



"After a harrowing year in which we have been impacted by COVID and racial, social, and economic unrest, this meeting will bring us together from around the world."

Juan A. Crestanello, MD



▶ The STS 2021 conference platform will allow participants to navigate the visually rich environment with ease.

STS 2021 Stands Ready to Excite, Educate, and Inspire

With just 3 weeks to go before the start of STS 2021, excitement is growing about the Society's fully digital and interactive annual meeting.

"After a harrowing year in which we have been impacted by COVID and racial, social, and economic unrest, this meeting will bring us together from around the world to share the latest scientific advances, celebrate cardiothoracic surgery, reaffirm our dedication to patient care, and reflect on our accomplishments, resilience, and friendship," said Juan A. Crestanello, MD, chair of the Workforce on Annual Meeting.

The Friday–Sunday meeting, January 29–31, is expected to be unlike anything that the

specialty has experienced to date. It will offer a state-of-the art virtual conference platform with an innovative learning environment, reliable functionality, and intuitive navigation.

With increased flexibility and expanded reach made possible by the digital nature of the meeting, attendees will be able to connect in ways never before possible and actively learn in a uniquely immersive and engaging online setting.

While some aspects of the meeting will be different, participants still can expect latebreaking research, practice-changing education, robust debates and conversations, and opportunities to network and socialize.

Educational Sessions

The rich and diverse program includes 70 hours of thought-provoking content that highlights approximately 475 high-scoring abstracts across various oral, video, and e-poster presentations.

All members of the cardiothoracic surgery team will find topics that resonate with them. Some content was designed for the entire specialty, while other sessions were created for the various disciplines or participants by career level.

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The Society's mission is to advance cardiothoracic surgeons' delivery of the highest quality patient care through collaboration, education, research, and advocacy.

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STS News

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New Mentorship Program Helps Build Tomorrow's Leaders

Cardiothoracic surgery is an extremely demanding profession, and those who have journeyed into the specialty credit mentorship as one of the most important factors influencing their professional success and satisfaction.

The Society has created a way to connect those seeking mentorship with seasoned surgeons who can help provide guidance and support—the STS Mentorship Program. Through this program, STS members at any career level can apply for mentorship or to become a mentor.

"We are helping make connections between up-and-coming cardiothoracic surgeons and those with expertise in their areas of interest," explained David D. Odell, MD, MMSC, chair of the STS Mentorship Task Force. "We have an opportunity to do something cool something that will have a lasting, positive effect on our specialty. That's really powerful."

The day-to-day practice of medicine demands the skillful balance of leadership, administrative, educational, and research expertise that cannot always be learned from a textbook or in a classroom. That's why this program is so important.

The new Mentorship Program is designed to connect a younger surgeon with an experienced one who has been through similar situations and challenges. A mentor can offer advice and encouragement, as well as help chart a professional course and build a network. The relationship often is mutually beneficial, guaranteeing valuable engagement experiences for both parties.

Even though the program just launched, a good number of surgeon leaders already are committed and eager to help the future generation of cardiothoracic surgeons—many of whom are in the program queue as well.

Sign-up is available through the easy-to-use mentorship portal—**sts.org/mentorshipportal**. Whether interested in being a mentor or mentee, you will be required to provide contact information, practice type, and other details such as career objectives and areas of interest (e.g., practice building, clinical research, contract negotiations). It takes approximately 5 minutes to complete.

A few weeks after the application is submitted, STS will match the mentee with a mentor and facilitate the initial contact by email. After that, the mentor and mentee will drive their own experience; though in this current COVID environment, most of the communication likely will be via phone, email, and Zoom.

The application and mentor/mentee selection processes are ongoing. For more information about the program, contact **mentorship@sts.org**.



► The STS Mentorship Program is designed to develop mentor/mentee relationships that have long-term benefits for both individuals.

Member News



Nguyen Is New Chief at UCSF

Tom C. Nguyen, MD, has been named chief of the Division of Adult Cardiothoracic Surgery and the Helen and Charles Schwab Distinguished Professor of Surgery in the Department of Surgery at the University of California, San Francisco (UCSF). He also is co-director of the UCSF Heart and Vascular Center. Prior to this, Dr. Nguyen was chief of cardiac surgery, director of minimally invasive valve surgery, co-director of structural heart disease, and professor of cardiothoracic surgery at The University of Texas in Houston. An STS member since 2015, he serves on the Workforce on Annual Meeting and its Program Task Force.



Grondin Elected to ACS Board of Regents

Sean Grondin, MD, MPH, FRCSC, has been elected to serve on the American College of Surgeons (ACS) Board of Regents. The Board of Regents formulates policy and directs the affairs of the College. Dr. Grondin is currently professor of surgery at the University of Calgary in Alberta, Canada. He recently completed his roles as the academic head of the Department of Surgery for the Cumming School of Medicine at the University of Calgary and clinical department head for Alberta Health Services. Dr. Grondin is the STS First Vice President and has been an STS member since 2001.



Romano Holds Distinguished Professorship

Jennifer C. Romano, MD, recently was honored with the Herbert E. Sloan Collegiate Professorship from the University of Michigan Medical School in Ann Arbor, Michigan. The professorship is named after a past STS President and former editor of *The Annals of Thoracic Surgery* who was considered a pioneer in thoracic and cardiovascular surgery—performing Michigan's first successful open heart surgery in 1956. At Michigan Medicine, Dr. Romano is an associate professor of cardiac surgery in the Section of Pediatric Cardiovascular Surgery, associate director of the Pediatric Cardiothoracic Intensive Care Unit, and program director of Congenital Cardiac Surgery Residency. An STS member since 2007, she is a director-at-large on the STS Board of Directors.



Ramlawi Tapped to Lead Cardiac Surgery

Basel Ramlawi, MD, has been named the system chief of cardiac surgery for Main Line Health and co-director of the Lankenau Heart Institute in Wynnewood, Pennsylvania. Previously, he was chairman of the Valley Health Heart & Vascular Center in Winchester, Virginia, and was founding director of the Advanced Valve and Aortic Center. Dr. Ramlawi has been an STS member since 2010.



Ailawadi Moves to Michigan Medicine

Gorav Ailawadi, MD, MBA, has joined the University of Michigan in Ann Arbor as chair of the Department of Cardiac Surgery, co-director of the Frankel Cardiovascular Center, and professor of cardiac surgery in the medical school. He also holds an appointment in the Department of Biomedical Engineering. Previously, Dr. Ailawadi was a professor of surgery and chief of cardiac and thoracic surgery at the University of Virginia in Charlottesville. He has been an STS member since 2009.



Chen Leads CT Surgery at Duke

Edward P. Chen, MD, is the new chief of the Division of Cardiovascular and Thoracic Surgery at Duke University Medical Center. He previously was at Emory University in Atlanta, Georgia, where he served as executive director of the Aortic Center, director of thoracic aortic surgery, and section head of adult cardiac surgery. An STS member since 2005, Dr. Chen is co-chair of the Aortic Surgery Database Task Force and is a member of the STS Annual Meeting Program Task Force as well as the Workforce on Adult Cardiac and Vascular Surgery.



Estrera Moves Up at UTHealth

Anthony L. Estrera, MD, has been appointed chair of the Cardiothoracic & Vascular Surgery Department at McGovern Medical School, The University of Texas Health Science Center at Houston. He also currently serves as professor of cardiothoracic and vascular surgery at the medical school and co-director of the Memorial Hermann Heart & Vascular Institute-Texas Medical Center. Dr. Estrera is on the Board of Directors for The Thoracic Surgery Foundation and has been an STS member since 2004.



