

STS | News



“The program planning team has hit the ball out of the park with STS 2022 offerings. ...This will be a tremendous meeting.”

Sean C. Grondin, MD, MPH, FRCSC



► A dynamic and diverse program is in store for STS 2022 registrants, whether joining in person or virtually.

STS 2022 Program Makes It Worth the Wait to Be ‘Together Again’

Top-quality research, groundbreaking procedures, expert discussion, networking, and wellness activities are abundant in the program for the Society’s 58th Annual Meeting, Saturday through Monday, January 29–31, in Miami Beach, Florida.

The theme of STS 2022 is “Together Again,” and it will include both an in-person meeting and a virtual option for attendees to tune in from anywhere in the world. With 45+ parallel sessions, 12 “Ask the Experts” sessions, four hands-on courses, four 360° “In the OR with...” sessions, eight Deep Dive presentations, featured lectures, more than 200 electronic posters, and more, STS 2022 is a don’t-miss event for cardiothoracic surgical professionals of every discipline and at every career level.

“The program planning team has hit the ball out of the park with STS 2022 offerings,” said STS President Sean C. Grondin, MD, MPH, FRCSC. “The adult cardiac, general thoracic, congenital, and critical care presentations are top-shelf. This will be a tremendous meeting.”

Adult Cardiac Offerings Highlight Trials and Techniques

Trending in the adult cardiac program are observations from major trials and registries, and a session devoted to them will deliver key points for attendees, said Tom C. Nguyen, MD, a member of the Annual Meeting Program Task Force.

“We decided to break the usual cadence a bit by having four abstracts within each session, mixed in with preludes and discussions,” said Dr. Nguyen. “A ‘what’s the latest’ session will include topics of interest to all cardiac surgeons, and during our ‘controversies’ session we’re going to start off with a discussion about what we know and what we don’t know about our most common operation, coronary artery bypass grafting.”

A “2025 forecast” will explore what’s in store for adult cardiac surgery in the next few years. “We’ll also have a video session featuring top-scoring productions,” Dr. Nguyen continued.



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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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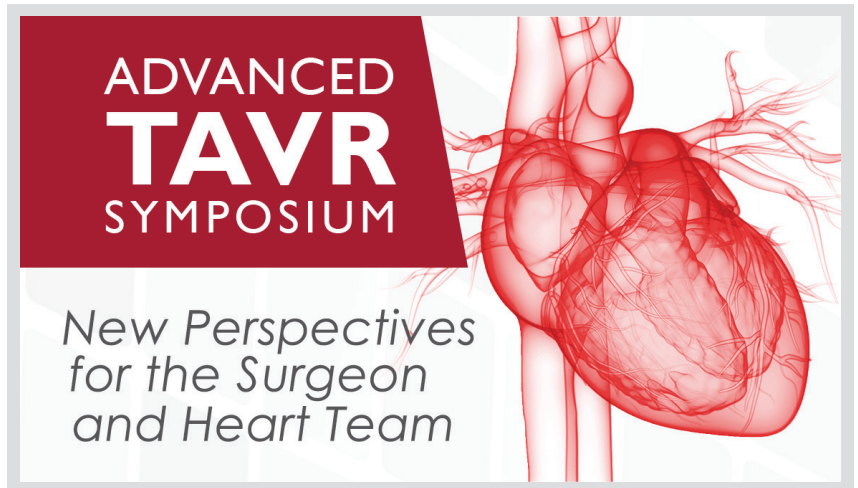
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TAVR Symposium Explores Expert Techniques, Challenging Perspectives

More than 300 registrants and faculty participated in the recent Advanced TAVR Symposium: New Perspectives for the Surgeon and Heart Team, where they joined in-depth discussions on classic and complex topics in the areas of transcatheter aortic valve replacement (TAVR).

A “TAVR in Low-Risk Patients” session explored the landscape of TAVR, highlighting the case of a 65-year-old patient with tricuspid aortic stenosis. Presenters shared insights from the perspective of both a surgeon and an interventional cardiologist, and in the context of a new guideline from the American Heart Association and American College of Cardiology.

During the “Valve-in-Valve TAVR” session, attendees heard the latest clinical data on valve-in-valve procedures, were guided stepwise through the procedure using the BASILICA technique, explored findings on second-valve (TAV-in-TAV) implantation, and learned approaches to balloon valve fracturing.

“Controversies in Bicuspid TAVR” addressed guideline recommendations and bicuspid procedure classifications, compared TAVR and surgery for all bicuspid, and examined the merits of a randomized control study. During the “Alternative Access for Surgeons” session, presenters weighed the merits of transcarotid, percutaneous axillary, transinnominate, and transcaval TAVR and discussed which routes are preferable in different patients.

Identifying TAVR explant as a new specialty for cardiac surgery, moderators and faculty assessed current data on explant procedures, demonstrated techniques for bicuspid aortic valve, self-expanding valve, and sutureless explantation. They also addressed the question, “Would TAVR explant change your point of view on TAVR in low-risk patients?”

In a concluding session on optimizing TAVR, faculty covered topics such as commissural alignment to replicate surgical aortic valve replacement-like results, the necessity of cerebral embolic protection devices, the advent of TAVR for aortic insufficiency, and new techniques and devices on the horizon.

Each session concluded with in-depth live discussions and Q&A, during which attendees, presenters, and panelists shared perspectives, addressed questions, and debated strategies to address professional challenges.

The digital archive of the TAVR Symposium—now available for purchase—includes unlimited access to course materials until September 20, 2022. More details are available at [STS.org/TAVR](https://www.sts.org/TAVR). ■

Member News



Higgins Appointed President at Brigham and Women's

Robert S.D. Higgins, MD, MSHA, has been named president of Brigham and Women's Hospital in Boston, Massachusetts, and executive vice president at Mass General Brigham. In these new roles, which are effective in December 2021, Dr. Higgins will be responsible for faculty and academic leadership appointments and stewardship of the research programs. He previously was surgeon-in-chief at The Johns Hopkins Hospital in Baltimore, Maryland, as well as director of the Department of Surgery and senior associate dean for diversity and inclusion for The Johns Hopkins University School of Medicine. An STS member since 1997, Dr. Higgins is a Past President and currently serves on the STS Workforce on Career Development and the Nominating Committee.



Abbas Takes Reins of Brown Thoracic Surgery

Abbas El-Sayed Abbas, MD, is the new chief of thoracic surgery at Brown Surgical Associates in Providence, Rhode Island. He also will serve as chief of thoracic surgery at all Lifespan hospitals—the health system associated with The Warren Alpert Medical School of Brown University—and chief of thoracic oncology at the Lifespan Cancer Institute. Previously, Dr. Abbas was system thoracic surgeon-in-chief and system director of the Foregut Disease Thoracic Oncology Programs at Temple University Health System in Philadelphia, Pennsylvania, and chief of thoracic surgery at Fox Chase Comprehensive Cancer Center. He has been an STS member since 2009.



Sádaba Joins STS Board as International Director

J. Rafael Sádaba, MD, PhD, FRCS(C-Th), is the new International Director on the STS Board of Directors. He fills the vacancy left by Domenico Pagano, MD, FRCS(C-Th), FETSC. Dr. Sádaba is the associate clinical professor at the University of Navarra in Pamplona, Spain, and head of Cardiovascular Research and Innovation at the Navarra Hospital Complex. He also serves as the Secretary General for the European Association for Cardio-Thoracic Surgery. Dr. Sádaba has been an STS member since 2011.



