

JULY 2023 / VOLUME 108 / NUMBER 7

# ACS Bulletin

AMERICAN COLLEGE OF SURGEONS

## Clinical Congress 2023 in Boston

### Also Inside:

OR Black Box

Conflict, Confusion with DNARs

Elite Athletes-Turned-Surgeons

ChatGPT for Surgeons

# CLINICAL CONGRESS 2023

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The American College of Surgeons is dedicated to improving the care of the surgical patient and safeguarding standards of care in an optimal and ethical practice environment.

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# Career Advice for Every Surgeon

Patricia L. Turner, MD, MBA, FACS

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EARLY JULY IS A SPECIAL TIME in medicine. During this month every year, thousands of surgeons and physicians of all specialties shift from their roles as residents and fellows to roles as attending physicians. As the Executive Director and CEO of the ACS, I want to congratulate everyone who is making a transition this month. I remember my own transition from residency to fellowship, and a year later to attending surgeon. For the vast majority of us, this is the culmination of a long journey and a moment to reflect on achievements with pride, even as we recognize how much more we have to learn.

This is also the point at which practice management becomes a concrete part of surgeons' working lives. We talk about this in training, but thinking about the business of medicine in the theoretical is quite different than living it. Our goal at the ACS is to provide support that enhances both surgeons' financial positions and careers and our patients' outcomes. We are committed to offering a robust suite of practice management resources to new (and not-so-new) surgeons, today and throughout our careers.

The words *practice management* are sometimes used to indicate the managerial and administrative activities that private/small business practice surgeons and their patient-facing office staff must do. In the ACS, these words mean that, but also much more. We use practice management to refer to myriad resources for private/small business practice surgeons and employed surgeons, as well as incorporating information on legal support, coding, billing, negotiation, enhancing value, and personal finance, some number of which are topics relevant to all of us.

The ACS offers these resources because we recognize that there are simply not enough hours during residency to teach everything surgeons need to know about building a surgical practice. New attendings must learn the nuances of contract negotiation, legal matters, hiring, firing, contracting with insurance companies, and more. Failing to understand the complexities of the regulatory burdens under which we work can lead to legal and financial struggles, so obtaining this knowledge is crucial to successful practice.

With this in mind, we have recently made our practice management resources easier to access for surgeons across all disciplines, practice types, and circumstances. All existing resources are now organized in a single hub on our website. Visit [facs.org/practice-management](https://facs.org/practice-management) and check back frequently, as additional resources, educational offerings, and tools will be continually added.

## For Employed Surgeons

If you are a surgeon who is employed or seeking employment, our resources for you start at square one: helping you secure favorable working conditions and fair compensation in your new role.

First, you can access a discounted contract review through a legal firm specializing in serving physicians. With a rapid turnaround, their attorneys can advise you about contracting and negotiation.



Importantly, we have also arranged for special discounted ACS member access to physician compensation data reports from three major companies that offer them—the Medical Group Management Association (MGMA), American Medical Group Association (AMGA), and Association of American Medical Colleges. You can purchase these reports at substantial discounts, in some cases with data on multiple, closely related specialties in one package. Depending on your practice setting, one or more of these reports will be most meaningful to you. We support and engage surgeons of every specialty and in every practice setting.

Around the time you are gathering information from compensation reports and considering a legal review, you may want to familiarize yourself with contract negotiation skills via our newest webinar, *Negotiation: Taxonomy, Tactics, Traps, and Tips*, which was first presented to an overwhelmingly positive response at the Leadership & Advocacy Summit in April 2023.

Combining these resources will help you establish yourself successfully at the healthcare organization you are joining. These tools also can help ensure that you plan for the long, fulfilling, and productive career delivering high-quality care we all envision as we embark in practice. This is an element of “healing all with skill and trust.” Supporting all surgeons is a key goal of the ACS and has been represented in our motto for more than a century.

## For Private/Small Business Practice Surgeons

If you are a surgeon in private/small business practice and engaged in practice management in the strictest sense of the term, your work is incredibly valuable, and we have resources to support you specifically.

These include a primer on coding, billing, regulatory compliance, and branding, as well as a primer on contracting with private payers. In addition, our guides (with articles and videos) to buying and selling surgical practices are helpful for surgeons taking these career-defining steps. You will also benefit from the MGMA or AMGA compensation reports, which include data on salaries and will be essential when purchasing a practice or hiring associates.

To serve those surgeons entering rural private practice with unique needs, we have also created a module on the rewards and challenges of rural surgical practice. This engaging webinar, led by Michael Sarap, MD, FACS, former Chair of the ACS Rural Surgery Advisory Council, and Alisha D. Reiss, MD, FACS, President-Elect of the ACS Ohio Chapter, includes

content about the fundamentals of practice in small communities and rural living. We are mindful that we have members serving their patients in every type of environment, from the most urban neighborhood to the most remote frontier.

## For All Surgeons

Being a new attending surgeon is incredibly exciting, and for most, will include a higher salary than when in training. Many surgeons have focused on saving, investing, and planning for years. For those who have not yet embraced these considerations, there may be new interest in information on personal financial wellness. To meet that need, the ACS has developed a series of webinars on topics that span the entire working lives of surgeons, from first employment through midcareer practice protection to retirement.

## Resources Throughout Your Career

Being an attending is a different phase of our careers than being in training. The ACS, representing the entire House of Surgery, is committed to offering essential support to all surgeons throughout their careers—including the moment in early July when many take the substantial step from training to practice.

If there is another practice management resource you need to augment your surgical career, improve your business acumen, or enhance your well-being, please let us know. The more the ACS can provide directed support to surgeons in practice, the better for our workforce, our profession, and our patients.

## Clinical Congress

Registration for Clinical Congress 2023 is now open, and more than a thousand of our colleagues have already registered. The conference returns to Boston this year and will include content focused on both employed practice and private practice. The 4 days we will spend together will also include sessions on contract negotiation, work-life integration, career satisfaction, balance with family, and what senior surgeons wish they had known earlier in their careers, along with the scores of sessions on the clinical practice of surgery. I look forward to seeing you and all of our colleagues there. Register at [facs.org/clincon2023](https://facs.org/clincon2023). Use the hashtag #ACSCC23, and tag me on social media when you do. **B**

**Dr. Patricia L. Turner** is the Executive Director & CEO of the American College of Surgeons. Contact her at [executivedirector@facs.org](mailto:executivedirector@facs.org).

# Join Us for Clinical Congress 2023 in Boston

Matthew Fox, MSHC



## Get ready for one of the most popular surgical education events of the year.

CLINICAL CONGRESS 2023 will be held October 22–25, in Boston, Massachusetts—one of the nation’s oldest municipalities and global home to renowned medical institutions.

This year’s Sunday-through-Wednesday meeting footprint is designed to give you all the learning and networking you need in a more compacted timeframe. In addition, this hybrid event will again offer select content in a virtual, on-demand format, which will remain available for access until May 1, 2024.

Registration is now open—and the deadline to receive the discount early bird registration rate is August 28. Residents and medical students may register for free through October 11. Visit [facs.org/clincon2023](https://facs.org/clincon2023) to register today.

### A Singular Event

Clinical Congress annually brings together distinguished experts in the clinical practice of surgery, as well as leaders in surgical education, research, and technology. It is a meeting that is truly open to and impactful for surgeons of all disciplines.

“What distinguishes Clinical Congress from other meetings is that it truly represents the House of Surgery for all surgeons,” said ACS

Executive Director & CEO Patricia L. Turner, MD, MBA, FACS. “There is content at our Clinical Congress that is relevant to every one of us, no matter the stage of our career, no matter our practice type or situation, no matter our discipline. We are inclusive of all surgeons. The ACS is mindful of all the things that come together to support us in our profession, and we aim to deliver it to you in an efficient package.”

In addition to a broad range of outstanding hands-on and didactic learning opportunities and timely discourse on relevant surgical topics, attendees will have unparalleled access to peers. There is a strength that comes from engaging with colleagues who have a shared experience.

“What is always exciting about attending Clinical Congress is the camaraderie. It’s the ability to network with so many friends, it’s seeing people you haven’t seen in years or decades—people who went through residency with you,” said ACS President-Elect Henri R. Ford, MD, MHA, FACS, FRCS, FAAP, MAMSE. “And whether it’s at the Scientific Forum, whether it’s a Panel Session, or perhaps at one of the department of surgery receptions, there is no better forum in the field of surgery to network with like-minded people.”



Clinical Congress also provides an impressive slate of more casual networking opportunities, and the event that closes the meeting is Taste of the City, which will showcase Boston's unique cuisine and provide impressive entertainment. "It's an opportunity to bring your family and be casual that day, really celebrating with one another and bringing the meeting to an end," Dr. Turner said.

This year's theme is "Surgeons United," reflecting the various pathways that surgeons have traveled during their careers and the reaffirmation of shared values that include quality, integrity, and professionalism.

"Whether you're a general surgeon, a neurosurgeon, orthopaedic surgeon, OB-GYN, or a surgeon in any specialty, we want you to join us at this year's Clinical Congress where we will come together, be united, and carry on the mission of the College to 'Heal All with Skill and Trust,'" said ACS President E. Christopher Ellison, MD, FACS, MAMSE.

### **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 the ACS mission and values.

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.

"To me, one of the most important aspects of the Clinical Congress is the Convocation, where we recognize our new Initiates, our Honorary Fellows, and other Fellows who come to this assembly of surgeons from all over the world," Dr. Ellison said. "It's an amazing event, and I'm looking forward to participating in the avowal to support the College's activities and mission going forward."

### **A Robust Scientific and Clinical Program**

The defining feature of Clinical Congress is the unbeatable scientific and clinical education program, which has several new, exciting features in 2023, in addition to returning core elements.

**“The new features that we are really excited about include a pro/con debate for the first time, which is going to be lively and will present different opinions of the experts.”**

Dr. Ajit Sachdeva

“The Program Committee has worked very hard to create an outstanding clinical program, and it has also made changes that have been dictated by feedback from Fellows,” said Fabrizio Michelassi, MD, FACS, MAMSE, ACS Regent and Chair of the Clinical Congress Program Committee.

Some of the most popular scientific events include more than 100 Panel Sessions, with several dedicated to core general surgery topics. This year will include the latest on:

- Diverticulitis
- Appendicitis, including surgical versus nonsurgical treatment
- Anastomotic leaks
- Hernia repair
- Cholecystectomy

A returning conference favorite is the 10 Hot Topics in General Surgery session, in which Dr. Ellison and Regent Kenneth W. Sharp, MD, FACS, MAMSE, will moderate a wide-ranging, rapid-fire event that highlights important topics for general surgeons, including clinical advances, practice management, career growth, and more.

Timely topics such as the role of predictive tools and artificial intelligence in surgery and postoperative outcomes, caring for transgender patients, and more also will be explored, along with a broad selection of surgical discipline-specific content, including trauma, cancer, and rural surgery.

In addition, Panel Sessions will include dozens

of nonclinical but significant subjects such as management of post-Roe obstetric and gynecologic emergencies; greening the OR; de-stigmatizing and supporting surgeons with disabilities; shifting surgeon culture to support work-life balance, career satisfaction, and retention; and family planning for surgeons.

And there is much more to be excited about with this year’s program, according to Ajit K. Sachdeva, MD, FACS, FRCSC, MAMSE, Director of the ACS Division of Education.

“We have Postgraduate Courses, Meet-the-Expert Sessions, and Town Halls, and each are contemporary in their approach this year and cover important topics for all the professionals, whether they are surgeons in practice, residents, members of surgical teams, or even administrators,” Dr. Sachdeva said.

“The new features that we are really excited about include a pro/con debate for the first time, which is going to be lively and will present different opinions of the experts,” he said.

This debate will cover two common topics faced by general surgeons: the first will debate percutaneous cholecystostomy versus cholecystectomy for acute cholecystitis, and the second will cover open versus minimally invasive surgery repair for inguinal hernia.

“We also have some interdisciplinary sessions as part of a new Multidisciplinary Track,” he said, which will include sessions on care of the advanced melanoma patient, rectal cancer, and critical head and neck injuries.

## Renowned Named Lecturers

A popular feature of Clinical Congress is the series of Named Lectures, and this year's 11 lectures will provide attendees with an opportunity to hear internationally known surgeons and figures in healthcare share their perspectives and insights on medicine and surgery.

The Martin Memorial Lecture, delivered immediately after the Opening Ceremony on Monday, will be given by Gordon L. Telford, MD, FACS, MAMSE, professor emeritus at the Medical College of Wisconsin in Milwaukee.

In his lecture, Dr. Telford will discuss the path from rural boyhood to distinguished surgeon of Franklin H. Martin, MD, FACS, the College's founder.

"It is a great honor to be asked by the College to present the annual Martin Memorial Lecture and have that presentation be about Dr. Martin and his highly accomplished career," Dr. Telford said.

"Like Dr. Martin, I come from a farm background and that makes the opportunity to give this presentation all the more special to me. It is my belief that Dr. Martin became a great leader, not in spite of his rural



background but because of it. He is a great example of the reason why an organization needs members from all backgrounds to flourish."

The Martin Memorial Lecture will be presented in person and livestreamed. All lectures will be recorded and made available for on-demand viewing within an hour after the live presentations.

## Other Named Lectures



### John H. Gibbon Jr. Lecture

*What's New May Be Old: Xenotransplantation*

Lecturer: Bartley P. Griffith, MD, FACS, FRCS



### Olga M. Jonasson Lecture

*Phoenix Rising: The Culture of Surgery—A Paradigm Shift*

Lecturer: Susan E. Mackinnon, MD, FACS



### Charles G. Drake History of Surgery Lecture

*Pathologies of the Surgical Image in Modern American Popular Culture*

Lecturer: Frederick G. Barker II, MD, FACS, FAANS



### Distinguished Lecture of the International Society of Surgery

*Artificial Intelligence and the Future of Global Surgery*

Lecturer: Ewen M. Harrison, OBE, MB, ChB, MSc, PhD, FRCS, FRSE



### Herand Abcarian Lecture

*Things I Wish I Had Known at the Start of My Journey as a Colorectal Surgeon*

Lecturer: Tracy L. Hull, MD, FACS, FASCRS



### John J. Conley Ethics and Philosophy Lecture

*America's Opioid Dilemma: Ethical Prescribing during an Overdose Epidemic*

Lecturer: Travis N. Rieder, PhD



### Excelsior Surgical Society/Edward D. Churchill Lecture

*Service, Synergy, and Surgical Mythology*

Lecturer: M. Margaret (Peggy) Knudson, MD, FACS



### Commission on Cancer Oncology Lecture

*Breaking the Mold: Chartering a New Roadmap to Impact Care through Science*

Lecturer: Jennifer A. Wargo, MD, MMSc



### Scudder Oration on Trauma

*Trauma Care: The Vehicle, the Barometer, the Original Yardstick for Equal Care in America*

Lecturer: Edward E. Cornwell, MD, FACS, FCCM



### Metabolic and Bariatric Surgery Lecture

*Metabolic Surgery: Bariatrics and Beyond*

Lecturer: Henry Buchwald, MD, PhD, FACS, FRCS(Eng)(Hon)

## Spotlight on the Academy of Master Surgeon Educators

Special Sessions on timely topics of interest to ACS members have become a foundational element of Clinical Congress in recent meetings. This year will include a Special Session from the ACS Academy of Master Surgeon Educators® on Acquisition of New Surgical Skills by Practicing Surgeons.