Avgerinos Takes Position in Greece

Dimitrios Avgerinos, MD, PhD, has accepted a position at the Onassis Cardiac Surgery Center in Athens, Greece. His work there will focus on minimally invasive cardiac surgery and aortic and endovascular surgery. Previously, Dr. Avgerinos was assistant professor of cardiothoracic surgery at Weill Cornell Medicine and the New York-Presbyterian Hospital, both in New York City. He has been an STS member since 2009.

Additional Member News items are available online at sts.org/membernews.



Send news about yourself or a colleague to **stsnews@sts.org**. Submissions will be printed based on content, membership status, and space available.



Rising to the Challenge

Joseph A. Dearani, MD

"Every day, I am proud that I chose this profession. I am proud of my colleagues, especially those on the front lines who have consistently shown great compassion and strength." It's finally 2021.

I'm glad that 2020 is in the rearview mirror. 2020 took a toll on everyone—from the global pandemic and greater awareness about social injustices, to wildfires, hurricanes, and other natural disasters. No one was immune from stress, exhaustion, and uncertainty.

Cardiothoracic surgeons rose to the challenge, however, and showed their grit throughout the year. Every day, I am proud that I chose this profession. I am proud of my colleagues, especially those on the front lines who have consistently shown great compassion and strength.

I also am proud to be an STS member. During a most difficult and disruptive year, volunteer leaders and staff forged ahead with initiatives that were already in process and used their ingenuity to introduce new ways of supporting the specialty and helping members with their day-to-day needs.

Not only did the various phases of the next generation STS National Database push forward and continue to evolve and advance the specialty (see page 12), but we also offered a series of online educational opportunities that included basic and advanced virtual courses, hour-long webinars, 8-minute microlearning videos, and the long-awaited launch of the STS Cardiothoracic Surgery E-Book (see fall 2020 issue of STS News). In mid-December, on the day that a US Food and Drug Administration committee recommended approval of the first COVID vaccine, Dr. Melanie Edwards and I hosted an evening webinar during which we talked to three high-profile infectious disease experts who offered their expertise, advice, and guidance. We discussed COVID therapeutics, various nuances about the vaccine, how to keep health care workers safe, and talking points for our patients. If you didn't have a chance to watch the webinar, it is available on the STS YouTube Channel or via the STS website at **sts.org/covid-19**.

Because it will take months to distribute and administer vaccines around the world, Dr. Deborah Birx, from the White House Coronavirus Task Force, emphasized the importance of vigilant prevention. I echo her concerns that the presence of effective vaccines may lead some to act recklessly.

Please tell your family, friends, and patients to wear their masks, practice social distancing, and maintain routine health care. It's also important to get a flu shot. Having coinfection with flu and COVID could be devastating.

Life will get back to normal, but not any time soon. We need to be patient for a little longer, but I am confident that we again will rise to the challenge—as we have before—and we will get through this.

STS 2021

In a few short weeks, STS will hold its annual meeting. Although STS 2021 will be virtual, that doesn't mean it will be an online version of what you would experience in a convention center.

Yes, you still will have the opportunity to hear about late-breaking research and witness pioneers and luminaries in our field discuss and debate important topics. But we've embraced technology and developed a program that will make the most of that online experience. The meeting will be interactive, allow you to see inside an operating room during a procedure, ask questions, chat with friends, and take part in social and wellness activities (see cover story).

A few months ago, when the Board of Directors made the very difficult decision to convert STS 2021 into a virtual meeting, we didn't know how long the pandemic would last. Many of us were reluctant to change an event that we look forward to every year. We now know that we made the right decision.

I want to express my gratitude to the Workforce on Annual Meeting, under the direction of Dr. Juan Crestanello and task force chairs Drs. Mara Antonoff, Tom Nguyen, Usman Ahmad, and Sloane Guy, for their strong work with the STS staff to create what will be an unforgettable experience.

Advocacy Victory

Before I sign off on my last STS President's Column, I also want to thank my colleagues who worked tirelessly to fight—and beat—the unfortunate and misguided CMS decision to significantly cut Medicare reimbursement for cardiothoracic surgeons. We, again, rose to the challenge; we won the initial battle, but the fight is far from over. See page 18.

Finally, I want to thank you and all STS members for their support and feedback.

I am honored to have served as STS President for the past year. I look forward to seeing you virtually at STS 2021.

Be well and be safe. ■



Joseph A. Dearani, MD, and Melanie A. Edwards, MD, hosted the STS webinar, "Next Steps in Eradicating COVID-19: Emerging Treatments and Vaccines," which featured prominent infectious disease experts Deborah L. Birx, MD, Andrew D. Badley, MD, and Trish M. Perl, MD, MSc.

STS 2021 Stands Ready to Excite, Educate, and Inspire

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Sessions that are expected to draw large audiences include updates and reflections on the EXCEL trial, the impact of COVID on the specialty, the use of extracorporeal membrane oxygenation (ECMO), and the growing emphasis on and importance of patient-reported outcomes.

In addition, STS 2021 will feature joint sessions with, among others, the Society for Vascular Surgery, the American Heart Association, the European Association for Cardio-Thoracic Surgery, the Canadian Society of Cardiac Surgeons, and the Asian Society for Cardiovascular and Thoracic Surgery.

In order to accommodate busy schedules, as well as a global audience, live sessions will be offered after-the-fact in an on-demand program library. Importantly, STS 2021 will be available with real-time translation in 17 different languages provided by artificial intelligence-based software.

Top Research

The J. Maxwell Chamberlain Memorial Papers, which represent some of the top-rated abstracts at the meeting, will be presented on Saturday morning during specialty-specific parallel sessions. Topics include transcatheter versus surgical approaches in the management of aortic stenosis and coronary artery disease, the impact of center volume on readmissions and mortality after congenital cardiac surgery, and lung transplant recipients who have a survival benefit after fundoplication.

The Richard E. Clark Memorial Papers highlight research utilizing data from the STS National Database. These papers, also featured on Saturday, include presentations on anti-coagulation in new onset postoperative atrial fibrillation, utilization and outcomes of the Nikaidoh, Rastelli, and REV procedures, and national trends and outcomes of segmentectomy. Another first for STS 2021—the program will include Chamberlain and Clark papers for critical care. The Chamberlain paper will explore failure to rescue as a new STS quality metric for cardiac surgery, and the Clark paper, using data from the Intermacs component of the STS National Database, will analyze failed bridge to transplant.

Must-See Keynote Lectures

Following the Chamberlain and Clark papers on Saturday, Joseph A. Dearani, MD, will deliver his Presidential Address at 1:00 p.m. ET, which he promises will be a "very different experience."

Other keynotes include the innovationfocused C. Walton Lillehei Lecture, by Paul Yock, MD, from Stanford University in California (Friday), the Vivien T. Thomas Lecture on diversity and inclusion, by Quinn Capers, MD, from The University of Texas Southwestern Medical Center in Dallas (Friday), and the Thomas B. Ferguson Lecture (Sunday), which will be an international roundtable discussion. The panelists are Enrico Ruffini, MD, from the University of Torino in Italy and the European Society of Thoracic Surgeons, Craig R. Smith Jr., MD, from Columbia University and NewYork-Presbyterian Hospital in New York City, and STS International Director Alan D.L. Sihoe, MD, MA, FRCSEd, from Gleneagles Hospital in Hong Kong. The esteemed panelists will offer their personal reflections on how COVID-19 affected them and their institutions, and what the impact on medicine and the specialty is likely to be.