Shekar Leads CT Surgery at Lahey

Prem S. Shekar, MD, MBA, has joined Lahey Hospital & Medical Center in Burlington, Massachusetts, as chair of cardiac and thoracic surgery. Prior to joining Lahey, he was chief of the Division of Cardiac Surgery and surgical director of Brigham and Women's Hospital Heart & Vascular Center in Boston, Massachusetts, as well as associate professor of surgery at Harvard Medical School. Dr. Shekar has been an STS member since 2008.



Killinger Named Chief Medical Officer in Houston

William A. Killinger, MD, now serves as the chief medical officer for HCA Houston Healthcare Clear Lake and HCA Houston Healthcare Mainland in Texas. Most recently, he was chief medical officer in the HCA Healthcare West Florida Division at the Medical Center of Trinity in Florida. Dr. Killinger has been an STS member since 2006.



Sai Sudhakar Is New Chief at UConn

C.B. Sai Sudhakar, MD, has been appointed chief of cardiothoracic surgery at UConn Health in Farmington, Connecticut. Most recently, he was a cardiothoracic surgeon at Largo Medical Center, which is part of the HCA Healthcare West Florida Division. Dr. Sai Sudhakar has been an STS member since 2006.



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



Selecting Effective Leaders

Sean C. Grondin, MD, MPH, FRCSC

We recognize that organizations should reflect not only the current membership but also the future membership.

Since assuming the role of STS President, one question that I have been asked frequently is “How is a member chosen for a volunteer STS leadership position?”

In this article, I would like to provide answers to that question by describing the current selection processes for various STS leadership positions. I also will highlight some of the initiatives being undertaken to review and, where appropriate, amend existing processes for filling leadership roles.

Officers and Board Members

Each year at the annual STS Business Meeting, the Chair of the Nominating Committee presents a slate of Officers and Board members nominated to fill vacant positions for member approval. Upon approval, an STS Officer (e.g., Secretary, Treasurer, Second Vice President) is appointed to a 1-year term; a Director-at-Large is typically appointed for a 3-year term, with eligibility for a 3-year renewal (for a potential total of 6 years).

By way of background, the STS Nominating Committee is composed of the five most recent STS Past Presidents and the current STS President, who serves as an ex-officio, non-voting member. Through its six members' diverse experiences and broad knowledge accumulated over many years of STS service and leadership, the Committee is tasked with nominations to the STS Board, as well as the yearly nomination of the STS Treasurer, Secretary, Second Vice President, First Vice President (President-Elect), and President. All Committee members are invested fully in nominating an effective, representative STS leadership team best able to represent our cardiothoracic surgeon community and our patients.

With this as a foundational goal, the Committee takes into consideration many criteria when making nominations for Board and Officer positions such as the relevant leadership experience of nominees within and outside STS in areas such as education, advocacy and governmental affairs, quality, database/registry expertise, and global outreach. In addition, broad expertise in clinical areas relevant to STS such as structural heart, transplant, esophageal and mediastinal surgery, robotics, aortic disease, and thoracic oncology, as well as experience in novel surgical techniques, are considered in the selection process.

While the slate of candidates is prepared by the Nominating Committee based on criteria previously outlined, the nominees also are

vetted through the lens of diversity, which includes but is not limited to gender, ethnicity, practice type (private practice vs. academic setting), discipline (cardiac, general thoracic, and congenital), and geography.

Workforce and Committee Members

The selection of individuals for STS leadership roles, including Standing Committee and Workforce members/Chairs and Council Chairs, is voted on each December by the Executive Committee based on a slate developed by the STS First Vice President, with significant input from the STS President, Secretary, and senior STS Staff. Per STS Bylaws, Workforce members are appointed to an initial 3-year term and are eligible for a 3-year renewal. To maintain efficient functionality, most workforces have 10-20 members and typically 1-3 vacant positions are open for appointment each year.

To appoint new Standing Committee or Workforce members, input is sought from the responsible Standing Committee, Workforce, and/or Council Chair(s). Nominations also may be received from STS members at large, as well as through the STS Self-Nomination Process. On average, a total of 25 nominations for consideration are received for each open Standing Committee or Workforce position.

Improve the Appointment Processes

Significant efforts are under way to revisit our internal selection processes to help ensure that we are identifying and utilizing the full array of expertise and experience to provide effective leadership today and in the future.

1 Presidential Task Force Appointed – A Presidential Task Force led by Drs. Doug Mathisen and Richard Prager and made up of a diverse group of leaders has been created to review the current nomination processes and policies. As well, this group is reviewing the current STS governance structure, including Workforce and Council composition, to ensure appropriate alignment of their respective activities to streamline efficiency, minimize overlap of responsibilities, and improve reporting. Recommendations from this Presidential Task Force are due to be presented to the STS Board in November.

2 Expanding the candidate pool of cardiothoracic surgeon leaders – STS is reviewing existing resources and developing new STS tools to help identify individuals with specific interests or skills to fill specific leadership roles. For example, creating a list of physicians who self-nominated in the past

but were not appointed to a Workforce could potentially serve as a valuable resource for Workforce Chairs in selecting members to populate their respective task forces in the future. Also, the Women in Thoracic Surgery (WTS) “Find an Expert” resource designed to enhance the process of identifying qualified women for STS leadership positions has been proposed and is being reviewed by STS leadership.

3 Reviewing individual STS surgeon leader involvement and limiting participation where appropriate are very practical ways to enhance the breadth of member participation and expand leadership opportunities. A detailed review of Standing Committee, Workforce, and Task Force membership is under way.

4 Ensuring the diversity of STS leaders – STS leadership is committed to all forms of diversity as a means of enhancing the organization's ability to represent the profession more fully. As such, efforts are under way to obtain additional STS membership data on diversity in areas related to underrepresented minorities and gender diversity as part of a process to establish “where we are now” and “where and how we can improve.” Enhancing engagement with stakeholder organizations such as WTS and the Association of Black Cardiovascular and Thoracic Surgeons, as well as seeking ongoing assistance from the STS Workforce on Diversity and Inclusion to help guide decisions on relevant issues also is being prioritized to help ensure that a variety of viewpoints and experiences are represented.

Through these initiatives, our objective is to evaluate these procedures in a transparent manner with a goal towards improving our longstanding approach of selecting STS leaders. We recognize that organizations should reflect not only the current membership but also the future membership, and that proportional representation of groups does not automatically infer equitable representation.

STS is very thankful for the members who have served and are currently dedicating their valuable time and expertise as volunteer leaders to support our activities.

Being an active member and volunteer leader of STS has been among the most rewarding aspects of my professional life. I would strongly encourage anyone interested in exploring STS leadership opportunities to use the self-nomination process or seek mentorship from an STS leader in your area of interest or expertise. ■

STS 2022 Program Makes It Worth the Wait to Be ‘Together Again’

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Deserving of attention is a presentation addressing why cardiac surgeons should be involved with acute pulmonary emboli, as well as an aortic session that focuses on both the ascending and descending aorta. “This one will be accompanied by a talk called ‘A Brief Walk in Time: A History of Aortic Surgery,’” he added.