Over the course of decades of surgical practice, surgeons acquire skills to perform new procedures and use new technologies to provide the best care to patients. Unlike the period of structured surgical training, practicing surgeons participate in self-directed and self-regulated learning based primarily on their own efforts. In this session, education experts will discuss how to assess the appropriate time to acquire new surgical skills, seek out effective education programs to acquire the new skills, and safely transfer the new skills to surgical practice.

## Scientific Forum and More

The expansive Scientific Forum 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 researchers of all experience levels—from medical students to 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 discipline-specific format (e.g., cardiac surgery, pediatric surgery).

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

In recognition of the ACS's commitment to surgeons at all stages of their careers, the Surgery Resident Program and the Medical Student Program will return this year with information, education, and faculty tailored to meet the unique needs of these young cohorts.



## Plan Your Conference and Stay on Schedule

With hundreds of sessions, it can seem daunting to plan your tailored conference experience. But the College is offering several options to help you create your Clinical Congress schedule and find where and when you need to go.

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### Check out the Exhibit Hall

Throughout the conference, attendees will be able to visit ACS Central and the Technical Exhibition, where more than 125 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.

In addition, returning this year are two popular educational exhibits—the ACS Surgical Metrics Project and the Surgical Ergonomics Hands-On Clinic.

“Our Committee on Surgical Ergonomics and Division of Education worked together to create this clinic, which allows surgeons to come into a protected space where they can practice certain techniques. Surgeons can learn tips and implement them in their own practices so they can address some positioning issues,” Dr. Sachdeva said. “Last year, we had a huge number of people who came in; interest in the clinic was overwhelming. We expect the same in Boston this year.”

More information on Clinical Congress 2023 will be available in the coming months. Continue to check ACS communications channels, including [facs.org/clincon2023](https://facs.org/clincon2023). **B**

**Matthew Fox** is the Digital Managing Editor in the ACS Division of Integrated Communications in Chicago, IL.







A dark, high-angle photograph of an operating room. The ceiling is visible with various medical equipment and lights. In the background, several monitors and medical equipment are visible. The overall atmosphere is clinical and professional.

# **Black Box Technology Shines Light on Improving OR Safety, Efficiency**

Tony Peregrin

**“Improving surgical care requires access to high-quality data from one of the most secretive environments in modern society—the operating room (OR),” said Teodor Grantcharov, MD, PhD, FACS, inventor of the OR Black Box.**

INSPIRED BY THE AVIATION INDUSTRY’S black box, which helps transportation investigators determine the cause of an adverse event, the OR Black Box is a sophisticated system of sensors and software—not a physical box—that captures data with the goal of minimizing risks and improving patient outcomes.<sup>1</sup>

The OR Black Box tracks all activity in the OR, including patient vital signs, equipment malfunctions, and surgical team performance—virtually any factor that might affect the outcome of a surgical procedure. The streams of data collected by this platform are then analyzed using a combination of artificial intelligence (AI) and specialty-trained analysts to produce feedback intended to improve efficiency in the OR, enhance surgical training, and optimize best surgical practices.

“The OR Black Box processes an enormous amount of data in excess of half a million data points per operating room per day,” explained Dr. Grantcharov, adding that the purpose of this technology is not to point fingers or assign blame but to reduce errors and improve systems of care.

Last September, Stanford Hospital in Palo Alto, California, installed this technology in four operating rooms—the first on the West Coast—joining a total of 24 hospitals in the US, Canada, and Western Europe that are using the OR Black Box system.<sup>1,2</sup>

“We expect this number will double in the next 12 months,” said Dr. Grantcharov, who is the associate chief quality officer for innovation and safety for Stanford Healthcare and professor of surgery at Stanford University.

Duke University in Durham, North Carolina, has featured the OR Black Box platform in two of its



ORs, with plans to expand across several surgical specialties, including thoracic surgery, urology, gynecology, neurosurgery, and trauma.<sup>2,3</sup>

“The OR Black Boxes are quite good for minimally invasive surgery, whether its robotic or laparoscopic, because the filming of it can be taken straight off of the monitor,” explained Christopher R. Mantyh, MD, FACS, FASCRS, vice-chair of clinical operations at Duke University Medical Center, and a professor of surgery in the Division of Surgical Oncology.

“Historically, the OR has been a very closed shop,” added Dr. Mantyh. “We’ve never really conducted a close deep dive into what actually occurs there until now.”

### **Evidence Supporting OR Black Box Implementation**

The idea to develop what eventually evolved into the OR Black Box came to Dr. Grantcharov as a surgical resident in Copenhagen, Denmark, where he observed sharp differences in skill levels of surgeons objectively measured by a virtual reality simulator.<sup>4</sup>

After moving to the University of Toronto in 2006, he worked with engineers and data specialists to create the first prototype of the OR Black Box, which was installed at St. Michael’s Hospital in Toronto.<sup>5</sup>

Advancing the OR Black Box from a prototype to a system adopted by hospitals around the globe started with a fundamental question: Does the platform deliver on its mission to make healthcare safer and more cost effective?

In a study published in a 2020 issue of the *Annals of Surgery*, Dr. Grantcharov and coauthors conducted a cohort study of patients undergoing laparoscopic surgery at an academic hospital during the first year of OR Black Box implementation.<sup>6</sup>

Analyzing the data from 132 consecutive patients, a median of 20 errors per case or 3,435 errors were identified. According to the study’s authors, “...errors most frequently occurred due to the application of insufficient force or underestimation of distance to target tissue when performing surgical tasks. Errors often took place during dissection (median of 18 errors per hour), resection (13 per

A specialized camera behind Dr. Grantcharov captures video and audio data. The output has all faces blurred to de-identify patients and the surgical team. (Photo by Yuri Makarov)

hour), and reconstruction phases (18 per hour), and when performing a grasping or dissecting task (6 per hour).<sup>6</sup>

The study also revealed that auditory distraction occurred a median of 138 times per case, including alarms from equipment, pagers, phones, and surgical devices.<sup>6</sup>

“The topic of distractions in the OR was something that really surprised us in the early days of the data analysis,” revealed Dr. Grantcharov. “In fact, the number of distractions we found was extraordinarily high. I think my colleagues will identify with the fact that somebody inevitably comes in and asks a question during the most physical step of the procedure or how often someone comes in and asks when we will be done so that the next case will be able to follow.”

According to the study, the OR door opened a median of 42 times per case or approximately once every 2 minutes. The authors assert that surgeons

who encounter auditory distractions exhibit “lower surgical skill proficiency, speed, and accuracy” in a simulated environment.<sup>6</sup>

“Often, these distractions adversely impact our ability to execute critical steps and can lead to an increased number of errors,” Dr. Grantcharov said. Both Drs. Grantcharov and Mantyh said findings such as these present informed opportunities to construct better ORs and intentionally design devices with more effective alarms.

Further studies using the OR Black Box technology have demonstrated the impact of stress, leadership style, teamwork, and communication on safety outcomes. The results have highlighted the importance of modern leadership and safety culture in the journey toward high reliability in surgery. Ongoing studies are investigating the impact of data-driven improvement achieved through the OR Black Box on patient outcomes and are expected to be published later in 2023.

The OR Black Box console is a touch panel screen that provides information to the surgical team.





Dr. Christopher Mantyh



Dr. Theodore Grantcharov

Notably, the OR Black Box design is intentionally nonintrusive in order to avoid interrupting normal behavior or processes in the OR. This approach is aimed at eliminating the Hawthorne effect, which occurs when individuals behave differently if they know they are being watched, according to Dr. Grantcharov.

### **OR Black Box and the M&M Conference**

Mitigating errors and eliminating distractions in the OR are not the only ways the OR Black Box can drive a culture of safety—this technology also can augment surgical education and training with feedback that addresses specific procedures focused on the system rather than a particular individual.

After data from an OR are collected, they are analyzed via explainable AI algorithms to uncover variations in the procedure that are then tagged for human review.

Dr. Mantyh described how a tagged case provided a notable teaching moment during a Morbidity and Mortality (M&M) conference at Duke.

“It was a low interior resection for rectal cancer, and one of the large veins was entered, which is a known complication from these procedures,” he said. “The decision was made to open and anesthesia saw that there was bleeding, and they actually called for some blood and additional help. Within a few minutes, the patient had an open laparotomy, and the bleeding was repaired surgically with a couple of sutures.”

According to Dr. Mantyh, the case—which was presented at an M&M conference a week or so later—is used as an example of how well a surgical

team can perform if there is an untoward event.

“I think what we try to do with this technology is look at something that occurred and figure out how we can make it better. Or determine what we did if something actually worked out quite well. The old mantra of blame and shame at M&M conferences is out—we really want to examine things to learn how we can improve,” said Dr. Mantyh.

Developing an objective process for evaluating surgeon proficiency is key to improving surgical outcomes. Rather than relying on human memory to reconstruct an event, the OR Black Box is an assessment tool that can be used, not only in the peer-review setting of the M&M conference, but also in a self-directed review to identify areas for improvement. For surgical trainees, this platform promotes effective coaching and opportunities for enhancing technical skills like closing an incision or inserting a breathing tube.

“We’ve known for a long time that high-quality, objective, meaningful measurement of skill and performance is important,” Dr. Grantcharov said. “Today, this is done through questionnaires that are subject to recall bias. Often, the way we evaluate our cases and provide feedback to our trainees

is subjective and biased, and it's often meaningless in terms of improvement.”

Replacing subjective and unreliable measurement and feedback with a machine-generated process that is objective and actionable could dramatically improve surgical education, as well as surgeon development at three critical steps: selection, promotion, and certification.

“A lot of work still has to be done in this area, especially for high-stakes or summative assessment, but we are well into that process. And, for the first time in many years, I feel optimistic about the introduction of competency-based education in surgery,” said Dr. Grantcharov.

### **Improving OR Efficiency**

Implementing procedures that decrease inefficiencies in the OR, such as scheduling delays, canceled cases, and surgical wait times, also can improve the care of the surgical patient. “Everyone thinks that the Black Box is going to just be looking at what’s going on in the operating room, but there’s a lot of activity that goes on before the case even starts,” explained Dr. Mantyh.

In a 2015 article published in the *Journal of the American College of Surgeons* that examined factors contributing to OR delays, the authors noted that “delays in surgical start times can be attributed to both human errors and system deficiencies, with both occurring in the OR.”<sup>7</sup> The article suggested that improvements in scheduling lead to more efficient allocation of staff and resources, enhanced patient flow, and higher patient satisfaction scores.

“More than half of procedures are under-scheduled, which means that if the surgeon believes that a procedure will take 1 hour, it often takes 2 to 3 hours,” said Dr. Grantcharov. “We’ve shown with the objective data that we generate through the OR Black Box that we can cap scheduling errors dramatically resulting in better OR utilization.”

For example, if three cases are booked in one OR and each of them is an hour longer than originally scheduled, this obviously can lead to significant delay-related inefficiency throughout the day. The OR Black Box uses machine learning, rather than subjective and retrospective information that is manually input into the system, to make scheduling predictions.

This technology also can help improve OR turnover rates by looking at how surgical equipment is arranged in the OR, including the positioning of trays or the placement of laparoscopic devices.

“If there’s a delay getting the patient into the room because a piece of equipment’s not there, we can look at the Black Box and figure that out,” added Dr. Mantyh. “Was it simply not in the room or did we have to call it up from our supply area? Turnover time has always been an issue at our hospital, and the question is, ‘Why?’ With data from the Black Box, there is a lot of opportunity to streamline the process and make it more efficient.”

Inefficiency has a tremendous effect on the quality of life of doctors, nurses, and staff in the OR, shared Dr. Grantcharov. “We found that one of the reasons operating room nurses were leaving their profession was unpredictable overtime. It’s hard to organize your life if you can’t predict when you’ll be home.”

Enhanced efficiency in the OR not only increases job satisfaction, it also reduces spending on overtime. “This reduction in cost leads to better use of one of the most valuable resources in the hospital—the operating room,” said Dr. Grantcharov.

### **Positive not Punitive**

A significant barrier to widespread adoption of the OR Black Box is the concern that the data could be used for punitive or legal purposes.

“This is a natural first reaction,” said Dr. Grantcharov. “Obviously, we practice medicine in a litigious society, and we’ve got enough stressors in our lives

**The OR Black Box uses machine learning, rather than subjective and retrospective information that is manually input into the system, to make scheduling predictions.**





without adding another one. We've introduced a number of protective mechanisms to make the data de-identified in order to aggregate it and make it practically impossible to be used for any type of legal action."

Dr. Mantyh added, "Not only is the patient information de-identified, but the surgeon's voice and his or her image are also de-identified as is anyone's who is in the operating room."

To date, OR Black Box data remain untested in the legal arena, likely because the system is relatively new.<sup>2</sup>

Both Drs. Grantcharov and Mantyh urge hospitals to embrace the OR Black Box platform, as these data reinforce and promote surgical safety and best practices, leading to fewer adverse outcomes and, therefore, fewer liability and malpractice claims.

"I believe this type of technology will be the mirror that we need to look at as individuals, as teams, as organizations, and as a profession in general," said Dr. Grantcharov. "I think that continuous access to objective data will allow us to critically reflect on our performance. Without objective and reliable data, we have absolutely no chance of improving." **B**

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The OR Black Box captures data analyzed by both artificial intelligence and human reviewers. (Photo by Yuri Makarov)



Access the video at [facs.org/bulletin](https://facs.org/bulletin)



# DNARs Can Lead to Conflict, Confusion

Jim McCartney

## PHYSICIAN STATEMENT

I am the physician of the patient named above and I affirm the patient's wishes. I hereby direct any and all qualified health care personnel to not perform any resuscitation (cardiac compression, intubation and other related procedures) from the patient such as intravenous fluids, oxygen or other therapies and alleviate pain. A copy of this order is in the patient's medical record.

Date: \_\_\_\_\_

GUIDANCE ON how to manage surgery patients with “Do Not Attempt to Resuscitate (DNAR)” orders has not yet been universally adopted and often leads to confusion and even conflict.

However, several experts in this area are urging surgeons to explore and document a patient’s wishes before the operation to help avoid disagreements during and after the procedure.