New! Immersive Video Experiences

Also a first for the STS Annual Meeting will be "Immersive Video Experiences."

This exciting new series will allow attendees to enjoy 360° views of operating rooms and feel as though they are standing beside world-class surgeons while they perform various operations. As 360° video clips are shown during several live sessions on Friday morning, moderators will talk with the surgeons about critical aspects of the procedures and engage the audience in interactive discussions. The series also will feature sessions in which experts will take attendees on "deep dives" into particular procedures, using a combination of video segments and group discussions (see page 8).

This special programming requires a separate fee.

Ask the Experts

Another interactive experience with master surgeons will be the "Ask the Experts" chats on Sunday morning, which will allow for direct peer-to-peer conversations in a nonpresentation format.

These sessions—more than 20 of them will feature a diverse group of leaders in cardiothoracic surgery discussing important topics on wellness, physician reimbursement, health care disparities, lung cancer screening, and much more.

Shark Tank

The innovation plenary session and always-popular Shark Tank presentations will take place on Friday afternoon after the Lillehei Lecture.

Shark Tank features entrepreneurs pitching their ideas for new technologies and groundbreaking techniques to a panel of experts. On deck for discussion: an ambulatory ECMO, a detachable head aortic cross clamp, and a mobile application for communication during organ procurement. These presentations will offer a glimpse into the possibilities that exist within the specialty.

Industry Symposia and Exhibit Hall

Industry will continue to have a prominent role at the STS Annual Meeting.

In addition to dedicated time for companies to present educational sessions on their latest products and services, STS 2021 will include a virtual exhibit hall. Attendees can "tour the hall," clicking on booths to experience many of the aspects that typically are available at in-person meetings. The platform even allows participants to live-chat with exhibitors, schedule one-on-one meetings, or browse downloadable content.

Social Events

On Friday and throughout the weekend, several fun social events will be available, including STS-customized comedy sketches from The Second City. The show will be based on the day-to-day lives of cardiothoracic surgeons and feature special guest appearances by STS leadership and opportunities for audience interaction.

In addition, STS 2021 will offer a Mindfulness Lounge, virtual cooking and mixology demonstrations, a family-friendly trivia competition, and group Peloton rides—all complimentary. A virtual 5K run/walk will be hosted separately by The Thoracic Surgery Foundation (see page 17).

"Although the pandemic is very serious and has impacted us all, the various STS social events will allow us to safely participate in some upbeat, fun activities with colleagues," said Sean C. Grondin, MD, MPH, FRCSC, STS First Vice President.

Browse the educational program, check out the "STS Pavilion," read scientific abstracts, and more via the STS 2021 conference platform, which is expected to be available to registrants a few days before the meeting.

If you haven't registered yet, there still is time to secure your spot. STS members receive discounted rates, and Candidate and Pre-Candidate Members can register for free. Registration also includes complimentary access to Annual Meeting Online, a web-based video presentation of most sessions offered at STS 2021 that will be available through January 2022. More information is available at **sts.org/annualmeeting.**



Register for STS 2021

Registration for STS 2021 is online only at **sts.org/annualmeeting**. The registration fee includes:

- Access to more than 70 hours of content showcasing the latest research and techniques in cardiothoracic surgery
- Participation in social, wellness, and networking events, and a virtual scavenger hunt
- 15 industry symposia
- Entrance to the STS Virtual Exhibit Hall, where you can learn about the newest products and services available
- Opportunity to earn continuing medical education, as well as perfusion and nursing credits
- Access to Annual Meeting Online, the online digital archive of the meeting

Please note that STS members are not automatically registered for the meeting.



If you're talking about the meeting on social media, use **#STS2021** in your posts.

New Series Delivers Master Class in CT Surgery and Panoramic Perspective of OR

Imagine this: You're standing beside renowned surgeon Robert J. Cerfolio, MD, MBA, in an operating room at NYU Langone Health in New York City. You are watching every move he makes during a robotic lobectomy. You are listening intently as he talks you through his thought processes. You are looking around and able to see who is in the operating room, where they are standing, and what equipment is being used.

And, almost unbelievably, you are doing all of this while sitting in front of your computer at home or in the office.

That's exactly what attendees can expect from "Immersive Video Experiences"—a new and exciting course series offered during STS 2021.

"This is an amazing opportunity to bring the outside world into your operating room," said Dr. Cerfolio. "Attendees will not only witness the technical aspects of a procedure, but they also will see and feel how you lead, how you inspire those around you to perform at their optimal levels, and how you make everyone in that room understand that although this is just another day of work for them, it's that patient's only operation."

In the OR with...

The series, scheduled for Friday morning of STS 2021, will open with visits to the operating rooms of five different surgeon luminaries. These "In the OR" sessions will offer an interactive and visceral way to experience a robotic lobectomy, a congenital heart surgery, a valve-sparing aortic root procedure (reimplantation), a video-assisted thoracoscopic (VATS) lobectomy, a transcatheter aortic valve replacement (TAVR), and a transcatheter mitral valve-invalve replacement.

Alongside world-class surgeons—Dr. Cerfolio, Joseph A. Dearani, MD, from the Mayo Clinic in Rochester, Minnesota, Joseph E. Bavaria, MD, from Penn Medicine in Philadelphia, Shanda H. Blackmon, MD, MPH, from the Mayo Clinic in Rochester, Minnesota, and Vinod H. Thourani, MD, from Piedmont Heart Institute in



▶ The "In the OR with..." series offers "wheels in" to "wheels out" experiences with world-class surgeons.

Atlanta, Georgia—attendees will experience these procedures from start to finish and be able to take in the entire operating room environment in a way that they've never been able to do before—at least from in front of a computer screen.

With the use of specialized 360° cameras, participants will observe not just the insides of the chests, but they also will witness all of the outside happenings, including the sights and sounds of the surgeries—all real-life, no avatars, drawings, or animations—just as though they are in the room.

Dr. Cerfolio explained that the series makes available "all of the optics" in the operating room: How do the team members get along? How do they move around the OR? What's the culture in the room? How is the OR set up? What's being said during the surgery? What is the leadership style of the surgeon? Is it effective?

"The immersive video experiences don't offer a myopic view that just studies the surgical field and the technical exercise of the operation. But more so, the series offers additional unique features that help participants really understand how surgery is a team sport," he said.

During the sessions, the surgeons will talk through the actual operative techniques, as well as demonstrate the difference between good outcomes and masterful ones. A moderator will discuss with the surgeon key aspects of the procedure, drive the 360° views, and engage the audience during interactive discussion periods.

"While traditional videos of surgical or transcatheter procedures offer only a unidimensional experience, this program allows participants to be engrossed within all aspects of the procedures and is guaranteed to enhance the learning of these complex surgeries for not only practicing physicians, but also residents and the entire heart team," said Dr. Thourani.

Deep Dives into...