Cancer Breakthroughs, Quality, Robots Shine in General Thoracic Surgery

“Our abstract session on novel technology in non-small cell lung cancer looks at new techniques that aren’t part of current care,” said Jessica S. Donington, MD, MSCR, a member of the Program Task Force. These applications include artificial intelligence applications for predicting malignancy and nodal metastasis during resection, virtual reality planning of segmentectomy, transbronchial microwave ablation of lung nodules in a hybrid operating room, and CT radiomics and serum histoplasmosis testing for improving diagnosis.

In the arena of bronchoscopy, the “EM, Robots, Ablation” session will explore robotic and electromagnetic navigation, ablation, and other advances in therapy.

“We also have a very good group of esophageal cancer papers, looking at everything from new neoadjuvant therapies to robotic esophagectomy,” Dr. Donington said.

Additional lung cancer sessions will address clinical care, quality issues, and access to care and disparities within the health system—a prevailing theme in this year’s abstracts, said Dr. Donington. The J. Maxwell Chamberlain Memorial Paper in the general thoracic category will use a statewide collaborative to identify racial differences in lung cancer surgery. “The authors found pretty significant differences in terms of staging and workup and the care delivered,” she said.

A joint session, “Regional Quality Collaboratives,” will explore metrics and perspectives from faculty at the University of Michigan in Ann Arbor, as well as from the Northern New England Cardiovascular Disease Study Group and the Canadian Association of Thoracic Surgeons.

Congenital Sessions Employ Hard Data, Expert Demonstrations

Abstract sessions in the congenital realm will delve into an abundance of neonatal topics, from tackling surgical challenges to exploring the pathway to surgical innovation, said S. Adil Husain, MD, Vice Chair of the Program Task Force. The “It’s Not in the Books ... So How Do They Do It?” session will demonstrate an array of techniques, including cone repair for Ebstein anomaly and prophylactic commissural resuspension during unroofing procedures for anomalous coronary arteries.

“We also have really nice basic science abstracts, and we’re sprinkling them in with two invited talks—one that looks at stem cell use within the single-ventricle population and one that demonstrates how to establish a basic science lab and use it as a transition into creating novel techniques within the OR,” Dr. Husain said. “A session on the aortic valve and the left ventricular outflow tract covers anatomic regions of congenital heart surgery that continue to have quite a bit of controversy.”

Another session will examine advancements in pediatric heart failure and transplantation, addressing issues such as the impact of persistent renal dysfunction and high-panel reactive antibody, transplantation in pediatric patients with heterotaxy syndrome, and re-intervention for superior vena cava obstruction, culminating in an invited talk on implantation and outcomes for systemic ventricular assist devices.

“There’s been a lot of push within the congenital population to look at the concept of program regionalization and how data and outcomes may be employed as tools to define metrics and approaches,” said Dr. Husain.

Accordingly, a data-centric session—featuring the congenital Clark paper—includes presentations that explore risk stratification for adults and mortality predictive models utilizing the STS National Database.

Transplantation, MCS Share Spotlight with Critical Care

To help ensure that attendees have a rich experience with the latest devices—and that they can attend high-priority concurrent sessions without missing others of interest—STS 2022 will include cardiothoracic transplantation assist devices within the “critical care” category. Ahmet Kilic, MD, from the Program Task Force, oversaw programming for the mechanical circulatory support (MCS), critical care, and transplant arenas.

“Two sessions are dedicated to critical care devices, including for MCS, lung transplant, and heart transplant,” Dr. Kilic explained. “One focuses on identifying issues while you’re on circuit. We’re going to talk about topics like left ventricular dilatation pulmonary edema, the use of veno-arterial ECMO for pulmonary embolism, recalcitrant hypoxia, and harlequin syndrome. We expect a lively discussion on the key problems surgeons are having.”

The next session will be “Same Toys, New Indications,” and it explores novel applications such as axillary access with a balloon pump and flow pumps to get patients safely to transplantation. “In addition, we’ll be talking about a total artificial heart, as well as the unmet needs with current left ventricular assist devices that are already out there,” said Dr. Kilic.

“Our abstract session on novel technology in non-small cell lung cancer looks at a lot of new techniques that aren’t part of current care.”

Jessica S. Donington, MD, MSCR

For lung transplantation, experts will examine the euthermia approach with ex vivo donors. Still more must-attend sessions will address the impact of COVID positivity in recipients and donors, a data-driven analysis on how weekends, holidays, and thoracic conferences impact the acceptance of heart transplant offers, as well as transplant controversies in the ICU and extended-criteria donors for heart/lung transplantation in the modern era.

Quality, Wellness Sessions Help Surgeons Be Their Best Selves

Elizabeth A. David, MD, MAS, a member of the Program Task Force, identified a great variety of topics in the areas of education, wellness, and quality. During a wellness session, an expert in physician resilience will address issues that surgeons may bring home to their families. “Then we have invited panelists who represent a diverse array of surgical families, such as dual-physician and dual-surgeon families, single parents, those who had children at different phases of their careers, and those with children who needed congenital cardiac surgery,” Dr. David said.

A session on global health and cardiothoracic surgery will feature a diverse international panel, Dr. David continued, and it will address topics such as how to craft a career in global cardiothoracic surgery, how gender disparities limit capacity building, different models of providing care, complementing a career using databases, and the status of global health disparities.

For surgeons looking to enhance their publishing prowess, a panel of statisticians and editorial board members will lead an “*Annals Academy*” session aiming to demystify artificial intelligence and machine learning. “They’ll explain how to use these methodologies—and appropriately write them up,” said Dr. David. “There are fewer issues with manuscripts submitted using these methods, so this should be a very helpful session.”

A session on cultural competence in surgical leadership will explore strategies to build leadership and inclusive cultures in health care systems. Another will be geared toward the concept of “psychological safety”—a person’s level of willingness to speak up in a group setting.

Abstracts in quality initiatives are a high-scoring mix of adult cardiac and thoracic topics, with several related to emergency departments, Dr. David said. “And there’s a session on the Negotiation Toolkit, with topics such as rules of engagement, understanding the landscape in which you are negotiating, showing your value and what you need to bring to the table, and the nuts and bolts of negotiation lessons from the business world.”



► The STS 58th Annual Meeting will bring the cardiothoracic surgery specialty together again in Miami Beach, Florida.

In a moderated expert discussion, attendees will be presented with sample scenarios of burnout-inducing issues in surgeons, said Dr. David. “I’ll give you an example: ‘I’m feeling growing resentment toward patients who choose not to get vaccinated. I feel they imperil the lives of other patients, health care workers, and their families. I fear that my compassion is beginning to wane, and I weigh the sheer magnitude of resources that have been consumed.’”

360° and Deep Dive Sessions Return for More Unforgettable Experiences

Two popular programs launched at the STS 2021 Annual Meeting again will be available in Miami Beach. “In the OR with…” sessions will feature 360° videos, offering attendees panoramic and up-close views of challenging cardiothoracic procedures from beginning to end. Highly acclaimed surgeons will walk participants through each case and provide live feedback that’s nearly like standing beside the team in the operating room. The four operations on the agenda this year are uniport lobectomy, complex aortic arch reconstruction, Ross procedure, and minimally invasive complex mitral valve repair.

In addition, during eight “Deep Dive” courses, experts will walk attendees through the considerations, challenges, and real-time decision making involved in an interdisciplinary variety of procedures and scenarios.

Hands-On Courses Provide Access to World-Class Faculty

STS 2022 provides the unique opportunity to learn from and practice with some of the most celebrated minds in cardiothoracic surgery.