In 2013, the ACS issued a revised Statement on the Advance Directives by Patients: “Do Not Resuscitate” in the Operating Room (the original statement was issued in 1994) that focused on patients who accept a surgeon’s recommendation to have surgery and already have a DNAR in place. The statement notes that the best approach for these patients is a policy of “required reconsideration” of the existing DNAR orders.<sup>1</sup>

In addition, the American Medical Association Code of Ethics states that the ethical obligation to respect patient autonomy and self-determination requires that physicians respect decisions to refuse care, suggesting that physicians should address the potential need for resuscitation early in the patient’s course of care.<sup>2</sup>

“We’ve had this policy for a long time, and it’s probably not working exactly as we envisioned,” said Margaret “Gretchen” Schwarze, MD, MPP, FACS, a vascular surgeon and medical ethicist at the University of Wisconsin (UW)-Madison. UW-Madison has a policy mandating preoperative conversations about DNAR orders.

In fact, authors of a recent article in the *Journal of the American College of Surgeons (JACS)* described the OR as the “last bastion of resistance to acceptance of DNAR orders.”<sup>3</sup>

### Suspension of DNAR Instructions during Surgery

Why have some clinicians failed to adopt and practice the concept of required reconsideration for patients with DNARs going to the OR? The authors of the *JACS* article assert that there may be a number of reasons, including the inability to predict all potential scenarios in the perioperative environment, the time spent having these conversations, ambiguities associated with the decision-making process, and the need for accurate, readily accessible documentation.

Although research is scarce in this area, one study shows that nearly one-third of surgeons at the Mayo Clinic in Rochester, Minnesota, automatically suspended DNAR orders during surgery.<sup>4</sup> One reason may be that automatically suspending the DNAR is the easiest and quickest way to handle the DNAR issue

because it doesn't involve a conversation with the patient or the surrogate.

Clinicians may choose this course when there isn't enough time to have a conversation about the DNAR orders or if the patient doesn't have the capacity to hold the discussion, according to Preeti R. John, MD, MPH, FACS, FCCM, HEC-C, a palliative care surgeon, intensivist and healthcare ethics consultant with the VA Maryland Health Care System in Baltimore, and lead author of the *JACS* article.

Dr. Schwarze added that not suspending the DNAR in the OR often goes against the grain of clinicians.

"Many surgeons feel that the whole point of surgery is for the patient to survive the operation," she said. "So why wouldn't we want to do everything in our power to allow the patient to survive—especially if we did something that put them in cardiac arrest that we could easily reverse in the operating room?"

This urge to suspend the DNAR order in the OR to protect the life of the patient is compounded when the clinicians' actions—whether related to the anesthesia, the procedure, or a medical error—cause the patient to deteriorate or arrest, especially when they are in a position to immediately attempt to correct and reverse this decline.

### Understanding and Respecting the Patient's Wishes

Automatic, unilateral suspension of DNAR orders in the OR is neither best practice nor ethically justified for elective surgery because it does not respect the

patient's autonomy or the right to be truly informed about the choices they have with regard to resuscitation, Dr. John said.

Even if resuscitation may appear to have a good chance of success, this does not justify automatic suspension of DNAR orders because those efforts could cause the type of harm the patient wanted to avoid when he or she requested the order.

On the other hand, the patient needs to understand that while the DNAR order means "do not try to restart the heart when the heart stops functioning," it does not mean "do not treat clinical deterioration," she explained.

"Most surgeons know that, for some people, the best way to help them is not to try to prolong their life, but to make sure they're not suffering," Dr. Schwarze said. "That's part of our job as much as it is to prolong life and prevent disability: prevent suffering for patients who are dying or have very serious life-limiting illness."

Informed consent is based on the ethical principles of patient autonomy and the right to self-determination. Patients are likely

to consent to surgery to improve their clinical condition or quality of life.

Normally, informed consent involves standardized, straightforward paperwork that may be modified based on the individual patient, said Linda G. Phillips, MD, FACS, a plastic and reconstructive surgeon at The University of Texas Medical Branch in Galveston, and Chair of the ACS Ethics Committee. But for patients with DNAR orders, clinicians need to address the ambiguities associated with treatment decisions if they are to respect the patient's autonomy and inform their consent.

"Patients don't necessarily want to have a full court resuscitation because they're concerned that they'll be kept alive in a comatose state or on a ventilator," Dr. Phillips said. "But they would still be very interested in procedures that could give them less pain, make them more comfortable, and make the time they have more enjoyable for them and those who love them."

On occasion, for an emergency case, when there is insufficient

## Automatic, unilateral suspension of DNAR orders in the OR is neither best practice nor ethically justified for elective surgery.

**Table.** Levels of Care and Life-Sustaining Treatments Required During Anesthesia

Procedure-Directed Levels of Care	Life-Sustaining Treatments
Level I (required routine administration of anesthesia)	Routine
	IV fluids
	Intubation
	Mechanical ventilation
	Vasopressors
Level II (required during deterioration)	Clinical Deterioration
	Blood transfusion
	Inotropes
	Antiarrhythmic drugs
	Cardioversion
Level III (excluded if DNAR order is retained)	Cardiopulmonary Arrest
	Chest compressions
	Defibrillation
	E-CPR using ECMO circuit

time to have a detailed conversation and the patient’s life depends on getting to the OR as rapidly as possible, it may be necessary to do the procedure without obtaining consent.

Also, if the patient does not have decision-making capacity (e.g., because they have lost cognitive function due to dementia) and a surrogate is not available, unilateral suspension of an existing DNAR order prior to emergency surgery may be the most feasible and appropriate option.

But even in cases of emergency when the patient or surrogate is unavailable for a discussion, the decision is not a simple one, said Dr. John. For example, if there are unforeseen complications

and the patient depends on life-sustaining treatments (LSTs) postprocedure, how long does the surgeon temporarily rescind the DNAR order?

### Conducting the Required Reconsideration Discussion

At a minimum, surgeons should clarify what the DNAR order means to the patient. The DNAR order may be an indication that a patient does not want heroic measures, to stay on life support for a prolonged period, or to be in a persistent vegetative state.

“I really love this notion of required reconsideration because it doesn’t tell you what to do,” Dr. Schwarze said. “It lets you make sure everybody is on the same page before you move forward.”

The DNAR does not imply that clinical deterioration should not be treated. For example, resuscitation during hemodynamic deterioration is different from resuscitation after cardiac arrest. For many patients, the issue isn’t about resuscitation efforts, but about the risk of functional and cognitive deficits and the potential need for additional LSTs due to cardiac arrest, Dr. Schwarze said.

Clinicians should consider having both a goal-directed discussion (clarifying patient wishes and values) and a procedure-directed discussion, Dr. John said. When discussing procedures, using a levels-of-care approach that groups LSTs into categories may simplify the explanation about which LSTs are used only during an arrest (see Table, this page).

Ultimately, patients with a DNAR order have three options before surgery:

- Retain the DNAR order
- Temporarily rescind the DNAR order
- Permanently revoke the DNAR order

But without a required reconsidered discussion, the clinician may not know what the patient means or intends in choosing one of these options.

### Disclose potential complications

Both the surgeon and anesthesiologist have a responsibility to disclose potential complications resulting from therapeutic interventions or error.

If the complication is reversible, would the patient wish to have resuscitation attempted? An array of scenarios should be discussed with the patient and family/caregivers before surgery to clarify when a DNAR order should or should not be suspended.

These clinicians also need to explain to the patient the difficulty in predicting intraoperative complications and postoperative outcomes.

### Determine patient goals for the procedure and for quality of life

Clinicians need to discuss the patient’s goals for the procedure and their longer-term, quality-of-life goals. What is the patient’s definition of a successful resuscitation? Should lifesaving therapies such as postoperative ventilator support be used and, if so, for how long? (see sidebar, page 30)

Ultimately, surgeons and anesthesiologists should come away from the conversation with a good understanding of the nuances around the patient's short- and long-term goals.

"The conversation is a way to document what they're not okay with, such as loss of cognitive function or living on a ventilator," Dr. Schwarze said. "What kinds of burdensome treatments are they afraid of?"

Dr. Phillips added that "these kinds of discussions have to be individualized based on what their medical condition is."

Conducting a required reconsideration conversation is challenging and time-consuming, which is why many surgeons avoid having the discussion even though they agree that it's important.

Dr. Schwarze co-authored a research study that showed, before taking a patient in for an operation, surgeons tend to avoid having—much less

documenting—advance care planning discussions that include addressing postoperative life-sustaining treatments.<sup>5</sup> Avoiding these conversations may result in the surgeon's inability to understand the patient's wishes during surgery and postoperatively as well.

"We lose access sometimes to our ability to know what their preferences are, because they can't speak to us after surgery," Dr. Schwarze said. "We really need to figure out before surgery what kind of burdens they will tolerate."

#### **Present and document the patient's choices**

The choices presented should be nuanced and tailored to the individual patient, not "all or none." For example, Dr. Schwarze said patients should not be presented with a checklist of LSTs; it is inconsistent care, and it may end up in unrealistic scenarios, such

as patients demanding CPR but refusing intubation.

Likewise, presenting the patient with a checklist describing quality-of-life issues may not be practical because there are so many complicated potential scenarios for which the outcomes are difficult to accurately forecast.

"It's hard to be absolutist in your approach," Dr. Phillips said. "It pretty much has to be tailored to the patient, the situation, and their family."

For patients with progressive, incurable disease, including those in hospice, palliative procedures can address symptoms and improve quality of life. For these situations, it's especially important for the surgeon and anesthesiologist to clarify the overriding goals.

"If it's something that is palliative and we're doing it in such a way that it's going to leave them permanently transformed or disfigured even, I certainly would want the ethicist present for that," Dr. Phillips added.

Palliative procedures are further complicated by the fact that if the patient dies within 30 days after a procedure it will increase the surgeon's 30-day mortality rate. This is a disincentive for surgeons who do not want a 30-day mortality outcome on their publicly reported records. As a result, some patients in great pain may have trouble finding a surgeon to relieve their symptoms.

"With palliative procedures, improving the quality of life is the goal," Dr. John said.

Dr. Schwarze added that using a more sophisticated and nuanced



## Discussion topics for “required reconsideration” conversations



What does the DNAR order mean to the patient?

Resuscitation choices (avoid presenting as “all or none”):

- Goal-directed discussions: What are the patient’s goals for the procedure?
- Procedure-directed discussions: with LSTs (see Table on page 28)

Discuss the potential for unexpected adverse events (including cardiac arrest) related to therapeutic interventions/errors. Would the patient wish to have resuscitation attempted if the clinicians think that the arrest is potentially reversible?

If LSTs are required after surgery with no clinical improvement, how long would the patient want to be dependent on LSTs? Would a time-limited trial of LSTs be desired?

What are the patient’s perspectives about “quality of life”?

What does the patient prefer to do with the DNAR order during the procedure:

- Temporarily rescind DNAR order—for how long?
- Retain DNAR order?
- Permanently reverse DNAR order?



approach may be necessary to better align the goals of surgery with measured outcomes.<sup>6</sup>

### Timing of the Conversation

A required reconsideration discussion about whether or not to modify the DNAR order should be multidisciplinary and should occur before the day of surgery; the day of the procedure can be stressful for the patient or surrogate, who may already be overloaded with information.

Ideally, the attending surgeon and the anesthesiologist, should attend these patient discussions, as should patient surrogates or immediate family members.

The anesthesiologist should be included because putting the patient in a “suspended state” and getting them out again is a significant risk, Dr. Phillips said. General anesthesia may cause problems for the patient by suppressing the patient’s respiratory drive and consciousness and changing the patient’s hemodynamics.

The hospital ethicist should be included, especially if there are family members with opposing viewpoints regarding DNAR orders, said Dr. Phillips. Having a calm third party is helpful for what could be an emotional discussion, she said.

Unfortunately, these required reconsideration discussions often are delegated to junior members of the surgical team who may perceive asking about code status as just another box to check preoperatively, without thinking through the critical nature of this discussion.

“Especially if they have an established relationship with the patient, the surgeon needs to be there,” advised Dr. Phillips. The patient and family may not accept having a delegate assigned to the task of participating in this important conversation.

Even when the surgery is elective, many surgeons feel they do not have time to have a lengthy discussion about DNAR orders. These discussions usually last at least 30 minutes, and often can be an hour, depending on how many family members are involved, Dr. Phillips said.

But, in the end, lack of time is no excuse.


“If you have time to get good consent, you have time to talk to a patient who has a DNAR order,” Dr. Schwarze said. “This conversation should include what to do about that DNAR in the operating room, and what happens if the patient is sick after surgery and needs to be on a ventilator for a while.”

### Patient Refuses to Modify or Suspend the DNAR Order

When probed with questions to clarify wishes, some patients want aggressive care while others may want to limit treatments in certain scenarios.

“Many patients will choose to suspend the DNAR order during this time because resuscitation during and immediately after a procedure has a higher chance of success,” Dr. Schwarze said. “However, some patients may choose to keep the DNAR order in effect during an operation or





## The choices presented should be nuanced and tailored to the individual patient, not “all or none.”

a procedure given the potential harm of resuscitation to their overall goals.”

Just as a Jehovah’s Witness patient can refuse a lifesaving blood transfusion during surgery, a DNAR patient may refuse resuscitation during a procedure, according to the *JACS* article. Neither patient intends to die on the operating table, but they accept that this may result from their refusal of certain LST measures.

In some cases, clinicians may be hesitant to treat patients who keep their DNAR orders intact during an operation.

“I have had patients who wanted to keep their DNAR order during surgery and had a hard time finding an anesthesiologist who would do the case,” Dr. Schwarze said.

### Advancing the Practice of Required Reconsideration

Culture change is necessary to incorporate best practice recommendations into everyday clinical care and institutional policies and protocols. Since often it’s a junior resident in teaching hospitals who’s delegated to get the patient consent and clarify issues about the existing DNAR order, it is even more important to develop

hospital policies and procedures for safeguarding the interests of the patients.

Prompts could be built into the electronic health record to enable documentation of these patient conversations, Dr. John said, adding that consideration should be given to linking this documentation to quality measures.

The Veterans Health Administration’s directive about LST decisions specifies that DNAR orders must not be automatically suspended prior to procedures that involve anesthesia. The VA enables documentation using a specific templated “LST note” in a standardized location within the order, according to Dr. John.

Learning how to discuss informed consent and advance directives with patients, including DNAR orders before surgery, should be taught to and practiced with surgical residents, just like other surgical skills, Dr. Schwarze said.

The demand for these types of required reconsideration conversations will only grow in the coming years.