Following the "In the OR with..." series will be 11 "Deep Dive" courses. In these sessions, expert surgeons will share comprehensive dives into particular procedures, using a combination of video segments and interactive group discussions. The detailed descriptions, in-depth explanations, and meaningful conversations will provide participants with a full-bodied understanding of the following topics:

- ▶ Essentials of TAVR
- Valve-Sparing Aortic Root Procedure (Reimplantation)
- ► VATS Lobectomy
- Robotic Lobectomy
- Transseptal Puncture for Surgeons
- Minimally Invasive Mitral Valve Surgery
- Minimally Invasive Esophagectomy
- Chest Wall Reconstruction after Tumor Resection
- Ross and Ross-Konno–Preventing Neoaortic Root Dilatation
- Navigating Initial Nights on Call: A GPS Guide for Residents
- How Can I Get Out of this Operating Room?
 Valve Replacement Strategies in Neonates and Infants

The Immersive Video Experiences are an optional add-on program that can be secured during STS 2021 registration for an extra fee and include both the "In the OR with..." and "Deep Dives into..." sessions (16 in all). For more information, visit **sts.org/annualmeeting**.

Scholarship Experience Set to Inspire Next Generation of Surgeons

Why become a cardiothoracic surgeon?

A group of 60 ambitious and aspiring young people are about to find out. The Society's Looking to the Future (LTTF) Scholarship Program will welcome 30 general surgery residents and 30 medical students to STS 2021 the virtual annual meeting later this month.

Through the scholarship, the students and residents—each with an interest in exploring a career in cardiothoracic surgery—will enjoy an exceptional experience that offers them a revealing glimpse of the specialty.

An exclusive virtual LTTF Scholarship Program event will deliver targeted information about

cardiothoracic surgery as a profession, life as a cardiothoracic surgeon, and the application processes for training programs. The scholarship recipients also will receive oneon-one virtual mentoring with a cardiothoracic surgeon who can share insights and provide guidance on how to carve a path in the field.

More than 185 medical students and residents applied for the 2021 scholarships— a new record.

Previous LTTF scholarship recipient Jacqueline L. Russell, MS, RN, CCRN, EMT-B, a medical student at Georgetown University School of Medicine in Washington, DC, said that participating in the program provided an invaluable opportunity to learn from and be inspired by "incredible" leaders.

"The 2020 STS conference was an outstanding experience for me, and the LTTF scholarship was the driver behind the opportunity to attend," she said. "I spoke with so many dynamic surgeons, from varying facets of the community ranging from cutting-edge clinicians to top-notch educators, and spent invaluable time with these individuals as part of the LTTF program. I will be forever grateful to be considered an LTTF scholar and hope to continue to live up to the name throughout my career."

Initiated in 2006, the program was developed to identify and encourage general surgery residents considering, but not yet committed to, a career in cardiothoracic surgery. In 2011, medical students became eligible. Since its inception, the Society has awarded 670 scholarships. To view a list of the 2021 scholarship recipients, visit **sts.org/lttf**.

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For information, contact Rachel Pebworth at **rpebworth@sts.org**.

In Memoriam: Vincent L. Gott, MD STS Past President (1992–1993)



An internationally renowned cardiothoracic surgeon known for his humility and civility passed away on November 20 at the age of 93.

Vincent L. Gott, MD, became the Society's 27th President in 1992 after having served as the Society's Vice President. An STS member for more than 50 years, he also held positions on several committees. In his STS presidential address, "And It Happened During Our Lifetime...," Dr. Gott discussed several pioneer surgeons and asked what they all had in common. "The descriptors I would use include brilliance, courage, dogged determination, and unbelievable creativity," he said. Not surprisingly, those are some of the same words that his colleagues and friends now use as they remember him.

STS Past President, William A. Baumgartner, MD, who was a longtime associate of Dr. Gott, said, "Vince was really a man for all seasons he was an incredible clinical surgeon, an amazing innovator, and he was gracious, compassionate, and a model of civility. When you think of Vince, a smile comes on your face."

Born in Wichita, Kansas, Dr. Gott had the privilege of spending time with a prominent plastic surgeon in his hometown and observing some of his operations. This experience influenced him to pursue a career in plastic surgery. But all that changed with a sketch and a surgery.

After receiving his medical degree from Yale University School of Medicine, Dr. Gott completed his internship and surgery residency at the University of Minnesota Hospitals. There, Dr. Gott was invited to observe C. Walton Lillehei, MD, as he repaired a congenital heart defect. Dr. Gott later sketched a procedural drawing of the surgery and added it to the patient's record. The skill and detail of the sketch so impressed Dr. Lillehei that he invited Dr. Gott to join his research laboratory. From that point on, Dr. Gott knew that cardiothoracic surgery was his future.

In 1965, Dr. Gott became an associate professor of surgery at The Johns Hopkins University School of Medicine and chief cardiac surgeon for The Johns Hopkins Hospital, where he practiced for 55 years.

During his career, Dr. Gott collaborated with some of the greatest minds in medicine, which led to extraordinary contributions. He was the first to perform experiments proving that an electronic stimulator could jump-start the heartbeats of patients—a discovery that led to the development of modern pacemakers. Dr. Gott also revolutionized heart valve designs and performed the first heart transplant operation at The Johns Hopkins Hospital. In addition, Dr. Gott was an expert in treating potentially deadly aortic aneurysms caused by Marfan syndrome.

New Podcast Episodes Reveal Inside Stories of CT Surgeons

The surgeon stereotype is alive and well with many believing that all cardiothoracic surgeons are cut from the same cloth.

Just one episode of the Society's podcast series, Same Surgeon, Different Light, though, is all that it will take to crush any stereotype and demonstrate that while all surgeons may wear scrubs and caps, that is where the similarities end.

Hosts David Tom Cooke, MD, and Thomas K. Varghese Jr., MD, MS, get up close and personal with leaders and rising stars in cardiothoracic surgery, uncovering their extraordinary and very different backstories.

So far, Leah Backhus, MD, MPH, Doug Mathisen, MD, Joanna Chikwe, MD, Richard L. Prager, MD, and Robert S.D. Higgins, MD, MSHA, as well as Drs. Varghese and Cooke have been featured.

Same Surgeon, Different Light Surgical Hot Topics

Coming up are conversations with Shanda Blackmon, MD, MPH, Douglas E. Wood, MD, Melanie A. Edwards, MD, Sidhu P. Gangadharan, MD, MHCM, Loretta Erhunmwunsee, MD, Tom C. Nguyen, MD, Ourania A. Preventza, MD, MBA, and Elaine E. Tseng, MD.

Did you know that Dr. Prager chose a career in medicine after helping his physician father on house calls and working a summer hospital job washing walls and cleaning patients' rooms? Why cardiothoracic surgery? Because it was the hardest thing he could think of to do. Or that Dr. Higgins was just 5 years old when he lost his father—who was an African American general practitioner in the segregated South during the 1960s—in a tragic accident? He lives by advice from his mother: "keep on keeping on"—a reminder that challenges in life should be embraced as opportunities to persevere and show grit.

You also might be surprised to learn that Dr. Blackmon originally pursued a career in art, selling her paintings in the art gallery where she worked. After buying most of Dr. Blackmon's artwork, her mom divulged that she was running out of wall space, so Dr. Blackmon knew it was time to find something else to do.

These are the types of inspirational stories and experiences that are shared during the Same Surgeon, Different Light episodes.

New episodes will be added regularly. Subscribe to Surgical Hot Topics via your favorite podcast app, or find the episodes at **sts.org/podcast**. Social media postings about the series include the hashtag **#TheFaceofCTSurgery**.

Online Course Offers Chance to Watch and Learn Robotic Cardiac Surgery

Whether you want to build a robotic cardiac surgery program or enhance an existing one, the Society's new comprehensive online curriculum provides expert tips and instruction on everything from initial finances and prerequisites for the surgical team, to creating surgical plans and formulating postoperative care pathways.