Trainees and veteran surgeons alike will benefit from real-world wet lab sessions on valve sparing root replacement, mitral valve repair, laryngeal tracheal resection, and creation of both a bi-leaflet and a tri-leaflet polytetrafluoroethylene valved conduit.

Exhibits, Learning Labs Get Hands-On with New Technology

Throughout the meeting, attendees will have dedicated time to meet with industry representatives. The Exhibit Hall will be open Sunday and Monday, and newly reimagined Learning Labs will allow participants to receive more in-depth hands-on demonstrations of the latest products and technologies in a dedicated space in the hall.

And as always, STS will offer a host of social events, wellness activities, and networking opportunities for attendees to unwind and socialize with colleagues.

Registration Is Now Open

Attendees may choose to register for either an in-person or virtual event. Registration is open now at sts.org/annualmeeting. Extra fees are required for some Saturday morning sessions and the President’s Reception.

COVID vaccination will be required for anyone attending the in-person meeting. STS 2022 COVID protocols are available at sts.org/AMcovid. ■



Scan to view the
STS Annual Meeting program.

SCAN ME

Innovations in 3D Printing for Thoracic Surgery

By Catherine T. Byrd, MD, H. Henry Guo, MD, PhD, and Natalie S. Lui, MD, MAS, from the Stanford University School of Medicine, California

The use of three-dimensional (3D) printing is expanding in cardiothoracic surgery. It can facilitate surgical planning and intraoperative guidance, be used to develop customized, implantable prostheses, and aid in patient and trainee education.

Although 3D printing for medical purposes is a fairly recent phenomenon, the process—additive manufacturing—has been in existence since the 1980s.

Additive Manufacturing

In additive manufacturing, very thin layers of material are deposited to form a 3D reconstruction of preoperative imaging. Thin slices (0.5 mm–1 mm) of a patient's computed tomography or magnetic resonance imaging are optimal to gather details for the structure of interest.

At our institution, cardiothoracic surgery residents use a 3D printed mediastinum model to learn mediastinoscopy.

The resulting images then undergo contouring and segmentation by a radiologist or technologist, who delineates structures of interest either manually or by using automated software. The data are then saved as a standard tessellation language (STL) file, essentially a series of triangles that convey the 3D nature of the anatomy. A surgeon may be involved to guide processing and highlight appropriate anatomy.

Next, the appropriate technique and materials are selected to print the model. Considerations include whether the material needs to be biocompatible and sterilizable because it will

be implanted, or if the material needs similar mechanical properties as the native anatomy so that it can be used for education or simulation.

Models are then printed and undergo postprocessing, which involves removing any support structures requisite to the printing process, polishing, and additional steps such as dimensional verification and sterilization.

Operative Guidance

3D models can serve as beneficial tools for preoperative planning.

In 2019, a multidisciplinary team of cardiothoracic surgeons, radiologists, and engineers in Spain described its experience with 3D printing. Over the course of a year, the team printed 26 models of general thoracic pathology, including tracheal stenosis, chest wall tumors, carcinoid tumors, mediastinal tumors, and a Pancoast tumor. A majority of the surgeons surveyed (78%) stated that 3D models helped with preoperative planning, and 77% said that the models accurately represented the intraoperative experience. Specifically, during Pancoast tumor resections, 3D models may be used for preoperative planning and intraoperative reference, allowing surgeons to carefully select the operative approach and surgical instruments.

Other surgeons have reported that 3D models are an improvement over conventional radiographic imaging and may decrease operative times.

Customizable Prostheses

Customizable 3D printed prostheses also offer promise.

One example is using a customized carbon fiber prosthesis to shift mediastinal contents in postpneumonectomy syndrome. Theoretically, this could improve on conventional techniques using breast implants as these materials are easily distorted and can migrate or more rigid implants which may be difficult to insert intraoperatively.

Patient and Trainee Education

3D printed models also are great tools for patient education.



► This 3D printed model shows the mediastinum from the right side.

One randomized study examined using customized 3D printed models of stage I lung cancer and the surrounding transparent lung parenchyma during informed consent discussions. The model improved patient knowledge of the surgery but did not impact the ability to make an informed decision.

Resident procedural training can benefit from 3D printed models as well. One example of this involves a group of experienced and non-experienced cardiothoracic surgery residents, who were trained on 3D printed bronchoscopy models.

The time to intubate an ostium was very different between the two groups on pre-testing. After training, both the experienced and inexperienced groups improved, and there was no difference in the final times to intubate an ostium between the experienced and non-experienced groups on post-testing, demonstrating the use of the bronchoscopy model to quickly close the experience gap.

At our institution, cardiothoracic surgery residents use a 3D printed mediastinum model to learn mediastinoscopy. Those who train with this model are better able to identify normal anatomy and perform the procedure according to self-assessments and assessments by the supervising attending.

Promising Future

3D printing holds great promise in several aspects of our specialty. The many advantages include customizable patient-unique models, potential shortened procedure time, better patient understanding of diseased anatomy, and increased procedure confidence among surgical trainees.

More innovations will be seen as cardiothoracic surgeons explore 3D printing in their clinical, research, and education endeavors. ■

Increased Trainee Diversity Is an Encouraging Step Across Demographic Landscape

Cardiothoracic surgery training programs represent an increasingly diverse population in the United States, and this can mean more comprehensive care for patients—but faculty and leadership positions need to catch up, according to a study published online in August in *The Annals of Thoracic Surgery*.

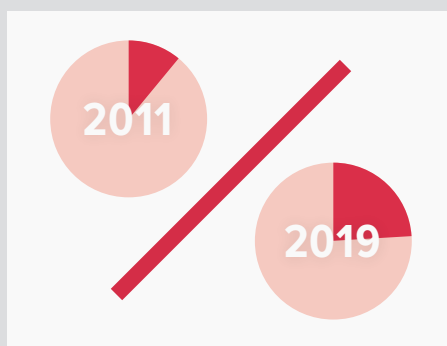
“It is imperative that our workforce represents the diverse patient population we treat,” said senior author Ourania A. Preventza, MD, MBA, from Baylor College of Medicine in Houston, Texas, and a member of the STS Workforce on Diversity and Inclusion. “My thoughts are that diversity and inclusion mean more than gender, race, and ethnicity. They are the first steps toward equity and excellence.”

For this study, Dr. Preventza’s team examined demographic trends among traditional, integrated (I-6), and fast-track (4+3) cardiothoracic surgery programs listed in the Accreditation Council for Graduate Medical Education (ACGME) public database. Using a combination of public resources, the researchers analyzed the characteristics of trainees through July 2020, including their gender and race/ethnicity, as well as any academic appointments bestowed on them.



► Dr. Preventza, who recognizes the importance of cultivating a culture in cardiothoracic surgery that encourages diversity, flexibility, and fairness, spent time with trainees at a recent STS Annual Meeting.

The researchers found that the proportion of female trainees increased significantly in the past decade, from 19% in 2011 to 24% in 2019. In the area of race/ethnicity, they observed significant increases in underrepresented minority candidates across all types of training programs. From 2019 to 2020, white, Asian, and Hispanic trainees had greater proportional representation in I-6 programs than in traditional curricula, while Black trainees had greater proportional representation in traditional programs.



► The proportion of female trainees increased significantly in the past decade, from 19% in 2011 to 24% in 2019.