“As the population ages,” Dr. John explained, “We’re likely to see more and more patients present for procedures with existing DNAR orders.” **B**

**Jim McCartney** is a freelance writer.

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FEATURE

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# Elite Athletes- Turned- Surgeons



# Take Valuable Lessons into the OR

M. Sophia Newman, MPH

THE MOMENT COMES AND GOES IN A FLASH. First, gymnast Lise Leveille is standing in one corner of a huge blue exercise mat, pulling her posture straight and taking a deep breath; then she runs a few steps, backflips, and launches herself into a triple twist. In a wordless 3 seconds, the tumbling pass explains why she was at the 2000 Olympics in Sydney, Australia, as part of the Canadian national gymnastics team.<sup>1</sup>

Twenty-three years later, Lise Leveille, MD, MHSc, PhD, FRCSC, now a pediatric orthopaedic surgeon at British Columbia Children's Hospital in Vancouver, Canada, said her time in top-level gymnastics has clear connections to her work as a surgeon: "I see it and feel it so much in my surgical career. Learning to become a surgeon is like training to be an elite athlete."

The idea that a surgeon's career can be positively shaped by the attributes or habits of high-level sportspeople is not confined to the rare elite athletes at work in the operating room. Rather, this idea has turned up in op-eds in surgery journals,<sup>2</sup> a named lecture at Clinical Congress,<sup>3</sup> even randomized clinical trials.<sup>4,5</sup> Collectively, these articles and

“The camaraderie, the hard work, the dedication, the teamwork, the self-sacrifice of being part of a team—all these things were tremendous values that I was drinking through a firehose and still to this day live my life by.”

Dr. John Frank



Dr. James Bradley has been the head surgeon of the Pittsburgh Steelers for more than 30 years.



personal experiences suggest there are specific approaches to sports achievement that doctors, athletic and not so athletic, can borrow to improve and maintain their surgical performance.

But are the habits of elite sportspeople truly exportable to the operating room? What elements of the elite athletes' experience can improve the daily clinical work of surgeons who lack athletic experience?

Beyond the op-eds and peer-reviewed studies are the insights of two National Football League players, a New York City Ballet dancer, and Olympic gymnast Dr. Leveille—all of whom have developed thriving careers in surgery since leaving their athletic days behind.

In addition, there are the thoughts of an icon of the dance world, Wendy Whelan, who underwent hip surgery—an operation shown in a documentary on her life, *Restless Creature*<sup>6</sup>—shortly before retiring from the New York City Ballet, where she had an incredible 30-year career as a dancer. She has since transitioned to her new role as Associate Artistic Director of New York City Ballet, as well as a teacher and repertory coach.

### Immersive, Not Exclusive

John E. Frank, MD, and James P. Bradley, MD, have both lived lives deeply immersed in athletic pursuits.

Dr. Frank was drafted by the San Francisco 49ers in 1984, at age 23, just after earning acceptance to several medical schools. He completed his first year as a medical student at his undergraduate alma mater, The Ohio State University in Columbus, during the offseason, after helping his team defeat the Miami Dolphins in Superbowl XIX.

After another 4 years in the NFL—and a second turn at the Superbowl, this time helping the 49ers conquer the Cincinnati Bengals—Dr. Frank announced his retirement from football. His decision was motivated in part by a lasting concern with the “matter-of-factness” with which the NFL addressed players' injuries.

Thirty-four years later, Dr. Frank is a private-practice hair transplant surgeon in New York, New York, and Columbus, Ohio. His relationship with football is complex. He described his early life in the sport as “rigorous and focused on one hand, but also naïve and sheltered on the other,” and the aftermath of his athletic career as “a tremendous void,” akin to

to that of a soldier returned from war. Nonetheless, he has assiduously moved on from football since leaving professional play.<sup>7</sup>

In contrast, Dr. Bradley has never left football behind. A one-time Penn State All-American who was drafted by the Cincinnati Bengals, Dr. Bradley has been the head surgeon of the Pittsburgh Steelers for 32 years.

From his childhood in a family in which “athletics were everything,” to his thriving orthopaedic surgery practice serving athletes of all sports, skill levels, and ages, he remains thoroughly dedicated to sports and caring for sports medicine patients.

Whatever their contrasts, the two surgeons can both testify to the positive influence of sports. Dr. Bradley’s lifelong dedication implies what Dr. Frank stated outright: “The camaraderie, the hard work, the dedication, the teamwork, the self-sacrifice of being part of a team—all these things were tremendous values that I was drinking through a firehose and still to this day live my life by.”

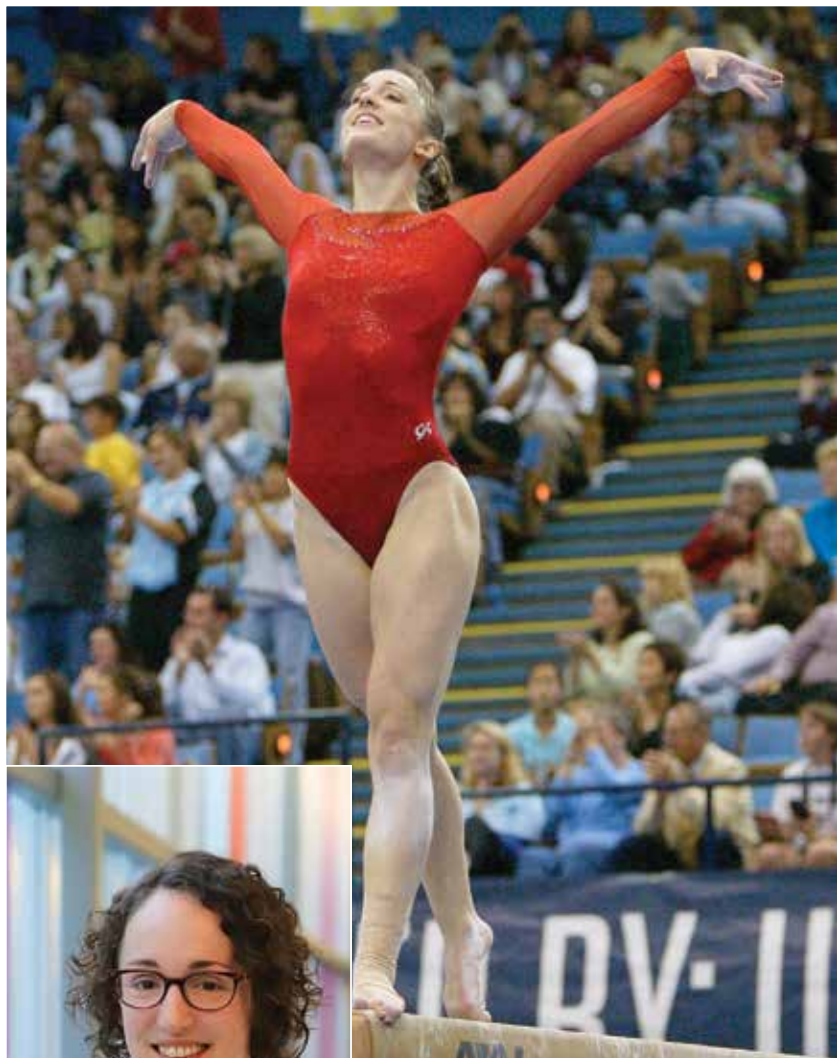
His thoughts echoed those of Dr. Leveille and Likolani Brown Arthurs, MD, a former ballet dancer, current general surgery resident, and ACS member. All four cited the rigor of their athletic careers as a transformative force that began early in their lives and continued to shape them long after their elite play ended. And they all said that surgeons without any particular athletic achievement or interest can benefit from the insights that sports have brought them.

## Deliberate Practice

For Dr. Arthurs, professional dance, although not a competitive sport per se, was an athletic pursuit: “I remember my doctors saying that dancers had the same injuries as the other professional athletes they treated, which rang true, as we go through the same level of rigorous training, both mentally and physically.”

Dr. Arthurs joined the New York City Ballet after high school and stayed a member of the corps de ballet for 15 years, completing her undergraduate degree part-time while dancing professionally.

Now in her first year of a general surgery residency at NYU Langone in New York City, she said her dance career compares well to her present one: “I feel that the rigorous nature of my previous career, having to go in every day, have a practice that you sort of work on endlessly and try to reach that perfection, is something



Dr. Lise Leveille, now a pediatric orthopaedic surgeon at British Columbia Children’s Hospital, was part of the Stanford University gymnastics team after the 2000 Summer Olympics in Sydney, Australia. (Credit: Stanford Athletics)



After a 30-year career as a dancer with the New York City Ballet, Wendy Whelan is now the Associate Artistic Director of the dance company.



that really does carry well into the life of a surgeon.”

That said, the two careers differ. For example, dance involved a persistent emphasis on practice, even during periods of intensive performance: “You are constantly practicing even when you are performing. For ballet, you go in and have a ballet class. Even prima ballerinas go in and have a class every day.”

In contrast, Dr. Arthurs noted, her residency offers “some practical labs,” but with less frequency than ballet’s skill-focused practice sessions. Adding more labs, she said, “would be very beneficial for us, especially for first-year residents. I felt that in dance you got better by doing the same thing every day.”

Dr. Frank noted the same approach was present in football: “The drill work, the repetitive action, those are extremely valuable. It was this mantra of reps, reps, repetition. The repetitive maneuvers—I think of the technical skills of surgery.”

However, a sport can permit repetition in a way that surgery may not. Dr. Leveille noted: “You’re not allowed to do 50 in a row, like an athlete could, because that many patients won’t present with a specific problem at one time. It’s almost harder, because you don’t have access to the unlimited repetition that is crucial for skill development.”

Indeed, academic literature reflects efforts to transcend that exact problem. Of all possible sports-to-surgery insights, deliberate practice may be the most well-studied. Myriad research, including randomized clinical trials,<sup>4,5</sup> have shown that when surgeons in training complete deliberate practice designed to allow for unlimited repetition (often through virtual or augmented reality, simulation, and task trainers), they can outperform those with standard, OR-based training only. While long-lasting improvement and effects on patient outcomes are less well-documented,<sup>8</sup> findings suggest that adding habitual deliberate practice to surgeons’ training or daily routines is likely valuable.

## Coaching

The idea that surgeons should have coaches may have first been popularized by general and endocrine surgeon Atul A. Gawande, MD, MPH, FACS, who wrote in a 2011 *New Yorker* article, “I’d paid to have a kid just out of college look at my [tennis] serve. So why did I find it inconceivable to pay someone to

**“Having to go in every day, have a practice that you sort of work on endlessly and try to reach that perfection, is something that really does carry well into the life of a surgeon.”**

Dr. Likolani Brown Arthurs

come into my operating room and coach me on my surgical technique?”<sup>9</sup>

Coaching has shown up in many articles since then. In a 2021 op-ed,<sup>1</sup> Richard Tapper, MMedSci, FRACS, a one-time Olympic swimmer who now practices colorectal surgery in New Zealand, prompted readers to imagine a newly recruited professional athlete being asked to work as surgeons do: “You show up to the grounds on the first day only to find out your team has no coach. ‘We think you are good to go,’ the management says. ‘You’ve reached the top and don’t need further coaching. You can organize yourselves, decide which position you play and what the plays are. Oh, and by the way, there are no practices, just show up on Saturday and give it your best.’ This sounds ridiculous, but this is pretty much what we do in surgery.”

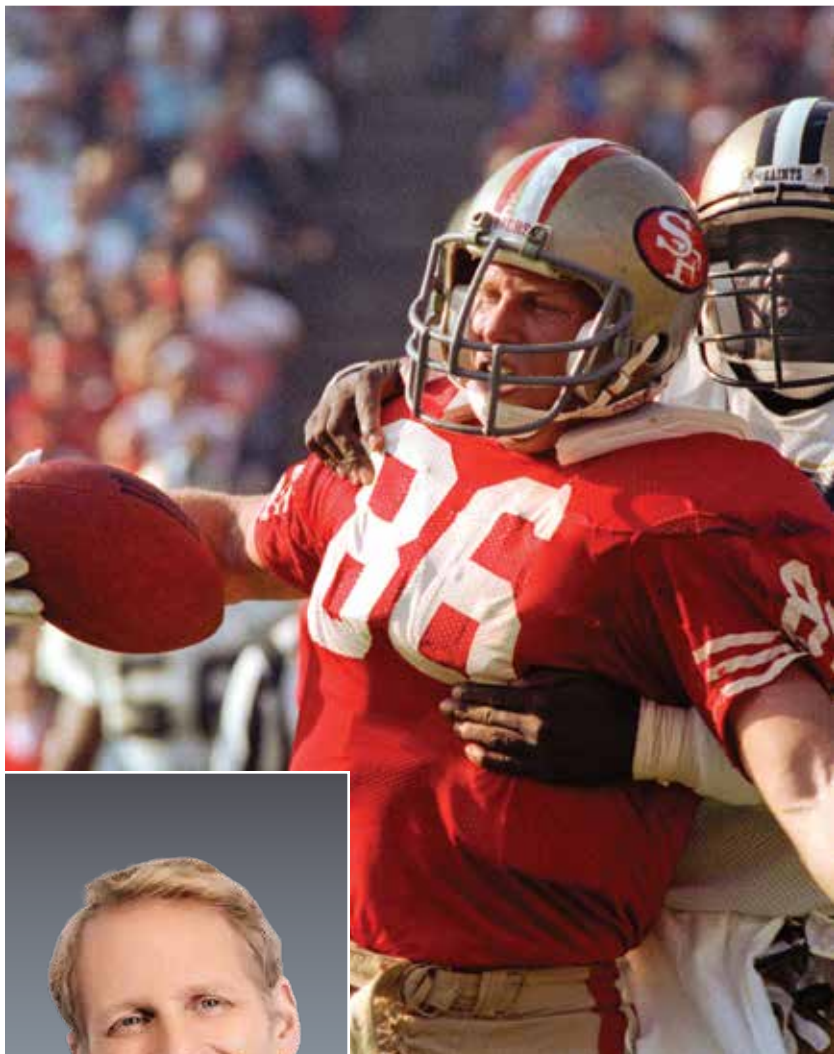
While “ridiculous” is not how the surgeon-athletes interviewed for this article described an absence of coaching, all four endorsed coaching as valuable. Each could name multiple individuals who had offered support in both their athletic and surgical careers.

Dr. Arthurs said her current mentor has been a “constant champion for me” and uses an approach similar to coaching: “She wants you to come up with a plan and talk through it, even as an intern. She will educate even about the small things, like how to hold the scalpel.”

Dr. Frank added: “I wish there were more coaches, because the athletic coaches were there to support in difficult times. They were there if you weren’t performing or weren’t being recognized for your performances. I don’t know if that’s as readily available in medical education.”

As the idea of coaching has spread, a body of research has emerged on this, too, including several systematic reviews and meta-analyses.<sup>10-13</sup> In general, they have reported that coaching can be objectively helpful to surgeons in training who are working on new skills. The consistently positive findings, despite variable coaching techniques, end points, and specific measurements in different studies, hint at the same insight that surgeons consistently endorse: coaching can be powerfully beneficial.

