medical community to function in the best interest of its patients in a variety of palpable ways. Full proceedings from the summit were published in the *Journal of the American College of Surgeons*, available at *bit.ly/3HiSHxN*.

The important work started at the inaugural Medical Summit on Firearm Injury Prevention will continue, Jeffrey Kerby, MD, PhD, FACS, Chair of the ACS COT, announced. "This fall, we will reconvene and cohost the summit to bring together subject matter experts from across the House of Medicine. We must continue to build our collective will and work creatively to address the root causes that have led to this epidemic," he said. Dr. Kerby believes the ACS COT recommendations provide an immediate path for moving forward.

Dr. Kerby, the Brigham Family Endowed Professor and director of the division of trauma and acute care surgery, department of surgery, University of Alabama at Birmingham (UAB), noted that he regularly speaks with trauma surgeons across the nation. "We are all deeply disturbed by the inordinate amount of firearm injuries and death we must constantly address. My own trauma center has seen a 40% increase in the number of firearm-related injuries just in the last two years, and these numbers continue to increase. We are in the midst of an epidemic of firearm violence, and we need to act. I have to believe that as a country, we can do better."

View the full news conference by scanning the QR code. ♦

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Long-COVID Research Indicates Implications for Surgery

Several notable studies have been released recently that describe a series of health conditions experienced by individuals who have recovered from COVID-19. Known as "long COVID," the impact of these pervasive conditions on health and quality of life may have significant implications for surgeons and patients as they make treatment decisions related to readiness for and recovery from surgery.

Key findings and conclusions include:

***Morbidity and Mortality Weekly Report* (Centers for Disease Control and Prevention)**
"Post-COVID Conditions among Adult COVID-19 Survivors Aged 18–64 and ≥65 Years"
(Available at *bit.ly/3N2M5Vx*)

Researchers looked at electronic health record data over more than 18 months in adults in two groups—those aged 18–64 and those aged 65 and older—to examine the occurrence of 26 conditions that may have stemmed from previous COVID-19, weeks or months after recovery. These data indicated that 38% of all COVID patients experienced a condition versus 16% of controls, with pulmonary embolism and respiratory issues occurring most frequently.

These findings may be relevant for surgeons because the researchers noted that "care requirements might place a strain on health services after acute illness in communities that experience heavy COVID-19 case surges."

Lancet Respiratory Medicine
"Health Outcomes in People 2 Years after Surviving Hospitalisation with COVID-19: A Longitudinal Cohort Study"
(Available at *bit.ly/3xz3kbk*)

This study measured six health outcomes at 6 months, 12 months, and 2 years after COVID-19 hospitalization and recovery in Wuhan, China. In the nearly 2,500 studied patients, half of the survivors had longitudinal improvements in mental and physical health from the acute phase of their infection; however, even 2 years later, they had a notably lower health status than the control group, with high prevalence of pain and discomfort, as well as reduced lung function in patients who had more serious disease.

According to the study, "long COVID symptoms at 2 years were related to decreased quality of life, lower exercise capacity, abnormal mental health, and increased use of healthcare after discharge. Physical health and health-related quality of life of COVID-19 participants were still poorer than those of the control population 2 years after acute infection."

Nature
"Long COVID after Breakthrough SARS-CoV-2 Infection"
(Available at *go.nature.com/3tIMBBc*)

This study had a more specific focus on whether vaccination against COVID-19 conferred any protection from long COVID in the event of a breakthrough infection (BTI). Using US Department of Veterans

Affairs health databases, the authors looked at more than 33,000 individuals with BTI 6 months after infection against several control groups of individuals who did not have COVID-19 infection.

The findings showed that although vaccinated individuals with BTI had a lower risk of death and incidence of post-acute sequelae—including cardiovascular, coagulation and hematologic, gastrointestinal, kidney, mental health, metabolic, musculoskeletal, and neurologic disorders—than patients who were never vaccinated, individuals with BTI still were significantly more likely than control groups to experience death and ongoing symptoms.

The authors concluded, "Measures for the prevention of breakthrough infections are needed to most optimally reduce the risk of the long-term health consequences of SARS-CoV-2 infection."

Visit the ACS COVID-19 Resource Center at *facs.org/for-medical-professionals/covid-19* for more information on how COVID-19 affects surgical care. ♦

ACS Surgical History Group Announces Recipient of 2022–2023 Archives Fellowship

The History and Archives Committee (HAC) of the American College of Surgeons (ACS) has awarded its Archives Fellowship to Julia Chavez of Chicago, IL. Chavez, a medical student at The University of Chicago Pritzker School of Medicine, will conduct research on the history of surgical ethics and the ACS's role in developing ethical standards for surgical care. This annual fellowship began July 1, and Chavez will present her research findings at the History of Surgery Community Breakfast meeting at Clinical Congress 2023 in Boston, MA. Chavez will receive a $2,000 stipend, funded by the Archives of the ACS and the ACS Foundation's Archives Fund.

The HAC Archives Fellowship is offered to support research in surgical history that uses the resources of the ACS Archives, which includes records of the ACS in Chicago and the Orr Collection in Omaha, NE. Four applicants submitted proposals this year, and applications were evaluated by the Archives Fellowship Selection Committee of the HAC.

The Archives Fund was established to support the mission and operations of the ACS Archives. Direct contributions to support the Archives Fund are welcome. Fellows who want to make tax-deductible gifts to fund this program should contact the ACS Foundation at 312-202-5338. ♦

Julia Chavez

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