While the proportions of women did not significantly differ by training pathway, the overall increase in the proportion of women was attributable to their increased enrollment in I-6 programs. The authors explained that I-6 residency may be more attractive to female medical students than the fellowship track, and they speculated that this may be due to factors including increasingly more women than men entering US medical schools, female residents’ mentorship of medical students, targeted scholarships for women in cardiothoracic surgery, and the appeal of earlier exposure to surgical procedures and research.

“Although the I-6 pathway does not always reduce time spent in training, it may help maximize relevant skills earlier on while enabling greater flexibility for lifestyle choices such as childbearing,” the authors suggested.

Overall, however, interest in cardiothoracic surgery among female medical students remains relatively low, the authors noted, and there is a significant need for same-sex mentors, as well as validation of career compatibility and life goals from both female and male colleagues in the specialty.

The researchers also observed a low proportion of underrepresented minority trainees who were appointed to faculty positions, noting that this has been the case in previous studies. They posited that with few underrepresented individuals in the pool of eligible candidates, it may take time for diversification to happen in leadership—unless the specialty makes targeted efforts to bring it about. These efforts might mean leadership engagement, a blinded step in candidate evaluation to mitigate bias, structured interviews, equal opportunities to express opinions during rank meetings, and reevaluation of the distribution of appointments and recognitions, the authors advised.

“It is imperative that our workforce represents the diverse patient population we treat.”

Ourania A. Preventza, MD, MBA

Diversity is an asset to cardiothoracic surgery, explained lead author Jacqueline K. Olive, MD, from Duke University Medical Center in Durham, North Carolina, because diverse backgrounds, experiences, and perspectives enhance patient care—as well as workplace culture and morale. “While statistics on gender, race, and ethnicity provide some metrics for diversity, we should also look beyond these categories to better understand inclusion, and how diverse individuals play a role in clinical and administrative leadership,” said Dr. Olive, also a member of the STS Workforce on Diversity and Inclusion.

“We are no doubt getting better, but we still have a lot of work to do,” said Dr. Preventza. “Our specialty needs to continue to advocate and focus on strategies to mitigate bias in recruitment, retention, promotion, and leadership engagement. The main beneficiary of these efforts will be our patients.” ■



Scan the QR code to access the study in *The Annals*.



Critical Care Conference Showcases Cutting Edge of ERAS, ECMO

During the 18th Annual Perioperative and Critical Care Conference, more than 350 registrants and faculty came together for a 2-day virtual experience featuring techniques and technological advancements in cardiothoracic perioperative and critical care medicine.

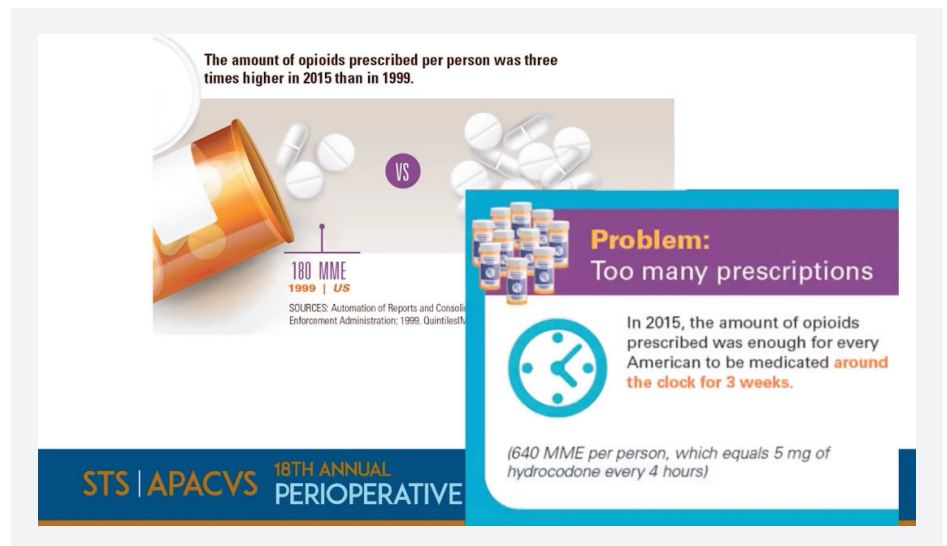
The conference included live presentations, e-posters, abstract sessions, on-demand videos, a virtual technical exhibition, and social and wellness events for attendees to connect and unwind with colleagues.

Day 1 highlighted enhanced recovery after surgery (ERAS), beginning with “What’s New” sessions covering cardiac and thoracic topics, complemented with panel discussions on issues, including “Making the Case for ERAS to Administrators” and “Can ERAS Equalize Outcomes Between Open and VATS?”.

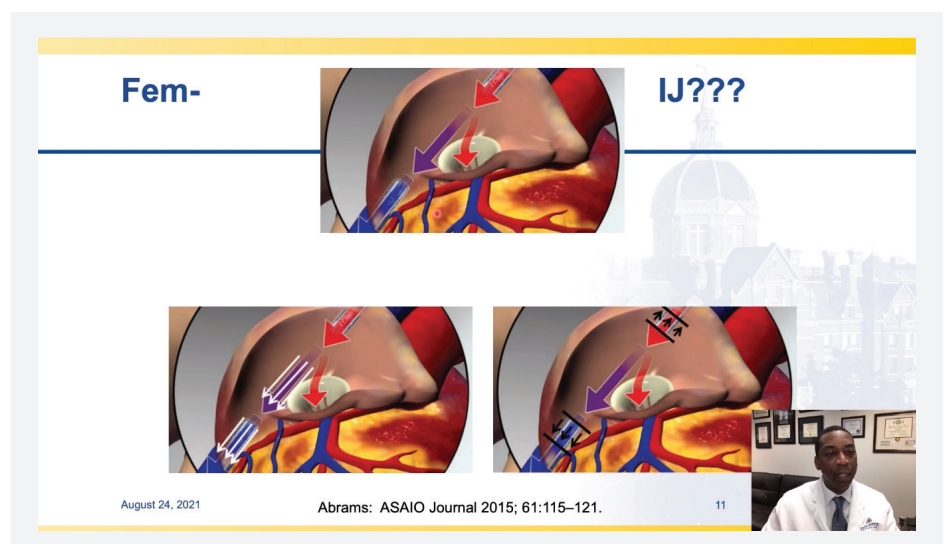
The day continued with discussions on opioid avoidance in ERAS, postoperative atrial fibrillation, managing the right ventricle after left ventricular assistive device placement, and complications after thoracic surgery.

During day 2, attendees explored the latest in extracorporeal membrane oxygenation (ECMO), with panelists and presenters addressing ethical controversies and conundrums in ECMO, goal-directed perfusion, and advanced life support after cardiac surgery. Sessions also addressed experiences with COVID “long-haulers,” and attendees had the privilege of hearing testimonials from two COVID survivors, who shared their stories of treatment, recovery, and living life after their illnesses.

If you missed the conference, the meeting content will be available for purchase this month through the STS Learning Center.



► Linda W. Martin, MD, MPH, from the University of Virginia in Charlottesville, presented the session “Why Are We Avoiding Opioids in the First Place?”



► During the conference, Errol L. Bush, MD, from Johns Hopkins Medicine in Baltimore, Maryland, discussed dual lumen cannulation as the “go-to strategy” for COVID ECMO.