Whelan, the famed New York City Ballet ballerina turned Associate Artistic Director (who said of the labral tear repair surgery shown in her documentary,<sup>6</sup>



Dr. John Frank had a 5-year pro career with the San Francisco 49ers before finishing medical school and becoming a hair restoration surgeon.

**“In coaching and being coached, there’s an openness to change and growth.... When I can hone that in other people, I feel I’ve given them something valuable.”**

Dr. Wendy Whelan



Dr. Likolani Brown Arthurs spent 15 years dancing with the New York City Ballet. Now, she’s a general surgery resident at NYU Langone.



“It’s my favorite part of the film.”), did not describe coaching primarily as a skill-building effort. Rather, she emphasized improving career longevity by emphasizing continuous development and a positive attitude: “In coaching and being coached, there’s an openness to change and growth. And when you coach someone, you help them grow. Openness, positivity—those are the two things that I have found for myself were my best tools to keep my longevity going. When I can hone that in other people, I feel I’ve given them something valuable.”

Within the surgical profession, the practice is increasing in popularity and accessibility. Dr. Bradley noted that some surgical societies now offer coaching services. (The ACS supports the practice and has published further information on coaching approaches.<sup>14</sup>)

Dr. Bradley explained, “They will bring someone in to watch you operate and coach you along. Usually, the people who take them are when they’re first coming out of school or residency.”

“I know more and more surgeons who have coaches,” Dr. Leveille said.

### Visuospatial Skills

Beyond the technical skills necessary for specific procedures, three surgeon-athletes each suggested the same areas that they had learned through athletics and that coaching and deliberate practice might help all surgeons improve: hand-eye coordination and awareness of three-dimensional space.

Dr. Arthurs noted that her athletic background first gave her a boost as an organic chemistry student: “It was way easier for me to understand molecules in a 3-D space, from moving and dancing. I think it’s easier for me to conceptualize the surgery now.”

According to Dr. Bradley, “To be a surgeon, you have to think in 3-D. Someone with hand-eye coordination, you can make into a pretty good surgeon.”

Dr. Leveille said that athleticism was just one route to enhance these abilities, and experience with video games or carpentry might enhance the same hand-eye and visuospatial skills—and noted surgical residents without such backgrounds could learn them in the OR: “I think that you can get there, and it just takes a little more time and effort, just like an athlete. I think everyone has the ability to improve with repetitions and pattern recognition.”



## The Physical Self

Of course, when talking to former elite athletes, it is to be expected that their insights include thoughts on how physical well-being connects to other endeavors.

“I see a lot of unhealthy behaviors in surgery, in terms of the easy things: diet, regular sleep. As someone who wants to perform at an elite level, that should be built in,” said Dr. Arthurs.

Dr. Frank said that adding exercise to one’s routine can offer mental benefits as well. “I think beyond the physical benefits you get from exercising and from nutrition—that’s got to be part of the equation as well—I just think it’s the meditative effects that exercise and sports have on anyone. The opportunity to let everything else go and work on movement—I think that is the most powerful value of athletics that I can imagine. And I think that some of those things are reproducible with just meditation and deep breathing and just shutting down for a few minutes.”

Whelan noted a possible upside to exercise for surgeons serving athletes as patients. “For a doctor to push their body to another level in any kind of physical form is going to benefit them knowing how to work with an athlete or a physical artist. Feeling the elation that you get from exerting yourself is almost enough to give you more connection to that patient,” she said.

## Passion and Hard Work

Ultimately, Dr. Leveille said, emulating a great athlete does not mean having to become one. Rather, she says, excellence of the kind she achieved in sports comes from passion.

“If you ask anyone who becomes an Olympian or reaches some elite level in their sport, they probably loved it. And because they loved it, they worked really hard at it. They spent time becoming excellent. I don’t think you have to have this prior experience. You just have to be matched in your interest and passion for something and then make sure you’re exercising your work ethic and apply yourself. I think those are the two most important ingredients of the recipe,” she shared.

It is a recipe she is still using. Eight years into her clinical career, Dr. Leveille said surgery is just as exciting to her as gymnastics once was.

“Sometimes a rare and challenging case comes along, and you spend hours preparing and

planning,” she said. “On the day of the surgery, you are a little nervous and excited. You walk into the operating room knowing you are well-prepared, and everything comes together beautifully—that high, after finishing the case and being pumped about how it went, is just like nailing a beam routine at the Olympics. I get the same thrill as a surgeon as I did as an athlete.” **B**

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Dr. Jeffrey Upperman (left) and Dr. Patrick Meyers

# For Better or Worse, ChatGPT Is Here to Play

Jeffrey S. Upperman, MD, FACS  
Patrick Meyers, MD

*NOTE: The preparation of this article was supported by artificial intelligence (AI), highlighting the collaborative potential between human experts and AI technology.*

OPENAI HAS created ChatGPT, a powerful language model designed to enhance communication and facilitate information exchange in today's fast-paced world. Trained on vast amounts of text data, ChatGPT generates coherent and contextually relevant responses, making it invaluable for professionals in various fields.

Surgeons, facing critical decisions and time constraints, require precise communication. However, traditional methods like emails and phone calls can fall short in meeting the administrative demands of healthcare. This viewpoint article explores the potential applications of ChatGPT for busy surgeons, highlighting how it can improve communication and knowledge sharing, and how it provides valuable insights.

Surgeons, especially members of the ACS, face numerous challenges related to patient care, research, education, and professional development. Balancing these responsibilities can be overwhelming, leaving little time for effective communication and collaboration—both of which play pivotal roles in local practice settings and are equally important within the greater ACS community. Surgeons must seamlessly communicate with their colleagues, nursing staff, and other healthcare professionals to ensure coordinated and safe patient care.

Moreover, within the ACS community, the exchange of ideas, best practices, and research

findings fosters professional growth and drives advancements in the field of surgery. But the challenges of time constraints, geographical distances, and varying schedules may thwart the smooth flow of information and hinder collaborative efforts.

Existing communications tools like electronic health records (EHRs) and traditional messaging systems have limitations such as inefficient communications features. Emails are not conducive to real-time collaboration, and phone calls have limits regarding comprehensive knowledge sharing.

development, underscoring the need for streamlined communications tools.

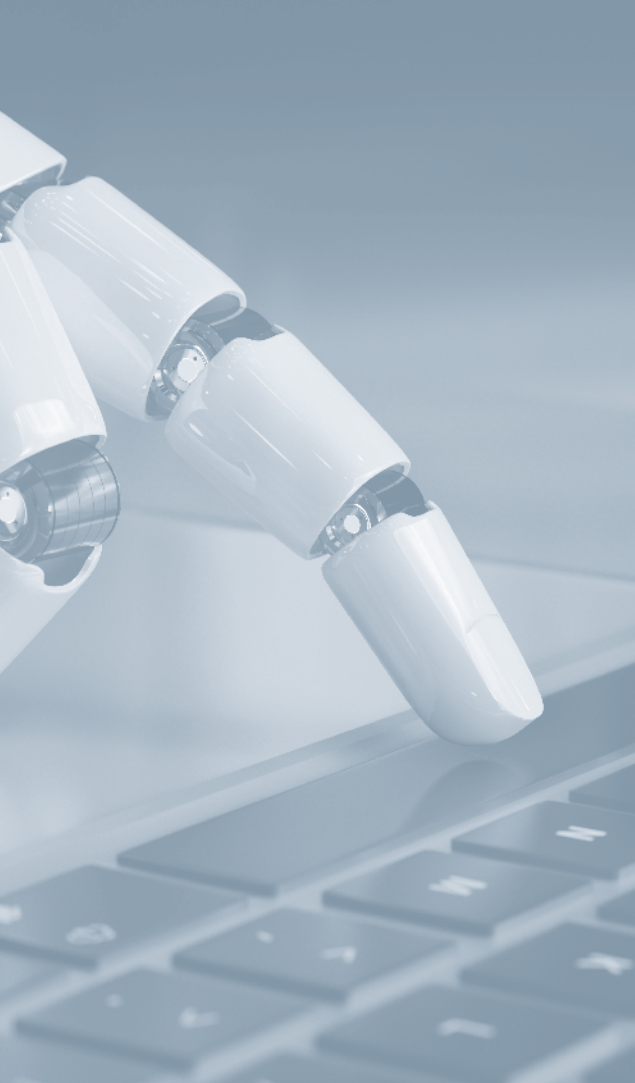
To address these challenges, innovative solutions are crucial to enhancing communication, reducing administrative burdens, and optimizing collaboration for busy surgeons. The subsequent sections of this article will explore how ChatGPT and other large language models (LLM) can help. LLMs are deep learning algorithms that can recognize, summarize, translate, predict, and generate text and other forms of content based on knowledge gained from massive datasets.

## Surgeons must exercise caution and validate information obtained through ChatGPT with trusted sources like medical literature or expert opinion.

Manual input adds to the administrative burden of surgeons who are already stretched thin by personal, clinical, and academic responsibilities. The rise of EHRs and associated insurance tasks have imposed additional drains on the House of Surgery. Time-consuming documentation and complex billing processes divert attention from patient care and professional

ChatGPT or other LLMs may provide clinicians with a powerful tool to access information quickly during busy clinical days. Surgeons often face complex problems that require immediate access to guidelines, research findings, or treatment protocols.

With its vast training data and language understanding capabilities, ChatGPT can offer real-time assistance by generating



concise and contextually appropriate responses. This functionality significantly improves decision-making and enhances patient care outcomes.

It is important to recognize that ChatGPT's responses are based on patterns and correlations learned from its training data. While efforts are made to generate accurate responses, there may be instances in which the information provided is not entirely reliable or up to date.

Surgeons must exercise caution and validate information obtained through ChatGPT with trusted sources like medical literature or expert opinion.

The limitations of ChatGPT stem from its training data and underlying algorithms. It

learns from various internet sources that may contain inaccuracies, biases, or outdated information. Consequently, there is a risk of ChatGPT generating responses that are not fully reliable or lack the most recent evidence-based guidance.

Even so, LLMs are valuable tools that can assist surgeons in accessing relevant information efficiently. So to mitigate any limitations, critical thinking and verification using trusted resources are essential. Medical professionals should rely on established medical guidelines, peer-reviewed literature, and consultation with colleagues or experts before implementing ChatGPT information into clinical practice.

By combining ChatGPT's strengths with surgeons' expertise and judgment, it is possible to leverage the model's potential while maintaining a commitment to evidence-based medicine.

### **ChatGPT and Patient Care**

There are many potential future applications of ChatGPT in surgical practice, such as surgical education, telemedicine, and interdisciplinary collaboration. Understanding these possibilities can provide insights into the transformative impact of ChatGPT on surgeons' professional lives.

By configuring an internal network appropriately, ChatGPT and similar LLMs can assist in retrieving research information, clinical practice guidelines, and case studies. Surgeons and other healthcare providers can leverage ChatGPT to quickly access the latest advancements in surgical

research and evidence-based guidelines specific to their field.

By providing specific keywords, ChatGPT helps navigate the vast amount of information within various resources, saving time and effort in searching for valuable clinical knowledge. Surgeons can seek guidance on complex cases, surgical techniques, or treatment recommendations.

It is important to note that the reliability and accuracy of information provided by ChatGPT depend on its training data. Integrating ACS-vetted sources into the training data and deploying ChatGPT within the ACS environment can enhance its ability to retrieve answers from trusted and proprietary sources. This advancement—which has the potential to revolutionize information retrieval and decision support within the ACS community—would require careful considerations and safeguards.

ChatGPT and other generative AI products also can serve as virtual assistants, offering valuable support to ACS members and other healthcare providers in organizing schedules, prioritizing tasks, and staying updated on events and initiatives. Surgeons have diverse responsibilities beyond patient care, including administrative tasks, research commitments, teaching obligations, and leadership roles.

ChatGPT can provide personalized assistance by helping manage schedules, setting reminders, and accessing information related to events, conferences, and initiatives. This support could streamline

workflow, improve time management, and promote active engagement within the ACS community.

Moreover, ChatGPT can ease the burden of administrative tasks for surgeon leaders. By offering guidance on workforce management, staffing strategies, and operational efficiencies, ChatGPT supports surgeon leaders in navigating healthcare organizations' complexities. This technology enables surgeons to focus on delivering quality care while effectively managing their administrative responsibilities.

ChatGPT holds immense potential for real-time information sharing and discussion forums within the ACS community. Surgeons can engage in live discussions, seek opinions, and share knowledge on various surgical topics. By leveraging ChatGPT's capabilities, ACS members can create virtual spaces for collaborative learning and problem-solving. Real-time interaction encourages timely responses, active participation, and camaraderie among surgeons, regardless of their locations.

Language barriers and complex medical terminology pose challenges in effective communication and collaboration. ChatGPT's language understanding capabilities help overcome these obstacles. Surgeons from different regions or those with English as a second language can use ChatGPT to bridge the gap and communicate thoughts and ideas more effectively.

Additionally, ChatGPT simplifies complex medical terminology, providing

explanations or definitions, while also facilitating understanding and engagement. The integration of LLM platforms like ChatGPT has the potential to facilitate communication and knowledge exchange among diverse communities. This inclusivity promotes global collaboration, diverse perspectives, and advancements in surgical practice worldwide.

### **Ethical Implications of ChatGPT**

As surgeons embrace AI systems like ChatGPT for professional development, it is crucial to address ethical considerations and potential challenges.

One primary concern is the need for appropriate data and human oversight. AI systems rely on data, and the quality, representativeness, and biases within the training data can affect the system's outputs. Therefore, it is essential to ensure diverse and representative data sources, as well as rigorous vetting and validation processes.

Human oversight is critical to ensure responsible and ethical deployment of AI systems. While ChatGPT provides insights and recommendations, it should not replace human judgment or devalue clinical expertise. Surgeons must exercise critical thinking, validate information from reliable sources, and interpret AI-generated outputs within the context of individual patient needs and healthcare guidelines.

Privacy and data security are paramount when using AI systems. Healthcare professionals must prioritize patient confidentiality and adhere to strict privacy protocols when interacting with ChatGPT or any AI tool that involves patient data. Safeguarding patient information and complying with data protection regulations are essential ethical considerations.

Transparency and accountability are vital aspects of integrating AI systems into professional development. Surgeons should have a clear understanding

**ChatGPT can provide personalized assistance by helping manage schedules, setting reminders, and accessing information related to events, conferences, and initiatives.**

of the limitations, biases, and potential risks associated with AI language models. Regular training and education on AI systems can empower healthcare professionals to make informed decisions and navigate the evolving landscape of AI-driven technologies effectively.


By acknowledging these ethical considerations, promoting responsible use, and ensuring appropriate data and human oversight, surgeons can leverage the potential of AI systems like ChatGPT while upholding the highest standards

of patient care, professional integrity, and ethical practice.

Integrating ChatGPT into healthcare offers transformative potential, enhancing communication, knowledge sharing, and collaboration.