Robotic Cardiac Surgery: Mitral Valve Repair, Coronary Bypass, and More also offers basic and advanced instruction on robotic coronary artery bypass, robotic mitral valve repair, and other intracardiac procedures.

The curriculum includes six sessions composed of prerecorded, narrated video lectures and demonstrations from worldrenowned surgeon instructors, including



Husam H. Balkhy, MD, Joseph A. Dearani, MD, Eugene A. Grossi, MD, T. Sloane Guy, MD, MBA, and Douglas A. Murphy, MD. Each session concludes with a live webinar featuring faculty from the session and an interactive audience Q&A. The live panel discussions are recorded and added to their respective online sessions.

- Session 1 Building & Maintaining a Robotic Cardiac Surgery Program
- Session 2 Robotic Mitral Valve Repair & Other Intracardiac Procedures: Basic Considerations
- Session 3 Robotic Mitral Valve Repair & Other Intracardiac Procedures: Advanced Considerations

- Session 4 Robotic Coronary Artery Bypass: Basic Considerations
- Session 5 Robotic Coronary Artery Bypass: Advanced Concepts
- Session 6 Robotic Cardiac Surgery Program Building: Advanced Considerations

Purchasers receive unlimited access to all content through December 31, 2021. For more information, visit **sts.org/roboticcardiac** or email **education@sts.org**.

A robotic thoracic curriculum is expected to be released in early 2021.

The Annals Recognizes Inaugural Reviewers of the Year



The unpredictability and challenges related to the coronavirus pandemic have placed a heavy burden on frontline health care professionals and caused incredible disruption; however, some have found silver linings such as more time for research and manuscript writing.

For *The Annals*, this has resulted in receiving a record number of manuscripts in 2020—approximately 5,000—which required the journal to rely on the diligence and hard work of its peer reviewers more than ever before.

In recognition of those who consistently provided a combination of highquality, thorough, and professional reviews in a timely manner, *The Annals* announced its inaugural "Reviewer of the Year" award and named the following outstanding recipients:

- General Thoracic: Chadrick E. Denlinger, MD, from Indiana University School of Medicine in Indianapolis
- Adult Cardiac: Danny Ramzy, MD, PhD, from Cedars Sinai Medical Center in Los Angeles, California
- Congenital: Tracy R. Geoffrion, MD, MPH, from Children's Hospital of Philadelphia in Pennsylvania
- ► **Trainee:** Kathryn E. Engelhardt, MD, MS, from Washington University in St. Louis, Missouri

"By virtue of the number and quality of their manuscript reviews, Drs. Denlinger, Ramzy, Geoffrion, and Engelhardt have earned special recognition as 2020 Reviewers of the Year. The cardiothoracic surgery community is privileged to have such outstanding scholars contributing to the success of *The Annals*," said Editor G. Alexander Patterson, MD, FRCS(C).

This award will be presented to four reviewers on an annual basis. All peer reviewers are eligible, and the criteria include the number of completed reviews, average review rating (1-5 scale), and reviews submitted on time (within a 14-day deadline). Feedback from the deputy editors also is considered.

"Peer review is a vital element of scientific publication. *The Annals* of *Thoracic Surgery* is deeply indebted to the many global cardiothoracic experts who provide insightful commentary to authors in an effort to improve the quality and impact of submitted manuscripts," said Dr. Patterson.



Thank You!

The Society of Thoracic Surgeons gratefully acknowledges the following companies for providing educational grants for STS 2021.

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If you are interested in joining the "Reviewer Volunteer" program, contact **theannals@sts.org**.

STS National Database Is Reaching New Milestones

A year after the next generation STS National Database was launched, providing landmark advancements for the most robust clinical outcomes registry in cardiothoracic surgery, significant new features continue to roll out, helping participants with self-assessment, quality improvement, and—most important patient care.

Risk-adjusted dashboards for the Adult Cardiac Surgery Database (ACSD) and General Thoracic Surgery Database (GTSD) are anticipated later this month. These dashboards will allow participants to compare their riskadjusted institutional results with benchmarked STS aggregate data.

Also expected soon are the highly anticipated longitudinal dashboard reports, which have been undergoing careful development and extensive testing.

"The ACSD longitudinal dashboard will be launched first, followed by the GTSD and CHSD," explained Felix G. Fernandez, MD, MSc, chair of the STS Workforce on National Database. "Participants will be able to view outcomes such as risk-adjusted mortality rates and observed-to-expected mortality ratios over time. The goal is to provide meaningful and actionable data to aid with continuous performance improvement, as well as help facilitate informed decision-making conversations with patients."

The ACSD also was first to experience a data specification upgrade in the new platform. Now with that upgrade firmly in the rearview mirror, beta testing and refinements are a focus for the GTSD data specification upgrade (v5.21), which is expected to go live in July.

"This new version includes upgrades in the staging of thoracic malignancies and greater detail on thoracic operations, including more specificity on minimally invasive approaches," said Dr. Fernandez. "Importantly, grading scales have been added for operative complications in the GTSD. This will allow for the relative severity of a complication to be ascertained from minor to life threatening. This approach may, in the future, refine definitions of major morbidities in thoracic risk models." Also important for the GTSD is the lung cancer composite that was added to the portfolio of performance measures to complement the lobectomy for lung cancer measure.

"Lung cancer can be removed with varying extents of pulmonary resection from wedge to pneumonectomy; extent of resection impacts operative risk and may be at the discretion of the operating surgeon. Therefore, it was important to create a lung cancer resection model that encompasses all extents of pulmonary resection for a more comprehensive measure of lung cancer surgery," said Dr. Fernandez.

Detailed information on the new composite is expected to be published soon in *The Annals* of *Thoracic Surgery*. A separate article in *The Annals* will focus on analyses conducted on the impact of smoking status and surgical approach (thoracotomy vs. minimally invasive) on lung cancer resection outcomes.

Indian Society Joins ACSD

The newly formed Society of Coronary Surgeons in India and all of its member surgeons are now participants in the ACSD. Although sites in India previously participated in the CHSD, this is a first for the ACSD and provides a great opportunity for collaboration with surgeons who perform high volumes of cardiac procedures. This collaboration will extend not only to quality assessment and improvement, but also may involve research.

Data Harvests and Public Reporting

During the first year of the Database transition, COVID-19 greatly impacted hospitals. Data harvest deadlines were extended, harvest reports were delayed and public reporting was put on hold in order to carefully review the impact of the pandemic on cardiothoracic surgical patients.

The 2020 hiatus in public reporting provided an opportunity to revamp the public reporting website to allow increased search functionality, as well as new outcomes results. The release of the updated website is planned for early 2021. And as the ACSD, GTSD, and CHSD prepare to resume public reporting, the STS/ACC TVT Registry is taking steps for its first foray into public reporting (see page 13).

Future Innovations

Behind the scenes, many surgeon volunteers, STS staff, vendors, and others are working tirelessly on future innovations and gamechanging practice improvement tools and programs for the STS National Database and its approximately 4,300 surgeon participants.

These projects include using artificial intelligence to assist with data entry, a site visit program for participants who want help with process improvement, and implementation of supplemental datasets for even more comprehensive outcomes analyses.

Through a collaboration with Northwestern University, National Death Index (NDI) follow-up data were acquired for more than 2.6 million unique patient records in the ACSD, GTSD, and CHSD. After data adjudication and merging, three subspecialty analytic datasets will be created for use through the STS Research Center.