Deep Dive Series

Deep Dive Series Launches with More Critical Care Essentials

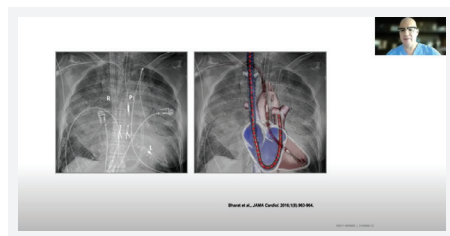
Complementing the popular 8 in 8 video series, the STS Deep Dive Series provides experts with a little more time to take in-depth looks at important cardiothoracic topics. The series launched with four videos highlighting must-know techniques in critical care.

Initiation of VV ECMO for COVID Patients

The coronavirus pandemic has led to a resurgence in use of veno-venous (VV) ECMO, which has become a salvage treatment when other therapies have failed. In this deep dive, presented by J.W. Awori Hayanga, MD, MPH, MHL, from West Virginia University Medicine, and HelenMari Merritt-Genore, DO, from Methodist Health System in Omaha, Nebraska, viewers will hear about emerging criteria, indications, and strategies for VV ECMO use for patients with COVID.

Post-Cardiotomy ECMO Support

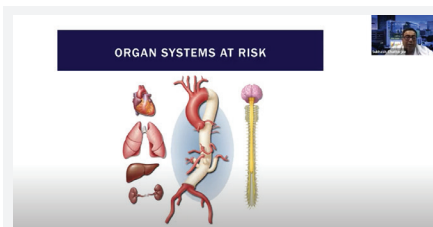
Presenter John M. Stulak, MD, from the Mayo Clinic in Rochester, Minnesota, leads viewers in exploring post-cardiotomy ECMO support for patients who have undergone a conventional cardiac operation and are unable to wean from cardiopulmonary bypass. Topics include cannulation configurations for VV and veno-arterial ECMO, left ventricular venting, troubleshooting failure to wean, and flow optimization.



► Dr. Stulak shows a different configuration for left ventricular venting in the Deep Dive video, “Post-Cardiotomy ECMO Support.”

Perioperative Care of the Aortic Surgical Patient: Parts 1 and 2

In a series of two videos, Rita K. Milewski, MD, PhD, MEd, from Yale School of Medicine in New Haven, Connecticut, along with Subhasis Chatterjee, MD, and Jonathan C. Hong, MD, both from Baylor College of Medicine in Houston, Texas, highlight the perioperative management of aortic surgery, identifying fundamentals and pitfalls. Part 1 focuses on aortic dissection, as well as proximal aortic and arch surgery with hemodynamic considerations and optimal neurologic outcomes. Part 2 focuses on managing the unique challenges of aortic aneurysm surgery and reducing the risk of spinal cord ischemia in the postoperative period.



► In Part 2 (Thoracoabdominal Surgery) of the “Perioperative Care of the Aortic Surgical Patient” Deep Dive video, Dr. Chatterjee shares that “literally every organ system in the body is vulnerable during thoracoabdominal aneurysm repair.”

Application Submissions Begin Soon for Miami Beach Leadership Capstone



The STS Leadership Series is a unique learning experience designed to help early to mid-career cardiothoracic surgeons build and hone their leadership skills. The 2021 series of webinars will culminate in a capstone in-person event on Friday, January 28, prior to STS 2022 in Miami Beach, Florida—and attendance at the event is limited.

STS will consider applications from surgeons within their first 8 years of practice who have watched the three webinars, including “Leading During Crisis,” “Building Your Practice and Your Brand,” and “Promoting Your Brand.” There’s still time to watch these webinars and be part of the exclusive event. Information about the application process will be announced soon.



The collection is free and available at sts.org/deepdive, as well as on the STS YouTube channel.



Visit sts.org/leadershipseries to take advantage of this career-building opportunity.

News Releases Draw Attention to Chewing Gum after Heart Surgery, ERAS Minimizing Opioid Use

The Society recently distributed two news releases that featured research presented during the 18th Annual Perioperative and Critical Care Conference.

Chewing Gum after Heart Surgery May Help Relieve Gut Problems

► **Researchers:** Sirivan S. Seng, MD, Hakan Orbay, MD, PhD, and Charles M. Geller, MD

► **Main finding:** Chewing gum after heart surgery may accelerate the return of gut function, helping patients feel better and potentially be discharged sooner than those who don't use this intervention.

► **Featured in:** *TCTMD*, *HealthDay*, and *Cardiology Today*

Patient-Centered Protocols Help Eliminate Excess Opioid Use after Lung Surgery

► **Researchers:** Andres Zorrilla Vaca, MD, David C. Rice, MD, and colleagues

► **Main finding:** Lung surgery patients who utilize a comprehensive, evidence-based enhanced recovery after surgery program require fewer opioid prescriptions when discharged.

► **Featured in:** *Medical Xpress*



For more information, visit sts.org/media.

Latin America Surgery Symposia Will Feature World-Class Insights



In November and December, two virtual collaborative events from STS and international partner organizations will showcase the latest advances in thoracic and cardiovascular surgery, featuring faculty from across the globe.

Hosted by STS, the European Association for Cardio-Thoracic Surgery (EACTS), and the European Society of Thoracic Surgeons (ESTS), the Latin America Thoracic Surgery Symposium on November 19 will offer new data and insights on managing patients with COVID, starting a lung cancer screening program, segmentectomy, and treating patients with chest wall trauma. Find details at sts.org/LatAmThoracic.



The STS/EACTS Latin America Cardiovascular Surgery Symposium on December 3 will present the latest developments and best treatment practices for coronary artery disease, valvular heart disease, thoracic aortic disease, atrial fibrillation, and the surgical management of heart failure. Learn more at sts.org/LatAmCardiac.

New Public Reporting Site Offers Quality Ratings for TAVR Procedures

This fall, the STS/American College of Cardiology (ACC) Transcatheter Valve Therapy (TVT) Registry will begin a much-anticipated public reporting program, where participating hospitals can demonstrate their ongoing commitment to quality measurement in the public eye.

“The same public reporting efforts that have powered the STS National Database will now be available for the TVT Registry, with the aim toward improving patient care,” said Vinod H. Thourani, MD, from Marcus Heart Valve Center at Piedmont Heart Institute in Atlanta, Georgia, who serves as vice chair of the Registry’s steering committee.

A collaboration between STS and ACC, the TVT Registry monitors patient safety and real-world outcomes related to transcatheter valve replacement and repair procedures. It collects and aggregates clinical data that give participants the evidence they need to understand their institution’s performance and consequently improve quality of care—as well as demonstrate success.

The new reporting platform will employ a “site win-difference” method to represent risk-standardized composite outcomes, both fatal and non-fatal, associated with transcatheter aortic valve replacement (TAVR) performed at each site.

The site win-difference model, used in clinical trials that have a composite of primary endpoints, provides different weights for adverse events surrounding valve procedures, including in-hospital or 30-day mortality, stroke, major bleeding, acute kidney injury, and paravalvular aortic regurgitation. Weights are based on the clinical importance and timing of the outcomes. This new method supplies the foundation of site reports, characterized publicly by a 3-star rating system that represents “better than expected,” “as expected,” or “worse than expected” outcomes.

In simple terms, star ratings are a visual representation of the probability that an average patient is better off going to a participant’s hospital versus an average hospital, minus the probability that an average patient is better off going to an average hospital versus the participant’s hospital.