By working together, we can ensure responsible integration, address ethical considerations, and maximize the benefits for ACS members and the surgical community. The future of AI in supporting ACS members and advancing surgery is promising.

ChatGPT offers valuable opportunities for busy surgeons

in the ACS community. By embracing AI as a powerful tool, ACS members can navigate the evolving healthcare landscape and deliver exceptional patient care in a continuously advancing field. 

### Disclaimer

The thoughts and opinions expressed in this viewpoint article are solely those of Drs. Upperman and Meyers and do not necessarily reflect those of the ACS.

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The *Bulletin of the American College of Surgeons* is the College's monthly member magazine. It contains articles on topics that affect surgical practice and the surgical profession, including socioeconomic trends, surgical innovation, advocacy, professionalism, the surgical workforce, and more.

# Cancer Research Program Redefines Its Role to Advance Care for Surgical Cancer Patients

Judy C. Boughey, MD, FACS  
Elizabeth Habermann, PHD, MPH  
Ingrid M. Lizarraga, MBBS, FACS  
Lesly Dossett, MD, MPH, FACS  
Heidi Nelson, MD, FACS

The ACS Cancer Research Program (CRP) is taking a more active role to integrate with other ACS Cancer Programs and advance the mission of the ACS.



## A research grant will be developed to study the impact of survivorship programs on patient experience.

THE RE-ENVISIONED CRP will proactively drive activities to improve the care of the person with cancer, in particular the surgical cancer patient. This will be accomplished through data modeling and analysis, validation, and implementation of standards and research.

The work will be performed through three newly CRP established committees: Cancer Data Modeling, Standards Investigation and Validation, and Implementation Research.

### Cancer Modeling Committee

The Cancer Data Modeling Committee, led by Elizabeth Habermann, PhD, MPH, will bring together a team of modeling experts to develop new approaches to investigate the incorporation of diverse types of data (e.g., social determinants of health and evolving biologic marker data) and use big data to drive the development of new clinical tools.

The overarching goals of the committee include developing new clinical tools to aid patients with cancer and physicians treating cancer and constructing annual reports that identify trends in cancer care and outcomes across multiple disease sites.


### Standards Investigation and Validation Committee

The Standards Investigation and Validation Committee, led by Ingrid M. Lizarraga, MBBS, FACS, will validate the impact of standards and accreditation, conduct research to help establish new standards, and demonstrate the value of adherence to standards. Many of the Cancer Programs (Commission on Cancer [CoC], National Accreditation Program for Breast Centers, National Accreditation Program for Rectal Centers, and Cancer Surgery Standards Program) develop evidence-based accreditation standards with the goal of improving patient care.

A Survivorship Services Survey (SSS) is underway with the goal of evaluating how CoC-accredited hospitals and cancer centers are recommending survivorship functions and services and to determine how CoC standards are being implemented. The overall objective of the survey—led by David R. Freyer, DO, MS—is to characterize current survivorship services nationally and identify potential growth areas to support high quality of life for cancer survivors. Based on the results of the survey, a research grant will be developed to study the impact of survivorship programs on patient experience.

### Implementation Research Committee

The Implementation Research Committee, led by Lesly Dossett, MD, MPH, FACS, will study the implementation of quality measures, including operative standards developed by the ACS, to understand barriers and facilitators to implementation, develop and test implementation strategies, and evaluate implementation outcomes such as costs and sustainability.

The CRP and its committees are open to research ideas and opportunities for projects, as well as people interested in participating in projects. For more information, contact ACS CRP at [cancerresearchprogram@facs.org](mailto:cancerresearchprogram@facs.org). 

**Dr. Judy Boughey** is the division chair of breast and melanoma surgical oncology, chair of the breast cancer disease group, and the W. H. Odell Professor in Individualized Medicine at the Mayo Clinic in Rochester, MN. She also is the interim Chair of the ACS Cancer Research Program.

# Bir Hospital Pioneers Surgical Services in Nepal

Anip Joshi, MBBS, MS, FACS

Bir Hospital in Kathmandu was established in 1889<sup>1</sup> with eight staff, one doctor, one administrator, two cooks, two attendants, two sweepers,<sup>2</sup> and 15 beds after then-Prime Minister Bir Shumsher Rana realized the need for a hospital in Nepal.



That event marked the foundation for the start of allopathic medicine, also called Western medicine or “modern medicine,” in Nepal. Bir Hospital is the oldest hospital in the country, with 133 years of history and a Department of Surgery that is more than a half century old.

Medical education in Nepal, in its primitive form, was established in 1934 when the Civil Medical School started training “dressers,” a mid-level healthcare workforce, in wound dressing. This occurred during an era when most doctors available in the country were on the staff of foreign embassies.

A formal Department of Surgery was established at Bir Hospital by Dr. Anjani Kumar Shrama in 1961,<sup>2</sup> 72 years after the establishment of the hospital. He was joined by Dr. Dinesh Nath Gongol in 1962.<sup>2</sup>

The original operating room was 20 feet by 20 feet with a marble floor and walls and a high dome-shaped ceiling with large windows along the northern wall for steady, shadowless light.<sup>2</sup> The other source of light was a single lamp hanging from the center of the dome. Many times, operations were performed using torchlights as there wasn't always an adequate electricity supply from the nearest hydropower station in Pharping. The first electrocautery was used in 1964.<sup>3</sup> There also was

a “Down brothers” hydraulic operating table in the operating room.

Eight years later, on May 10, 1969, the new operating theatre in Bir Hospital was inaugurated by Dr. Bhawani Bhakta Singh Pradhan, the first anesthetist in Nepal, who originally joined Bir Hospital staff in 1933.<sup>2</sup> The name of the surgeon in the inauguration ceremony was not listed.

In the 1970s, during the early years after the operating theatre was established, surgical procedures were performed under open ether anesthesia, using an Epstein-Macintosh-Oxford ether inhaler. Chloroform also was used for anesthesia using Junker's apparatus.

At that time, there was a “surgeon superintendent” who was appointed to both perform surgery and work with hospital administration.<sup>3</sup> The surgeons were trained either in India or the UK and appointed by the government to work in Bir Hospital.

In that era, there was a lack of trained operating theatre support staff and nurses. Later, the US Agency for International Development helped bring in trained personnel.<sup>2</sup> In 1986, there were six surgical consultants in the Department of Surgery; all were general surgeons who gradually started performing subspecialty surgery.<sup>2</sup>

Following the establishment of the operating theatre, surgical procedures of various subspecialties were performed. Laparoscopic surgery was not performed at Bir Hospital until the late 1980s, and regular laparoscopic services were possible only 2 decades later. During the initial years, a Sony-HR Trinitron monitor, an Olympus OTV-S3 light source, and an Olympus insufflator were used.

## Postgraduate Surgical Education in Nepal

In 1987, Bir Hospital was the first institution in Nepal accredited by The Royal College of Surgeons of Edinburgh to train surgeons.<sup>1</sup> This was approved by Prof. James Liester and Dr. Alasdair MacGregor of the Royal College<sup>3</sup> and marked the beginning of the era of postgraduate surgical education in Nepal. At that time, the surgical training program at Bir Hospital and the qualifying examination at Tribhuvan University Teaching Hospital, both in Kathmandu, were completed.

The actual cost for the training program of £300 and £300 for the examination was reduced by The Royal College of Surgeons of Edinburgh to one-sixth

### Photo:

The dedicated surgical building of Bir Hospital opened in March 2022.





The OR at Bir Hospital had been in use for more than 50 years—from its inauguration in 1969 through 2022.

of its actual cost, £50 for trainees at Bir Hospital.<sup>3</sup>

As a result, the Department of Surgery at Bir Hospital was the center of attraction for many aspiring surgeons from within the country as well as neighboring countries in South Asia. In 2002, Bir Hospital was developed into the National Academy of Medical Sciences (NAMS) of Nepal as a postgraduate training academy.

In 2005, NAMS held its first convocation ceremony with an address by director Dr. Gongol<sup>5</sup> who had played a pioneering role in establishing surgery and its subspecialties at Bir Hospital. During the first convocation ceremony, NAMS fellowships (FNAMS) were awarded to surgeons in honor of their contributions to establishing surgery and its subspecialties and starting surgical education at Bir Hospital:<sup>5</sup>

#### Surgery

- Prof. Dr. Anjani Kumar Sharma (FRCS)
- Dr. Sudip Kumar Bhattacharya (FRCS, England)
- Prof. Dr. Govind Prasad Sharma (PhD, thoracic surgery, USSR)

#### Urological Surgery

- Dr. Vishwaraj Dali (Master of Surgery, India)
- Prof. Dr. Bhola Raj Joshi (Master of Surgery, India)

#### Cardiothoracic and Vascular Surgery

- Prof. Dr. Loke Bikram Thapa (FRCS)

#### General and Gastroenterology Surgery

- Prof. Dr. Mahesh Prasad Khakurel (FRCS, Edinburgh)

#### Neurosurgery

- Prof. Dr. Upendra Prasad Devkota (FRCS)

Today, surgical services are provided from a dedicated surgical building with modern operating rooms in Bir Hospital, and trauma services are offered in the adjacent trauma center.

Currently, there are 17 active ACS Fellows practicing surgery in Nepal and seven Associate Fellows who have applied to become Fellows at the 2023 Clinical Congress. The Nepali ACS Fellows are in the process of forming an International ACS Chapter. Nepali surgeons are working to be more active in the ACS, as demonstrated by my appointment to the History and Archives Committee in 2022. **B**

**Dr. Anip Joshi** is the chief consultant surgeon and associate professor in the Department of Surgery at Bir Hospital, National Academy of Medical Sciences, in Kathmandu, Nepal. He also is chief of the general surgery unit, member secretary of the Institutional Review Board, and a member of the Infection Prevention and Control Committee.

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# Dr. Thomas Krummel Receives 2023 Jacobson Innovation Award

**“[Dr. Krummel’s] receiving of the Jacobson Innovation Award is a well-deserved recognition for his unrivaled career characterized by passion and dedication to discovery.”**

Dr. Christopher Ellison

THOMAS M. KRUMMEL, MD, FACS, FAAP, a pediatric surgeon who pioneered lifesaving advances in newborn life support and championed simulation and virtual reality in surgical education, is the recipient of this year’s ACS Jacobson Innovation Award.

Dr. Krummel, the Emile Holman Professor Emeritus of Surgery and co-director of Stanford Biodesign at Stanford University in California, received the award at a banquet last month in Chicago, Illinois.

“Dr. Tom Krummel is a pioneer and trailblazer in simulation-based surgical education, development of novel techniques in neonatal life support, and the creation of innovation fellowships for the next generation of surgeons and scientists,” said E. Christopher Ellison, MD, FACS, President of the ACS. “His receiving of the Jacobson Innovation Award is a well-deserved recognition for his unrivaled career characterized by passion and dedication to discovery.”

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, a general vascular surgeon known for his pioneering work in the development of microsurgery, and his wife, Joan.

“To join a group of remarkable innovators is an awesome career capstone,” Dr. Krummel said. “There are many recognitions of basic science advancements, but I think recognition of clinical innovation is responsible for most of the way surgeons practice today. It’s a real tribute to the Jacobson Family that they thought it was worthy to recognize surgeon innovators with this award.”

### **Career Highlights**

Dr. Krummel’s career-long focus on innovation began in residency, when he formed the world’s second-ever program

focused on extracorporeal membrane oxygenation (ECMO), a then-novel form of advanced life support designed to keep blood moving through the body in newborns with life-threatening cardiac or respiratory conditions. The team’s research in infants helped establish ECMO as an effective intervention, and the approach has since saved the lives of hundreds of thousands of patients worldwide.

Following his residency, Dr. Krummel completed a fellowship in fetal surgery at the University of California in San Francisco. In a subsequent faculty position at the Medical College of Virginia, he received funding from the ACS and other entities for research in fetal tissue repair—a pioneering effort.

Dr. Krummel continued his research on understanding the biochemical and cellular mechanisms of scarring and tissue damage for more than 2 decades, first while serving as a professor of surgery and pediatrics and chief

Opposite:  
Dr. Christopher Ellison presented the Jacobson Innovation Award medallion to Dr. Thomas Krummel.





of the Division of Pediatric Surgery at the Penn State Health Milton S. Hershey Medical Center; then as the John A. and Marian T. Waldhausen Professor and chair of the Department of Surgery at Penn State College of Medicine; and finally at Stanford University, during part of his tenure as the Emile Holman Professor and chair of the Department of Surgery.

In 2004, recognizing a need to bridge gaps between surgery, innovation, and clinical adoption, Dr. Krummel founded the Stanford Surgical Innovation Program, and a year later merged with the Stanford Byers Center for Biodesign. He served as co-director of Stanford Biodesign until 2021.

Throughout his career, Dr. Krummel held numerous leadership positions at the ACS, including serving on the Research and Development Committee of the ACS Consortium of Accredited Education Institutes and the ACS Committee on Emerging Surgical Technology and Education.

## Advice for Young Surgeon-Scientists

Dr. Krummel currently divides his time between Stanford and Austin, Texas, where he continues to mentor young scientists and helps fund promising technologies. He advises that perseverance and patience are vital attributes to innovation in surgery.

“You solve problems by first recognizing that there is a major problem, not just an inconvenience, and secondly, by spending a lot of time talking to other physicians about their perceptions on the state of care as we know it. Finding a receptive group of physicians who acknowledge there is a problem and are willing to explore new solutions is key,” he said. “It can be lonely and often frustrating, but if you can get past that, suddenly a whole new set of therapies or technology can emerge. The field needs an ongoing source of disruptors as Dr. Julius Jacobson recognized in his founding gift. If a small-town Wisconsin kid can make a dent, so can anyone.” **B**



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Opposite page:

Top photo: Dr. Thomas Krummel (center) with (from left): Dr. Christopher Ellison, ACS Executive Director and CEO Patricia L. Turner, MD, MBA, FACS, Robert H. Bartlett, MD, FACS, ACS Regent Carla M. Pugh, MD, FACS, James Kenedy Wall, MD, FACS, and ACS President-Elect Henri R. Ford, MD, MHA, FACS.

Bottom photo:

Front row, from left: Dr. Carla Pugh, Dr. Patricia Turner, Dr. Thomas Krummel and his wife Susan Krummel, Anthony Atala, MD, FACS, and Dr. Christopher Ellison. Back row: Patricia Lau, James Lau, MD, MHPE, FACS, and Dr. Krummels' daughter and son-in-law Maggie and Adam Parsell.

This page:

ACS Regent Anton Sidawy, MD, FACS (left) with Michael L. Marin, MD, FACS, who shared his thoughts during the presentation “Remembering Dr. Julius H. Jacobson.”

# Practice Management

Support for navigating coding and billing



## Manage with Confidence

Find articles and tools to help you become proficient in procedure coding and stay current in coding regulations.

### PRACTICE MANAGEMENT Coding and Billing

The ACS creates and updates coding, billing, and payment resources for surgeons.