In addition to death data, STS has acquired socioeconomic status data on 4.2 million records in the Database. Socioeconomic data tables mapped to specific geocodes are now available to STS for linking to projectspecific datasets. The derived geocodes also will be used to calculate an Area Deprivation Index measure for use in research and quality initiatives.

"Data enhancements such as the NDI and socioeconomic status are central to our mission to deliver high-quality and long-term value to our patients and the public," said Kevin W. Lobdell, MD, LTC, MC, USAR, chair of the STS Workforce on Research Development.

For the latest on the STS National Database, go to **sts.org/database**. For more information on the STS Research Center projects, visit **sts.org/researchcenter**.

Voluntary TAVR Public Reporting Begins in Fall 2021

The first public reporting results are expected to be available in October for transcatheter aortic valve replacement (TAVR) procedures in the United States. More than 300,000 TAVRs have been performed since the Food and Drug Administration's first TAVR device approval in 2011 and the subsequent Medicare reimbursement requirement that all TAVR procedures be reported to the STS/American College of Cardiology (ACC) Transcatheter Valve Therapy (TVT) Registry.

"When we first considered public reporting for TAVR, we started off by asking the question, 'Do we need to do this?'," explained Nimesh D. Desai, MD, PhD, chair of the STS TVT Registry Risk Model Work Group. "We found that the answer was 'Yes' because early data show a variation in mortality outcomes between hospitals. We don't know if it relates to volume or something else, but there certainly is sitelevel variation in outcomes after TAVR." Public reporting through the STS National Database and other registries has shown that the activity encourages transparency of outcomes, attention to quality metrics by hospitals and physicians, contributions to national registries, and increased choice by consumers—more shared-decision making between caregivers and patients.

The new TVT Registry public reporting website will include information on a participant's first TAVR procedure, the number of cumulative procedures performed, and average annual volume over a 3-year rolling period. It also will show a distribution of the participating hospital's annual volume compared to that of other hospitals in the TVT Registry. Outcomes will be a 30-day composite reflecting 30-day death, stroke, life-threatening major bleed, acute kidney injury, moderate to moderately severe paravalvular leak, or none of the above. Each site will be categorized as having results that are better than expected, as expected, or worse than expected.

"TAVR technology is changing rapidly, but more importantly the patients that we are operating on are changing rapidly," said Dr. Desai. "We are performing TAVR on younger and healthier patients, so we needed to develop a risk model that not only would be predictive of outcomes in 2020, but also would adapt and evolve to what things might look like in 2025 and beyond."

The methodology for the risk model is expected to be published this spring.



For more information on the state of TAVR, see page 14.

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The Society of Thoracic Surgeons

TAVR Surges Past Surgery in US AVR Treatment Volume

Nine years after the US Food and Drug Administration (FDA) approved the first transcatheter aortic valve replacement (TAVR) device, TAVR therapy volume is skyrocketing and patient outcomes continue to improve.

TAVR case volumes have risen steadily since 2011 and, in 2019, the state-of-the-art therapy exceeded all forms of surgical aortic valve replacement (SAVR), according to a report using data from the STS/American College of Cardiology (ACC) Transcatheter Valve Therapy (TVT) Registry.

"This report summarizes massive amounts of data about the US TAVR experience and includes 276,316 patients treated from 2011 to 2019," said John D. Carroll, MD, chair of the STS/ACC TVT Registry Steering Committee and lead author of the report. "In addition to volume, the data document a substantial improvement in quality of care over the last 9 years."

Expanded Patient Access

TAVR now is a treatment option for most aortic stenosis patients. In 2011, it was indicated only for those at extreme risk for surgery. In 2012, high-risk patients were added, followed by intermediate-risk patients (2016), and low-risk patients (2019). These risk categories importantly have helped shape clinical trial design and regulatory approval, as well as real-world practice.

"The TVT Registry allows us to see major trends occurring in the realworld TAVR patient population." John D. Carroll, MD

The report, published in *The Annals of Thoracic Surgery* and the ACC journal, showed that from 2011 to 2018, extreme- and high-risk patients remained the largest group undergoing TAVR, but in 2019, intermediaterisk was the leading patient group. It's worth noting that in the first year of FDA approval for low-risk patients, the TAVR population included 8,395 low-risk patients—a likely contributor to SAVR case volume falling behind TAVR.

When the FDA first approved use in low-risk patients, experts widely predicted that it would





pave the way for an even more rapid TAVR expansion, with the transcatheter-based therapy replacing a significant portion of SAVR procedures in the years to come.

Nonetheless, the number of people undergoing any form of AVR—transcatheter or surgical—grew by 94% from 2012 to 2019. This likely is due to greater disease awareness and an aging population, which results in more people being treated.

TAVR Programs Offered in All 50 States

In response to the demand, more and more hospitals are launching TAVR programs. In 2020, Wyoming saw its first site open, extending TAVR's reach to all 50 states and 730 participating centers. The number of TAVR procedures performed per site varies, but as the number of sites has increased, so has the total annual volume. In 2019, most centers performed an average of 84 TAVR procedures, while 161 sites each performed fewer than 50 cases.

"The TVT Registry allows us to see major trends occurring in the real-world TAVR patient population, including a rapid growth in both the number of hospital sites performing TAVR and case volume as we treat a broader spectrum of patients," said Dr. Carroll.

Voluntary public reporting for TAVR programs will be available in fall 2021. See page 13 for more information.



The data on outcomes after TAVR show a substantial improvement in quality of care over the last 9 years.



▶ The state of TAVR report documented a clear shift in vascular access.

Outcomes Improve Over Time

While SAVR traditionally has been the standard treatment for severe aortic stenosis, TAVR has emerged as a strong alternative treatment, providing promising patient outcomes.

Since the early days, there has been steady and dramatic improvement in TAVR mortality. In 2012, in-hospital mortality was 5.7%, falling to 1.3% in 2019. The 30-day mortality also decreased—from 7.5% to 2.5% during that same period.

Hospital stays for patients also improved from 7 days to 2 days. More specifically, lowrisk patients had a median length of stay in 2019 of only 1 day—an overnight hospital stay with some patients discharged the same day. In the early TAVR period, most patients were discharged to another care facility; however in 2019, 90.3% of patients were discharged home, while only 6.6% were discharged to a rehabilitation or extended care facility and 2.5% to a nursing home.

"The transformation of care for patients with aortic stenosis has been dramatic," said Dr. Carroll.

Two areas in which experts said they want to see improvement are stroke rates and the 30-day pacemaker implantation rate. Although the stroke rates showed a small, downward trend, the in-hospital stroke rate was 1.6% and the 30-day rate was 2.3%. The 30-day pacemaker implantation rate remained relatively unchanged since 2011. The early rate was 10.9%, it peaked in 2015 at 15.1%, and then slowly declined to 10.8% in 2019.

Patient-Reported Quality of Life

The TVT Registry has been innovative in gathering patient-reported data on quality of life, using a questionnaire tool before treatment. The survey provides a measure of the patient's perception of his/her health status, including symptoms, impact on physical and social function, and quality of life.

In 2018—the most recent year with 1-year patient-reported outcomes data—80.7% of all patients who were alive 1 year after TAVR, reported a good quality of life. In addition, a subgroup analysis revealed that a favorable outcome was achieved in 77.7% of high-risk patients, 83.6% of intermediate-risk, and 85.8% of low-risk patients.