The screenshot shows the STS/ACC TVT Public Reporting website. At the top, there are logos for the American College of Cardiology and The Society of Thoracic Surgeons. Below the logos is a navigation bar with links for TVT Registry, Rating Explanations, ACC Resources, and STS Resources. A search bar is also present. The main content area displays the 30-Day Risk Adjusted TAVR Composite score and rating. The reporting period is 10/1/2017 - 9/30/2020, with 434 eligible procedures. The TAVR 30-Day Composite Score is 0.02 (-0.02 to 0.04), and the TAVR 30-Day Composite Rating is 3 stars, labeled as 'As Expected'.

30-Day Risk Adjusted TAVR Composite ^{1,2,3}	
Reporting period:	10/1/2017 - 9/30/2020
Eligible procedures in reporting period:	434
TAVR 30-Day Composite Score*	0.02 (-0.02 to 0.04)
TAVR 30-Day Composite Rating*	★ ★ ★ As Expected

► The TAVR 30-day morbidity/mortality composite is a hierarchical, multicategory risk model that estimates risk standardized results, including the calculation of 1–3 stars for public reporting.

“Public data submission is voluntary for participating sites, and because sites need 3 years of data in order to publicly report outcomes, it will take about 3 years before patient outcomes are fully represented,” explained Dr. Thourani. “Our goal is for transparency for TAVR care in the US.”

Endpoint variables were selected and ranked based on their adjusted association with 1-year mortality and the patient’s quality of life, self-reported via the Kansas City Cardiomyopathy Questionnaire (KCCQ). The TAVR 30-day morbidity/mortality composite, for example, includes 46 variables, including KCCQ scores and gait speed on a 5-meter walk.

The initial consent period for TVT Registry participants to join the public reporting program closed in April 2021, and new consent periods will open on a yearly basis. Sites must have submitted a case to the TVT Registry prior to the first date in the reporting period, said David M. Shahian, MD, from the Division of Cardiac Surgery at Massachusetts General Hospital in Boston, who serves as co-chair of the TVT Public Reporting Committee and chair of the STS Work Force on Quality Measurement.

“You have to be a registry participant for 3 years,” Dr. Shahian said. “Your site must have performed 60 or more TAVRs within the 36-month reporting timeframe, and you have to have 90% or greater data completeness on the baseline—KCCQ and 5-meter walk—and then a status of ‘green’ or ‘yellow’ on data

quality reports.” Thresholds for KCCQ and 5-meter walk test were relaxed for the second and third quarter of 2020 related to the impact of COVID at sites.

The reporting metrics include the date of a site’s first TAVR procedure, the cumulative volume at program inception, the average annual volume for the reporting period, and the site’s composite score and composite rating.

Participating in the Public Reporting initiative will give institutions advanced decision-making capabilities, driven by quarterly reports that show practice patterns, demographics, and procedure outcomes that compare their performance with that of the national experience. The interface will provide an executive summary dashboard that enables not only “big picture” review and assessments at a glance but also the ability to drill down and analyze outcomes on the patient level.

As with the STS National Database, participants will receive ongoing support from clinically experienced staff, and they’ll be able to participate in training activities and discussions via regularly scheduled webinars and other educational offerings.

The Public Reporting pages are expected to begin displaying results for current participants this fall, and public-facing pages will be available on the STS Public Reporting page. To learn more about the STS/ACC TVT Registry, visit sts.org/tvtregistry. ■

From the Farm to the OR, STS Member Is Proof that Anything Is Possible

The harrowing days-long journey from a small village in rural Mexico to the US border and over the mountains landed a young Luis Godoy on a busy freeway in southern California.

There, for the first time in his life, he saw hundreds of cars traveling at high rates of speed with their headlights shining so bright he could barely believe his eyes.

“I was watching all of these cars flying by and it was like I was on another planet or something you would see in a sci-fi movie,” Dr. Godoy said.

Some 35 years later, Dr. Godoy now finds himself under the shine of similar bright lights, but these are overhead in the operating room as he performs life-saving general thoracic surgeries at UC Davis Health in Sacramento, California.

His winding path toward medical school and a career in cardiothoracic surgery, though, was a little less straightforward—but nonetheless complicated—than his immigration to the US.

As a very young child, Dr. Godoy wanted to be a police officer. However, after many years of watching his father brilliantly work with his hands—whether it was cleaning carburetors or working in the fields—Dr. Godoy quickly realized that he, too, had a drive to do something with his hands and an innate curiosity of how things worked.

He recalled a time when as a young child he found an old, broken handheld radio and spent countless hours taking it apart, trying to figure out what was wrong, and repeatedly putting it back together. While Dr. Godoy may not have known it at the time, that was an early sign that a career in surgery was in his future.

“It’s what we do in surgery: with meticulous attention to detail, we find out what is wrong, figure out how to correct the problem, and then restore the function. It’s something I’ve always had a passion for,” he said.

In fact, in his later teen years, Dr. Godoy also worked as a mechanic, restoring classic cars—something that he still does today in his free time. He considers this experience another “breadcrumb along the path to becoming a surgeon.”

“How I would prepare for a big restoration and take apart these cars—every nut and bolt—is similar to how we prepare for a big surgery case. I learned a lot during that time,” he said.

Dr. Godoy also gained a strong work ethic in his early years, while working with his parents in the fields. He vividly remembers despising the back-breaking work of picking peaches and nectarines, but later on, he came to appreciate how that experience shaped him.

However, as the son of immigrant farm workers, Dr. Godoy explained that he struggled with this identity and experienced bullying and teasing in middle school because he didn’t have fancy shoes and trendy clothes. He realized that nobody “messed with” gang members, so he convinced himself that he should join a gang in order to feel protected and respected. By the time he was in the 10th grade, he had been in several fights and other trouble, which resulted in expulsion.

“I had no intentions of going back to school. My plans were to work and start making a living at that point,” he said.

Within a few months, though, Dr. Godoy started thinking about returning to school. In fact, he remembers the day he made that decision. It was a cold winter morning around 4:00 a.m., and he was lying in bed, listening to his parents, Vidal and Victoria, getting ready to work in the fields.

“They were working these hard jobs in order to provide for their family and give us a better future,” he said. “I was thinking to myself what a disappointment I must be and how I must be letting them down after all of the sacrifices they made for us. I felt this extreme sense of guilt.”

That was a major turning point for Dr. Godoy.

He enrolled in independent study and worked three jobs. Without the distractions and social influences of other students, he excelled in his studies and graduated high school. Dr. Godoy also became a teenage father at that time, which motivated him to find work that offered stability and allowed him to better support his young family. He earned his associate degree and became an X-ray technician.

Not until his mid-20s did Dr. Godoy decide that he wanted to go to college and eventually pursue a career in medicine. But this decision was not an easy one and was full of hesitancy. Dr. Godoy did not fear trying to become a doctor and failing; he feared never trying at all.

“I didn’t want to be in my 60s, sitting on a porch somewhere wondering if I could have done it, wondering what would have happened if I had gone back to school,” he said.



► Here, with his sister and mom, Dr. Luis Godoy stands in front of their adobe home in rural Mexico.



► Dr. Luis Godoy performs a procedure in the cath lab at UC Davis Health in Sacramento, California.

With the full support of his wife Rita, who has been by his side for more than 25 years, Dr. Godoy attended UC Davis for his undergraduate studies, continuing to work and study full-time. He then was accepted into the School of Medicine.