### PRACTICE MANAGEMENT Employed Surgeons

In the current consolidation era of health care, there has been a renewed movement toward employment of physicians by hospitals, especially specialty physicians.

### PRACTICE MANAGEMENT Private/Small Business Practice Surgeons

The ACS has collaborated with fellows and practice management experts to capture valuable lessons, tips, and insights that can help surgeons thrive in private practice.

### PRACTICE MANAGEMENT Personal Financial Wellness Resources

Planning for financial wellness is important for your future. The ACS has resources with valuable lessons, tips, and insights.



### PRACTICE MANAGEMENT Hernia Repair Coding Resources for Surgeons

Learn more about new 2023 coding changes for anterior abdominal hernia repair procedures.

[View more](#)

### LIVE AND ON-DEMAND CPT Coding Courses

In collaboration with KZA, ACS offers live and on-demand coding courses that provide the tools to increase revenue and decrease compliance risk. You will receive an informative workbook for each course and you will also be provided online access to the KZA Alumni site where you will find additional resources and frequently asked questions about correct coding.

[Learn More](#)



# ACS Debuts New Practice Management Resources

THE ACS HAS updated and expanded its practice management offerings to include a website hub and a new surgeon salary data report.

By offering all practice management resources in one hub on *facs.org*, the ACS aims to help Members access these resources more easily. The hub serves as a portal to a series of web pages dedicated to evidence-based reports, services, and webinars tailored to surgeons who are employed or in private practice. Resources on coding, billing, payments, and personal financial wellness also are available.

One of the newest webinars is *Negotiation: Taxonomy, Tactics, Traps, and Tips*, which aims to help employed surgeons learn the basics of contract negotiation. This seminar was presented by attorney Cathy A. Constantino at the 2023 Leadership & Advocacy Summit, where it was well-received.

Another webinar, *The Rewards and Frustrations of Rural Surgery Practice*, presents the insights of two rural surgeons at different points in their careers. Michael D. Sarap, MD, FACS,

who is a former Chair of the ACS Advisory Council for Rural Surgery, and Alisha D. Reiss, MD, FACS, President-Elect of the ACS Ohio Chapter, compare notes on the importance of rural surgeons to their communities and the challenges and benefits of surgical practice in the countryside.

In addition, the ACS now offers access to Medical Group Management Association (MGMA) data reports. The MGMA is a source of nationally recognized compensation benchmarks, and its reports include salary and productivity information for private practice and academic surgical positions. Surgeons seeking employment or negotiating with an employer can use the data to ensure they receive fair compensation.

The relationship of the ACS and MGMA means that ACS Members interested in purchasing thorough data reports will receive a 45% discount off the standard price. In some cases, the single price will include reports for as many as seven closely related specialties rather than a single specialty, offering surgeons

more detailed insight into compensation.

This MGMA data report adds to two existing resources the ACS offers to employed surgeons: the American Medical Group Association (AMGA) Medical Group Compensation and Productivity Survey Report and the Association of American Medical College (AAMC) Faculty Salary Report.

The AMGA report offers single-specialty data on 177 specialties (with a discount for ACS Members), while the AAMC offers a single report with recent survey data on compensation at 152 accredited US medical schools.

Interested surgeons can find the link on the Resources for Employed Surgeons web page or by navigating from the main hub web page. **B**

# Future Trauma Leaders Program Offers Training, Mentoring Opportunities

Applications are now open for the ACS Future Trauma Leaders (FTL) program—an in-depth training and mentoring opportunity from the ACS Committee on Trauma (COT) for early career trauma and acute care surgeons (no more than 5 years out from fellowship completion). The application process is competitive; apply by **July 29**.

“The FTL program provided me with the opportunity of a lifetime. It not only gave me an early seat at the table, but it also gave me a voice,” said Chethan Sathya, MD, MSc, FACS, FRCSC, a pediatric trauma surgeon at Northwell Health in New Hyde Park, New York, and part of the FTL Class of 2021. “The mentorship and dedication to making my FTL experience a worthy one was nothing short of incredible. Everyone was rooting for us to succeed. And to have that type of network and support so early on in one’s career is a game changer.”


Once selected, FTLs will be able to engage with COT committees within their areas of interest and participate

in a new members welcome reception and Mentoring Day, both of which provide the opportunity to meet with leaders and learn about current projects.

Participants also will apply to join Work Groups through the COT Participation Opportunity Board and connect with leaders during the Spring and Fall COT meetings. In addition, FTLs will be encouraged to engage in their state and regional committees and develop an understanding of the practice and advocacy issues facing their regional trauma systems.

“This program opened doors in my career that I did not even know were there,” said Margaret M. Morgan, MD, FACS, a trauma surgeon at University of Colorado Health in Colorado Springs, and part of the FTL Class of 2018. “Being a part of the FTL allowed me to forge connections with other trauma surgeons across the country through which I was able to collaborate on projects within the ACS Military Health Strategic Partnership, Defense Committees on Trauma, and the National Association of Emergency Medical Technicians Prehospital Trauma Life Support Committee. It was perhaps the biggest steppingstone of my career, and I am forever grateful for the opportunities and mentorship.”

The 2-year FTL program begins with the COT Annual Meeting in March 2024 and concludes with the ACS Clinical Congress meeting in October 2025. To be eligible, participants must commit to attending all events during their appointment term, including the COT meetings (March/October), Mentoring Day (June), Trauma Quality Improvement Program meeting (December), and the ACS Leadership & Advocacy Summit (April).

For more information, visit [facs.org/flt](https://facs.org/flt). 





# Dr. Lucy Kornblith Wins Clowes Award


LUCY Z. KORNBLITH, MD, FACS, has been selected to receive the 2023 ACS George H. A. Clowes, MD, FACS, Memorial Career Development Award for her project, “Post-Injury Platelet Biology: Mechanisms and Outcomes.” Dr. Kornblith is an assistant professor of surgery at the University of California San Francisco.

According to Dr. Kornblith, the primary objectives of her study are improving the outcomes

for patients with postinjury hemorrhage by conducting innovative translational studies of trauma-induced coagulopathy that are informed by her clinical perspectives and training in high-throughput RNA sequencing in injured populations.

The Clowes Award is offered through the generosity of The Clowes Fund, Inc., of Indianapolis, Indiana. Its purpose is to provide support for the research of a promising young

surgical investigator. The award consists of a stipend of \$45,000 for each of 5 years and is not renewable thereafter.

More information is available at [facs.org/clowes](https://facs.org/clowes). Applications for the 2024 Clowes Research Career Development Award are due by **Friday, August 4, 2023.** 

# Residents Receive Research Scholarships

Research Scholarships for 2023–2025 have been awarded to six residents pursuing careers in academic surgery.

THIS AWARD, SUPPORTED by the Scholarship Endowment Fund of the College, offers \$30,000 each year for 2 years.

The recipients are:

**Arash Fereydooni, MD,  
Stanford University, CA**

- *Projected discipline:* Vascular surgery
- *Research project:* Development of an Automated Peripheral Calcium Scoring System for Peripheral Artery Disease Risk Stratification and Prediction of Major Adverse Limb Events

**Armaan Malhotra, MD,  
University of Toronto, ON**

- *Projected discipline:* Neurosurgery
- *Research project:* Long-Term Outcome Prediction following Traumatic Brain Injury: A Population-Based Deep Learning Approach to Traumatic Brain Injury Prognostication Using Clinical, Demographic, and Radiographic Factors

**Annie Sescleifer, MD, Johns Hopkins University, Baltimore, MD**

- *Projected discipline:* Pediatric surgery
- *Research project:* Investigating the Genetic and Mechanosensory Cell-Based Pathways of Pulmonary Hypoplasia in Congenital Diaphragmatic Hernia

**Jasmine Hwang, MD, University of Pennsylvania, Philadelphia**


- *Projected discipline:* Undecided
- *Research project:* A Mixed Methods Study to Improve Surgical Health Equity in Primary Hyperparathyroidism

**Melanie Fritz, MD, University of Wisconsin, Milwaukee**

- *Projected discipline:* Colorectal surgery
- *Research project:* Testing the Effectiveness of “Best Case/Worst Case-ICU” on Communication with Seriously Injured Older Adults in the Intensive Care Unit

**Morgan Pettigrew, MD,  
The University of Texas Southwestern Medical Center, Dallas**

- *Projected discipline:* Surgical oncology
- *Research project:* Dissecting the Role of ARID1A in Gastric Cancer Immune Surveillance and Response to Immune Checkpoint Inhibitors

The online application for the Resident Research Scholarship is expected to re-open this month. For more information, visit [facs.org/resident-research](https://facs.org/resident-research). 

# New Publication *for Current and Aspiring Leaders in Surgery*

With contributions from more than 80 current surgical leaders, the *Surgical Chairs Playbook* provides practical insights, real-world guidance, and innovative suggestions that will benefit current and aspiring leaders in academia and private practice.



## Topics include:

- Managing priorities and resources in mission-focused organizations
- Growing leadership skills throughout your career
- Building productive interpersonal relationships
- Engaging with the business side of surgery

# Faculty Research Fellows Are Announced

The ACS awarded four Faculty Research Fellowships for 2023–2025.

THE FELLOWSHIPS ASSIST surgeons in the establishment of their research programs under mentorship, with the goal of transitioning to independent investigators. The fellowship award—\$40,000 per year for each of 2 years—is supported through the generosity of Fellows, Chapters, and friends of the College.

## **Franklin H. Martin, MD, FACS, Faculty Research Fellowship**

**Joal Beane, MD, FACS, The Ohio State University, Columbus**

- *Discipline:* Surgical oncology
- *Research title:* Alternative RNA Splicing of ENAH By IWS1 Promotes Invasion and Metastases in Human Retroperitoneal Liposarcoma

## **James Carrico, MD, FACS, Faculty Research Fellowship for the Study of Trauma and Critical Care**

**Amelia W. Maiga, MD, Vanderbilt University, Nashville, TN**

- *Discipline:* Acute care surgery
- *Research title:* Predicting Recovery after Traumatic Brain Injury


## **Undesignated Fellowships**

**Jose Diaz-Miron, MD, FACS, University of Colorado, Children's Hospital Colorado, Aurora**

- *Discipline:* Pediatric surgery
- *Research title:* Understanding Variation and Clinical Factors Associated with the Use of Extracorporeal Cardiopulmonary Resuscitation in Children

**Sean Polster, MD, The University of Chicago Medical Center, IL**

- *Discipline:* Neurologic surgery
- *Research title:* The Influence of the Gut Microbiome on Radiation Necrosis

An open call for applications for the next cohort will begin in October. The closing date for completed applications and all supporting documents is **December 15, 2023**. More information is available at [facs.org/faculty-research-fellowships](https://facs.org/faculty-research-fellowships). 





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# Report on ACSPA/ ACS Activities

## June 2023

Ross F. Goldberg, MD, FACS

The Board of Directors of the American College of Surgeons Professional Association (ACSPA) and the ACS Board of Regents (BoR) met June 9–10, 2023, at the College's office in Chicago, IL. The following is a summary of key activities discussed. The information provided was current as of the date of the meeting.

## ACSPA

The ACSPA, a 501(c)(6), allows for a broad range of activities and services that benefit surgeons and patients, including expanded legislative advocacy and political programming such as the ACSPA Political Action Committee (ACSPA-SurgeonsPAC).

From January 1 to May 22, 2023, the ACSPA-SurgeonsPAC raised more than \$157,000 from 400 ACS members and eligible contributors and disbursed nearly \$146,000 to 67 candidates seeking federal offices, political campaigns, and other PACs. Fund distribution focuses on health professionals, key congressional leaders, and members who serve on US House and Senate committees with jurisdiction over various healthcare policies and issues, including ACS-supported legislative priorities.

## ACS

The BoR accepted resignations from 11 Fellows and changed the status from Active or Senior to Retired for 131 Fellows.

## Division of Education

The ACS Committee on Ethics, housed in the Division of Education, is planning several activities for Clinical Congress 2023, including the John J. Conley Ethics and Philosophy Lecture, *Evolving Concepts of Professionalism in Surgery—Shield or Weapon?*, to be presented by Travis N. Rieder, PhD, who is director of the master of bioethics degree program at Johns Hopkins University and author of *In Pain: A Bioethicist's Personal Struggle with Opioids*.

Other activities include:

- “Ethics of Surgical Innovation” panel session
- Meet the Expert session “Ethics Consults: How Can They Help Me?”
- Town Hall session “The Surgeon and Industry: Identifying and Managing Conflicts of Commitment”

Offered for the first time in 2015, the Fellowship in Surgical Ethics is sponsored by the ACS Division of Education and The MacLean Center for Clinical Medical Ethics at The University of Chicago. The program's goals are to prepare surgeons for careers that combine clinical surgery with scholarly studies in surgical ethics and provide specialized

knowledge, skills, and training to develop leaders in the field of surgical ethics. Recipients selected for 2023–2024 are Kathryn D. Bass, MD, MBA, FACS, FAAP, from Roanoke, Virginia, and Amanda Witte, MD, from Milwaukee, Wisconsin.

## Division of Member Services

A strategic analysis of the Division of Member Services was conducted to review the Division's programs and products, identify internal and external challenges, define the future vision, and establish priorities for moving forward.

Reviewed topics included:

- Division of Member Services' scholarship program
- Membership recruitment and retention

Strategic goals included:

- Developing new recruitment opportunities to increase membership
- Establishing metrics and policies to evaluate scholarship programs
- Exploring new tactics to increase engagement from all surgical disciplines
- Fostering additional membership retention plans
- Increasing resident membership across all specialties to demonstrate the value of membership and convert resident members to lifelong Fellows

## Division of Research and Optimal Patient Care

The Division of Research and Optimal Patient Care (DROPC) encompasses the areas of Continuous Quality Improvement, including ACS research and accreditation programs.

## Cancer Programs

The overarching mission of the College's seven Cancer Programs is to improve the care of the patient with cancer. The Cancer Programs work together to achieve this mission by setting standards, monitoring compliance, accrediting sites, collecting and reporting on vital statistics, and using vital statistics to drive quality improvement, research, optimization of staging, operative standards, and best practices.

The Cancer Programs have currently met the following strategic 2022–2023 goals:

- Created a portfolio of grant-based cancer research that supports new products and services within the ACS Cancer Department
- Conducted Just Ask—a national quality improvement (QI) project on smoking cessation—across 800 programs with more than 2,000 completed QI projects
- Convened the ACS Cancer Conference: Where Cancer Care Comes Together, in Atlanta, Georgia, on March 1–4, 2023, with nearly 400 participants
- Launched a standards revision project for the National Accreditation Program for Rectal Cancer (NAPRC)
- Held a dozen webinars addressing topics such as TNM Staging, operative standards implementation,

### Trauma Programs

The STOP THE BLEED® (STB) program continues to focus on empowering, educating, and informing individuals in bleeding control techniques with virtual, in-person, and interactive training.