"The routine use of patient-reported health status using the questionnaire has allowed this new metric to emerge," said Dr. Carroll. "A better understanding of a patient's baseline status and the impact of their aortic valve disease is possible. It also provides an assessment of whether the intervention has caused an improvement in the patient's life."

Racial Disparities in TAVR

Racial minorities are underrepresented among patients undergoing TAVR in the US, according to the report. For all years, TAVR patients were predominantly white. While the number of black patients receiving TAVR increased from 504 during the early TAVR period to 2,948 in 2019, only 4% of all patients receiving TAVR were black—this has not changed in the past 9+ years.

Possible contributing factors include access to primary care, referral for further testing, and bias at a treatment level, as well as insurance, socioeconomic factors, cultural beliefs, and patient preferences. Researchers said that they expect these gaps to stimulate further research.

"The TVT Registry can monitor whether there are unexpected differences among people of different races, ethnic groups, and rural residency," said Dr. Carroll. "While it cannot ascertain causes, the Registry can assess whether there are changes associated with variables such as expansion in the number of sites, campaigns to alter disease awareness, and other mechanisms to reduce disparities in care."

COVID-19 Challenge

And finally, the COVID-19 pandemic has had an impact on all programs, but especially on those performing TAVR with urgent clinical indications.

The report stated that the coronavirus "impaired submission of data" from some sites in 2020. As a result, researchers expect to see major decreases in the number of patients being treated. The Centers for Medicare & Medicaid Services has already announced that it will not hold hospitals and physicians responsible for meeting volume requirements mandated for reimbursement for a range of procedures, including TAVR.

According to the researchers, "further growth is expected with recovery of the health care system" after COVID-19.

The report, "STS-ACC TVT Registry of Transcatheter Aortic Valve Replacement," is available at **annalsthoracicsurgery.org.** THE THORACIC SURGERY FOUNDATION

New TSF Award Honors Pioneering Surgeon, STS Past President

Who invented the modified Bentall procedure?

"I asked my fellows that question the other day and no one knew the answer," said TSF President Joseph E. Bavaria, MD, from Penn Medicine in Philadelphia. "They do now."

STS Past President and former Historian Nicholas T. Kouchoukos, MD, has had a long, remarkable career in cardiothoracic surgery, and among his greatest achievements was the development of the modified Bentall procedure.

"Everyone who performs aortic root surgery uses a modified Bentall. It has become a gold standard," said Dr. Bavaria. "This operation has saved a lot of lives and continues to—I've done three in the last 48 hours. Dr. Kouchoukos's contributions are mammoth and have changed the entire landscape of aortic surgery."

The modified Bentall procedure uses a composite aortic graft to replace the ascending aorta and aortic valve. Coronary artery circulation is maintained by removing full-thickness "buttons," making it easier to implant the coronary arteries into openings made in the graft. The buttons are then attached to the graft.

"Dr. Kouchoukos's contributions are mammoth and have changed the entire landscape of aortic surgery." Joseph E. Bavaria, MD

According to Dr. Bavaria, the "button" idea came from a different operation—the arterial switch, which also uses coronary artery buttons. "Dr. Kouchoukos was so innovative. He took part of one operation and applied it to a totally different procedure. Everything changed after that."

'See One, Do One, Teach One' Era

As a medical student, Dr. Kouchoukos worked in the laboratory at Washington University in St. Louis, where renowned surgeons Thomas B. Ferguson, MD, and Charles L. Roper, MD, encouraged him to pursue a career in cardiothoracic surgery.



▶ Nicholas Kouchoukos, MD, now retired, had a long, remarkable career that included the performance of more than 13,000 heart procedures.

In the late 1960s, after completing a general surgery residency in St. Louis, Dr. Kouchoukos went on to the University of Alabama in Birmingham, where he completed his training in cardiothoracic surgery under the direction of the legendary John W. Kirklin, MD, a pioneer in the development the heart-lung machine and open heart surgery.

Despite increased risks associated with certain procedures, there were multiple opportunities to develop new techniques and protocols to treat patients with congenital and acquired heart problems and improve outcomes. The groundbreaking surgeons of what proved to be the "golden age" of cardiac surgery—Dr. Kouchoukos included made revolutionary decisions and important contributions that dramatically advanced the specialty.

"It was the 'see one, do one, teach one era," said TSF Vice President Keith S. Naunheim, MD, from Saint Louis University in Missouri. "Surgeons like Dr. Kouchoukos would have these ideas, these epiphanies, and back then, they immediately could act on those inspirations and forge a new procedure. They were both innovative and fearless. That's how surgery evolved in the earlier era."

A Distinguished Career Recognized

During his career, Dr. Kouchoukos performed more than 13,000 cardiac and major vascular procedures and strongly advocated for training the next generation of cardiothoracic surgeons. He is a co-author of the most recent editions of *Cardiac Surgery*, a textbook on adult and pediatric cardiothoracic surgery that is widely used in cardiovascular surgical centers around the world.

In recognition of his dedication to the specialty and its future, Dr. Kouchoukos recently was honored with a fellowship award in his name— The Kouchoukos Award.

This fellowship highlights Dr. Kouchoukos's commitment to refining the practice of cardiothoracic surgery, teaching innovative surgical skills, and advancing the careers of bright and motivated young surgeons, which is essential for the specialty to advance and thrive in the future.

"I am honored and humbled to have this fellowship established in my name, and I am indebted to the Foundation and to Drs. Bavaria and Naunheim who spearheaded this effort," said Dr. Kouchoukos. "The award will provide surgeons who have an interest in aortic surgery an extraordinary opportunity to visit and learn from recognized experts in the field."

The Kouchoukos Award will provide cardiothoracic surgeons or residents who are committed to the treatment of thoracic aortic disease with up to \$10,000 for travel to another institution with the purpose of observing experienced aortic surgeons and learning new techniques in order to enhance patient care.

Surgeons who want to be "great vessel specialists" should take a close look at this award, advises Dr. Naunheim: "Aortic surgery is changing but not disappearing, and it will require surgical expertise and advanced technical ability to devise safer operations. Through this fellowship, young surgeons can stand on the shoulders of these giants who are nationally and internationally recognized and learn techniques that are essentially refinements of practices that Dr. Kouchoukos started more than 30 years ago."

Applications for The Kouchoukos Award are expected to open in July 2021. In the meantime, fundraising to build the fellowship fund is under way. For more information on donating to this award, visit **thoracicsurgeryfoundation.org**.



TSF Hosts First Virtual Run to Coincide with STS 2021

Working out at the gym may not be an option these days, but don't sweat it!

The Thoracic Surgery Foundation—the Society's charitable arm is offering a way to get energized about STS 2021 while also raising money for cardiothoracic surgery research and education.

In this time of social distancing, the TSF Virtual 5K Fun Run & Walk provides an opportunity to stay active, engage with the cardiothoracic surgery community, and take part in some healthy competition.

This virtual race gives runners and walkers the flexibility to participate:

- Any day and time from January 22 to January 31
- At any pace
- In any location—in the house on a treadmill or outside in the neighborhood

The challenge can be completed solo or as part of a team, which can include a group of friends, family members, hospital employees, STS exhibitors, corporate staff, patients, or even STS staff.

Times will be based on the honor system and will be uploaded and compared with those of other participants. Race results will be shared on a leaderboard during STS 2021 and on social media, with special recognition given to high achievers. Don't forget to post photos on social media using the following hashtags: **#STS2021** and **#TSF5K**.