May marked the 5th Annual National STOP THE BLEED Month. Throughout the month, stories, videos, photos, and other content were shared on ACS social media channels and the STOP THE BLEED website. On May 25, which was National STOP THE BLEED Day, the ACS co-hosted an educational event in collaboration with the Chicago Cubs and the City of Chicago’s Office of Emergency Management and Communications before that evening’s game. ACS STB representatives distributed t-shirts and educational materials, and ACS STB instructors provided hands-on practice for the skills portion of the STB Course.

## On May 25, which was National STOP THE BLEED Day, the ACS co-hosted an educational event in collaboration with the Chicago Cubs and the City of Chicago’s Office of Emergency Management and Communications.

- and accreditation standards for Commission on Cancer, National Accreditation Program for Breast Cancer, and NAPRC
- Published Optimal Resources for Breast Care (2024 Standards)
- Supported a radio and television media communication campaign for breast, lung, and colorectal cancer awareness months with approximately 75 million impressions

For 2023, Key Performance Indicators for the Cancer Programs include accrediting 2,200 programs, reporting on 1.5 million new cancer cases, and developing 6–10 new cancer staging and synoptic operative report protocols.

The second Medical Summit on Firearm Injury Prevention was held September 10–11, 2022, at the ACS Chicago headquarters. A manuscript detailing the meeting’s proceedings was published in the February 2023 issue of the *Journal of the American College of Surgeons*.

The Healthcare Coalition for Firearm Injury Prevention, a multidisciplinary coalition of professional medical and public health organizations, currently is being established. The Coalition will focus on projects and initiatives to advance firearm-related injury prevention using a public health approach.

The redesigned MyATLS application is scheduled to launch this fall. The app will inform the design

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of the ATLS 11 Manual, PowerPoint templates, and online modules. A variable pricing model will be implemented based on educational components, hardships, and varying learners. MyATLS will be available globally using an equity model with free content for those who live in low- and middle-income countries.

The 2023 TQIP Annual Conference will be held December 1–3 in Louisville, Kentucky. Ellen MacKenzie, PhD, dean of the Johns Hopkins Bloomberg School of Public Health in Baltimore, Maryland, will be the keynote speaker. Dr. MacKenzie’s research focuses on the impact of health services and policies on the short- and long-term consequences of traumatic injury. Other sessions will focus on trauma survivorship, registry/data quality, and using data to improve patient outcomes.

### Office of Diversity, Equity, and Inclusion (DEI)

A strategic analysis of the Office of DEI was conducted to review the Office’s programs and products, identify internal and external challenges, define the future vision, and establish priorities for moving forward.

Reviewed topics included:

- External DEI initiatives
- Internal DEI initiatives

Strategic goals included:

- Developing a longitudinal program to further research and generate knowledge into disparities in surgical care and their mitigation
- Developing a system of review and verification of DEI programs for hospitals, departments of surgery, and professional organizations to meet

the recommendations and requirements such as the Accreditation Council for Graduate Medical Education, Centers for Medicare & Medicaid Service’s health equity standards, and The Joint Commission

- Operationalizing and garnering support for the ongoing DEI efforts and services of the College

### ACS Foundation

The ACS Foundation remains focused on securing and growing financial support for the College’s charitable, educational, and patient-focused initiatives. Through May 21, the Foundation had raised \$2,351,383 in donations and grant support. Individual donations totaling \$442,926 were secured, with \$214,871 supporting Greatest Needs with those monies being directed toward \$200,000 in scholarships.

Programs, projects, and initiatives received \$978,332. Corporate support reached \$674,779, focusing on support of educational surgical programs at Clinical Congress 2023.

The Fall Appeal generated \$152,977, with National Doctors’ Day generating \$14,072 in gifts.

Fellows continued to generously support the Stop the Bleed Ukraine Campaign with gifts totaling \$93,951. **B**

**Dr. Ross Goldberg** is the Chair of the ACS Board of Governors.

# Member News

## Armstrong Is Elected Vice Speaker of AMA House of Delegates



Dr. John H. Armstrong

Trauma surgeon John H. Armstrong, MD, FACS, recently was elected vice speaker of the American Medical Association (AMA) House of Delegates (HOD). In this position,

Surgeons Professional Association-SurgeonsPAC Board, Legislative Committee Member, and Chair of the Committee on Trauma Advocacy Pillar. He was a Governor from 2010 to 2016 and has held all major leadership positions—Secretary, Treasurer, and President—in the Florida Chapter.

Dr. Armstrong is professor of surgery at the University of South Florida Morsani College of Medicine in Tampa and adjunct professor of surgery at the Uniformed Services University of the Health Sciences in Bethesda, Maryland. In addition, he served as Florida's Surgeon General and Secretary of Health from 2012 to 2016, where he helped achieve the lowest infant mortality rate in the state's history.

Dr. Armstrong will assist in presiding over the HOD—the legislative and policymaking body of the AMA.

Since 1989, Dr. Armstrong has participated regularly in the AMA HOD as a member of several delegations representing the voices of surgeons, physicians-in-training, hospital-based physicians, and Army physicians. He has been a tireless advocate for the priorities of the College and advancement of the field of surgery within the AMA's efforts, serving as member and eventually chair of the ACS Representatives in the HOD.

In the ACS, Dr. Armstrong serves as a member of the Health Policy and Advocacy Committee, an Advisory Member of the American College of

## Eastridge Is New ACS Military Director



Dr. Brian Eastridge

Trauma surgeon and retired US Army Colonel Brian Eastridge, MD, FACS, has been named the new ACS Medical Director, Military Health Systems Strategic Partnership, succeeding M. Margaret Knudson, MD, FACS.

Dr. Eastridge is a professor of surgery and chief of the Division of Trauma and Emergency General Surgery at The University of Texas (UT) Health San Antonio. He also holds the Jocelyn and Joe Straus Endowed Chair in Trauma Research, is vice-chair of the Southwest Texas Regional Advisory Council, and is an appointed member of the Texas Governor's EMS and Trauma Advisory Council.

While he was in medical school at the University of Maryland in Baltimore, Dr. Eastridge was

commissioned in the US Army Reserve. After completing his residency in general surgery at the University of Maryland, fellowship training in surgical critical care at UT Southwestern Medical Center in Dallas, a faculty appointment in general surgery at UT Southwestern, and—concurrently—17 years of reserves service, Dr. Eastridge transitioned to active duty in the Army Medical Corps. He deployed six times to combat operations in Southwest Asia, during which he helped lead the development and implementation of the Joint Trauma System, designed to improve trauma care and patient outcomes after battlefield injury.

Dr. Eastridge left active service in 2012 and returned to UT Health San Antonio. An ACS Fellow since 2000, he has a long history of service to the ACS Committee on Trauma, for which he currently is the Trauma Systems Pillar Chair.



Have you or an ACS member you know achieved a notable career highlight recently? If so, send potential contributions to Jennifer Bagley, MA, *Bulletin* Editor-in-Chief, at [jbagley@facs.org](mailto:jbagley@facs.org). Submissions will be printed based on content type and available space.

## Hicks Assumes Role as ACOG President



Dr. Verda J. Hicks

Gynecologic surgeon Verda J. Hicks, MD, FACS, FACOG, has started a 1-year term as president of the American College of Obstetricians and Gynecologists (ACOG), a 60,000+ member organization and leading authority on gynecology and obstetrics. She succeeds Iffath Abbasi Hoskins, MD, FACS, FACOG, in the role.

Most recently, Dr. Hicks served as chief of gynecologic oncology at Jersey Shore University Medical Center and medical director of gynecologic oncology for Hackensack Meridian Health Center in New Jersey. She also previously worked in faculty positions at the University of Kansas in Lawrence, and the University of Missouri-Kansas City. She continues to serve as a locums tenens surgeon.

## Gregg Chairs Department of Surgery in Connecticut



Dr. Shea C. Gregg

Trauma and general surgeon Shea C. Gregg, MD, FACS, is the new chair of the Department of Surgery at St. Vincent's Medical Center in Bridgeport, Connecticut.

Dr. Gregg joined Hartford HealthCare in 2022, where he was a trauma surgeon at Hartford Hospital, the Hospital of Central Connecticut, and Backus Hospital. He previously held a position as chief of the Section of Trauma, Burns, and Surgical Critical Care at Bridgeport Hospital. Dr. Gregg will continue to serve as chair of the Connecticut State Trauma Committee as he transitions to his new role.



## Pomfret Is New ASTS President



Dr. Elizabeth A. Pomfret

Elizabeth A. Pomfret, MD, PhD, FACS, has started her term as president of the American Society of Transplant Surgeons (ASTS), a 2,000+ member organization dedicated to advancing the science of transplant surgery. She succeeds William C. Chapman, MD, FACS, in the role.

Dr. Pomfret is chief of transplant surgery and professor of surgery at the University of Colorado Anschutz Medical Campus in Aurora. As previous chair of the Department of Transplantation and Hepatobiliary Diseases at Lahey Hospital & Medical Center in Burlington, Massachusetts, she guided the department to become the largest live-donor adult liver transplant program in the US.

## Velanovich Leads International Surgery Organization



Dr. Vic Velanovich

General surgeon Vic Velanovich, MD, FACS, was named president of the Society for Surgery of the Alimentary Tract (SSAT), an international organization dedicated to advancing the practice and science of gastrointestinal surgery. He succeeds Jean Nicolas Vauthey, MD, FACS, in the role.

Dr. Velanovich is professor and vice-chair for education in the Department of Surgery and the Vivian Clark Reeves/Joy McCann Culverhouse Endowed Chair for Pancreatic Cancer and Digestive Disorders at the University of South Florida Health Morsani College of Medicine in Tampa.


Within the ACS, Dr. Velanovich served as a Governor from 2018 to 2021 and as Chair of the Florida Chapter Credentials Committee from 2012 to 2020. **B**

# ABS CME Submission Changes Affect ACS Members

THE AMERICAN BOARD OF SURGERY (ABS) recently made changes to its continuing medical education (CME) processes, which impact the way diplomates interact with the Board, upload CME credits, and meet Continuous Certification requirements.

**If you are an ABS diplomate, you can rest assured that you can continue to transfer your ACS-verified CME data to the ABS directly from your MyCME portal as you have always done.**

The ability to directly transmit CME data from the ACS MyCME portal to the ABS has been a longtime ACS membership benefit. Many surgeons use our easy, two-step process to upload CME credits from their MyCME profile to the Board. To ensure your CME data for ACS activities are transferred appropriately, you should continue to use this same process, which will electronically transmit your ACS-verified CME data to the ABS via the Accreditation Council for Continuing Medical Education.

For more information, contact the ACS MyCME staff at [MyCME@facs.org](mailto:MyCME@facs.org). 

## How to Transmit Data through MyCME

- 1. Access your 6-digit ABS ID.** ABS diplomates will find their ABS ID (sometimes called candidate ID) inside their ABS portal when they log in. This is a 6-digit number that appears in parentheses immediately after their name. If you do not know how to access your ABS profile, email [cc@absurgery.org](mailto:cc@absurgery.org) for assistance.



- 2. Log in to the ACS MyCME portal,** select the “Send CME Data” tab at the top, and send your data using the process with which you are familiar.



**NEW COURSE OFFERING**

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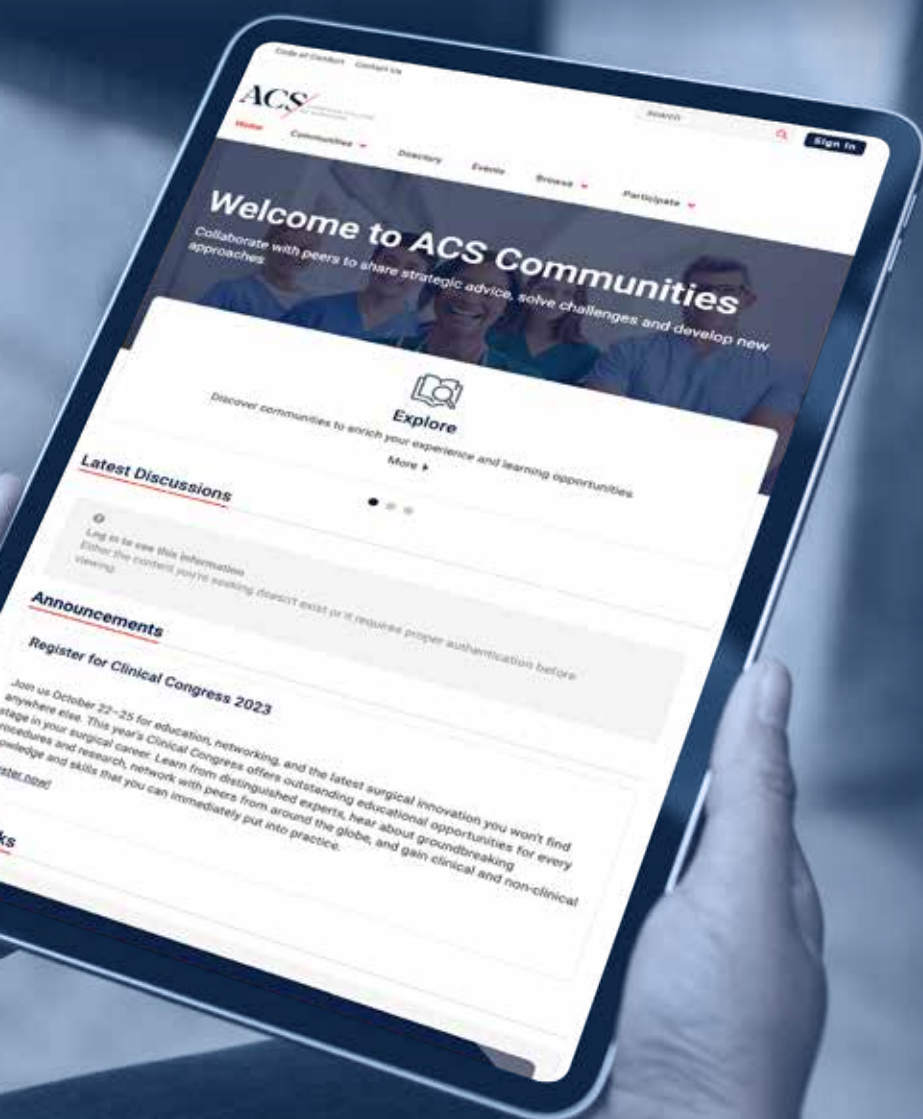
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# Get the Most Out of Your Community

The ACS Communities is an online, members-only forum where you can connect, engage, and share information with colleagues around the world.



Specialty communities focus on issues related to clinical and direct patient care, while nonclinical communities—such as ACS Wellness and Advocacy—focus on those topics.

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FOR YOU TODAY!**

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