The cost is \$50 (a portion is tax deductible), and each participant will receive a special TSF Fun Run & Walk t-shirt, which will be shipped to those who live in the United States or Canada. All proceeds will support the Foundation's cardiothoracic surgery research and education programs. Sign up at **runsignup.com/TSF5K**.

If you are unable to participate in the 5K, but would still like to support TSF, visit **thoracicsurgeryfoundation.org/donate**.

WASHINGTON SCENE

"We're facing one of the worst public health crises in our nation's history, and it's made the work that our cardiothoracic surgeons and all of our frontline health care workers do that much more important."

US Rep. Diana DeGette

Medicare Payment Cuts Blocked; STS Turns Up Heat on Other Issues

In a major win for cardiothoracic surgeons and their patients, significant Medicare reimbursement cuts set to take effect on January 1 were halted.

Congress approved a massive omnibus spending bill in late December that prevented the Centers for Medicare & Medicaid Services (CMS) from implementing cuts that were part of the 2021 Final Rule for the Medicare Physician Fee Schedule.

The legislation included language that delays an add-on billing code for office Evaluation and Management (E/M) services and increases Medicare payments for all of medicine by 3.75%. Combined, these two actions negated nearly the entire 8% in cuts that were expected for cardiothoracic surgeons.

The Society, in collaboration with the Surgical Care Coalition, has been involved in comprehensive advocacy efforts to stop the reduction in Medicare reimbursement payments. In addition, the hard work and steadfast efforts of STS members, especially those who reached out to their Congressional representatives and shared their stories, helped lawmakers realize that cutting physician pay in the middle of a public health emergency was absurd.

The 2021 spending package also included "wins" that buoyed other important STS advocacy priorities: the arbitrary cap on Medicare funding for graduate medical education (GME) was removed and 1,000 new Medicare-supported GME positions at rural and urban teaching hospitals were added (ending a 25-year freeze); current levels of funding for the Agency for Healthcare Research and Quality were sustained; and funding for the National Institutes of Health and the Centers for Disease Control and Prevention was increased.

STS will continue working to fully understand the impact of this legislation and help ensure appropriate implementation, while also pushing forward to resolve underlying issues in physician Medicare reimbursement.

21st Century Cures 2.0

Work continues on the next iteration of the landmark 21st Century Cures Act.

Reps. Diana DeGette (D-CO) and Fred Upton (R-MI) released a concept paper this past spring that includes COVID-19 surveillance and testing capabilities, educational programs for at-home caregivers, patient health literacy and access to health information, and diversity in clinical trials.

Cures 2.0 also will explore ways to safely and efficiently modernize CMS coverage and care delivery and better utilize real-world data and evidence in the US Food and Drug Administration (FDA)-approval processes.

The Society has urged Reps. DeGette and Upton to include guaranteed registry access to Medicare claims data in Cures 2.0. This would allow registries such as the STS National Database to facilitate medical research and quality improvement initiatives, as well as support patients and their families as they choose the right treatment options. Similar discussions have been under way with Sens. Lamar Alexander (R-TN) and Patty Murray (D-WA), who are leading the Cures revamp in the Senate.

Legislator of the Year

Last fall, Rep. DeGette was named Legislator of the Year by STS in recognition of her strong leadership and support of health care policies that impact cardiothoracic surgeons and their patients.

Rep. DeGette, who has served in the US House of Representatives since 1997, consistently has been a champion of STS advocacy priorities such as the Patient-Centered Outcomes Research Institute and e-cigarette and vaping regulations. She also supported the repeal of the Sustainable Growth Rate and voted in favor of the Medicare Access and CHIP Reauthorization Act of 2015.

"We're facing one of the worst public health crises in our nation's history, and it's made the work that our cardiothoracic surgeons and all of our frontline health care workers do that much more important. So, thank you to them and everyone at STS for your tireless efforts to help us improve our nation's health care system and modernize the way we care for patients" she said.

The STS Legislator of the Year Award acknowledges a member of Congress who has made sustained and/or extraordinary efforts in promoting issues of importance to cardiothoracic surgeons and their patients through legislation, funding, or other outreach to policymakers.

Coverage with Evidence Development

In addition to fighting Medicare cuts and advancing Cures 2.0, a key priority for the Society in 2021 is preserving coverage with evidence development (CED) as a Medicare pathway.

CMS policy allows Medicare coverage of an innovative treatment or technology while simultaneously collecting data through a clinical trial or registry on the efficacy and safety of the intervention in real-world populations; however, the agency recently started stripping CED from national coverage decisions (NCDs).

For example, CMS proposed to change the NCD for mitral valve transcatheter edge-toedge repair (TEER), previously known as transcatheter mitral valve repair (TMVR). While the proposed NCD offers expanded coverage for patients with functional mitral regurgitation (FMR), it does not include a CED requirement for TEER in patients with degenerative mitral regurgitation (DMR) and FMR. This means that participation in a registry such as the STS/ ACC TVT Registry would not be required as a condition of coverage.

In addition, both the FDA and CMS would be deprived of data on how TEER performs in real-world populations, which could have serious implications for patient safety and cause the FDA to revert back to more rigorous pre-market requirements for manufacturers, thereby delaying beneficiary access to innovative technology.

Medicare Coverage of Innovative Technology

The Society also will focus in 2021 on a CMS proposal to streamline the coverage pathway for FDA-approved "breakthrough medical devices." Under the proposed rule— Medicare Coverage of Innovative Technology (MCIT)—devices that the FDA deems as high-impact would be covered immediately for the first 4 years, rather than waiting for a coverage decision.

The 4-year window is intended for device manufacturers to generate clinical and real-world evidence on health outcomes among the Medicare population.

STS supports bringing innovative technologies to market faster, but in submitted comments to CMS, the Society stated that a less-rigorous evidence-based coverage process could result in premature coverage of unproven devices. Other concerns included the need for careful monitoring and the possibility that patients' access to competitive innovations would be limited.



New 8 in 8 Videos Delve Into Advocacy Topics

The Society has added five new short videos to its 8 in 8 Series, each focusing on an advocacy topic.

These microlearning opportunities offer quick and clear explanations of complex topics. A subject-matter expert covers one topic using eight slides in approximately 8 minutes.

The most recent 8 in 8 videos feature:

Payment Bundling: BPCI Advanced

Keith A. Horvath, MD Member, STS Workforce on Health Policy, Reform, and Advocacy

STS-PAC: Advocating for Your Specialty

and Your Patients Keith S. Naunheim, MD STS Past President; Chair, STS-PAC Board of Advisors

Surgical Specialties at Risk: How Medicare Cuts

to Surgery will Affect You and Your Patients Stephen J. Lahey, MD Chair, STS Workforce on Health Policy, Reform, and Advocacy

Grassroots Advocacy: How You Can Get Involved

Seth Wolf, MS University of Vermont Larner College of Medicine in Burlington

Coming Soon!

The Missing Data: Why Medicare Claims Data Matters to You Alan M. Speir, MD

Chair, STS Council on Health Policy and Relationships

New videos are added to the series regularly. The collection, which includes critical care and general thoracic topics, is available at sts.org/8in8 and on the STS YouTube channel.

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Upcoming STS Educational Events

▶ **STS 2021** Virtual — Jan. 29–31, 2021

Coding Workshop Virtual — Feb. 12–13, 2021

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Thank You!

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