“It’s a great responsibility to not only stop the heart, but fix it, restart it, and then see it function like it’s intended to.”

Luis A. Godoy, MD

“Medical school was the best time of my academic career,” Dr. Godoy explained. “That was the first time when I was a full-time student and didn’t have to balance school with jobs. I was able to focus 100% on my studies and immerse myself in the material. I enjoyed learning about the human body, how it works, the dysfunctions, the anatomy, and the physiology. For the first time in my life, I was studying something that I was so interested in. I thrived as a medical student.”

During his third-year rotations, even though he went in with an open mind, Dr. Godoy quickly realized that in cardiothoracic surgery, everything he loved about medicine came together in an intricate balance.

“I loved the anatomy and physiology of the chest. I enjoyed the variety of the operations that I saw. It’s a great responsibility to not only stop the heart, but fix it, restart it, and then see it function like it’s intended to. In addition, there are few things more gratifying than telling a patient that you have removed their lung cancer. Speaking with the families and the patients afterward—those are the things that make all of the sacrifices of undergrad, medical school, and residency worth it,” he said.

Throughout medical school, Dr. Godoy came to fully understand and truly appreciate the importance of mentors. He recalls working closely with and receiving instrumental advice and encouragement from J. Nilas Young, MD, and Francis J. Sousa, MD. David Tom Cooke, MD, also has been an incredibly influential mentor for Dr. Godoy.

“Dr. Cooke has guided me along the way and presented me with tremendous opportunities from when I was a medical student, through residency, and now he’s my division chief and a partner of mine. I can’t say enough about the guidance that I’ve received from him,” said Dr. Godoy.

Importantly, Dr. Godoy works to “pay it forward” by providing mentorship to first-generation students who have similar backgrounds as he does. He works with students who are trying to navigate their way through undergraduate studies and attend medical school. In addition, Dr. Godoy provides community outreach, exposing high school students to cardiothoracic surgery. The programs he sponsors include shadow days, suturing workshops, surgery seminars, and presentations at the local high schools.

“One of the most impactful lessons that I have learned and that I share is this: with the right amount of determination, persistence, work ethic, curiosity, and dedication, anything is possible. I’m living proof of that. Focus on taking one step at a time, one foot in front of the other, and ultimately you’ll cross the finish line.”

An STS Candidate Member, Dr. Godoy currently serves on the STS Workforce for Diversity and Inclusion. ■



If you know of a unique member experience that should be featured in *STS News*, contact stsnews@sts.org.

Braunwald Award Enables in Utero Research into Congenital Heart Disease

The Society's charitable arm, the Thoracic Surgery Foundation (TSF), powers learning, innovation, and research in cardiothoracic surgery, often filling niches in underrepresented communities.

For women entering a career in cardiothoracic surgery, the Nina Starr Braunwald Research Award offers a prestigious opportunity to bring original research to the table. Mallory Hunt, MD, MBE, an integrated cardiac surgery resident at the University of Pennsylvania in Philadelphia, used her award to explore complications associated with congenital heart disease before patients leave the womb.

"Children who have congenital heart disease are living longer because we're getting better at operating on them," said Dr. Hunt. "Now we're observing that they have neurological and neurodevelopmental sequelae later in life, meaning that they tend to lag behind their peers in areas such as educational achievement, employability, and functional status."

"Children who have congenital heart disease are living longer because we're getting better at operating on them."

Mallory Hunt, MD, MBE

For years, the medical community speculated that these sequelae were a consequence of surgical interventions in the first few days of life, Dr. Hunt explained. But now there's evidence that complications may begin as early as the fetal stages. By studying the effects of placental insufficiency and in utero hypoxia, Dr. Hunt's team sought to better understand the conditions that may lead to heart defects and developmental complications.

Obviously, recreating these conditions would be problematic in human fetuses. But while Dr. Hunt was studying under J. William Gaynor, MD, at Children's Hospital of Pennsylvania in Philadelphia, she was introduced to a model akin to an artificial womb. Developed originally as a means of supporting babies who were born extremely premature, this womb model provided Dr. Hunt's team with a tool to simulate in utero oxygen delivery in developing sheep.



► Dr. Hunt's lab training gave her and her team unique access to a simulated womb model.

“We were able to deliver fetal sheep at what would roughly be sort of a second-trimester gestation equivalent to that of a human,” Dr. Hunt said. “We placed a group of sheep in this womb environment in conditions that were relatively hypoxic, as well as a group in an environment more representative of that of a normal fetus without congenital heart disease.”

Initially, the researchers focused especially on observing neurodevelopmental status in the fetuses. “Over time, though, the project really evolved and took on a life of its own, because we realized that we were able to study basically every organ system within the body,” said Dr. Hunt. “Through collaborations with researchers in different schools at the university, we now have people who are looking at all major organ systems, and I think that’ll tell us a lot—not just about average developmental habits in children who have congenital heart defects, but also how development is altered in children who are hypoxic in utero for other reasons.”



► Dr. Hunt and the team at CHOP explored the possibilities of translational research.

Prior to this project, Dr. Hunt’s research had been mainly clinical in nature, focusing on outcomes for children who had undergone heart surgery for congenital defects. “But not necessarily anything that involved bench research or translational research,” she said. “At a certain point I was thinking about what I wanted my career to involve from the research arm, and I realized that there was this great opportunity to pursue projects that addressed the problems we saw in the clinic from a more basic science point of view. And then see those projects from inception to hopefully implementation into clinical practice.”

Dr. Hunt says that the financial support of the Braunwald award was critical to bringing her project to life. “Women are underrepresented in our field, and dedicated research awards targeted at female trainees is such a great opportunity for us. It helps us establish ourselves in a way that’s unique and that highlights what we’re able to do. It really has helped propel my career over the last few years, not just in terms of funding but also in terms of the connections I’ve been able to make with people interested in my research.”

TSF Surgeon Match Challenge Doubles the Impact

There’s no better time to make a TSF donation and help fuel projects like Dr. Hunt’s. In July, TSF and STS launched the Surgeon Match Challenge, pledging to match surgeon donations up to \$100,000.

This year, Eugene Braunwald, MD, husband of the late Nina Starr Brunwald, MD, for whom the award is named, pledged \$1 million to support the Braunwald Fund—if TSF can raise \$500,000 in matching funds.

Surgeon donations will be distributed to the fund designated by the donor, and corresponding match dollars will be directed solely toward TSF’s “area of greatest need,” a fund primarily used to award research grants.

Nina Starr Braunwald was the first woman to be certified by the American Board of Thoracic Surgery, and in 1960, she led the team at the National Institutes of Health that performed the first successful artificial mitral human heart valve replacement—with a valve that she herself designed and fabricated. The TSF research award in her name provides up to \$50,000 per year for up to 2 years to support original research efforts by early career women cardiac surgeons.

In 2020, TSF awarded \$1,056,600 in grants for 36 recipients. To support research, education, leadership, and surgical outreach programs for cardiothoracic surgery, give today at thoracicsurgeryfoundation.org/donate. ■

Members Tackle Physician Reimbursement, Patient Safety during Advocacy Conference

More than 50 cardiothoracic surgeons, trainees, medical students, and other STS members participated in the Society's Virtual Advocacy Conference this past September. STS members met with lawmakers and enlightened them about issues that can help improve care for cardiothoracic patients.

Participants connected with approximately 100 legislative decision makers during the conference. They also heard from Rep. Larry Bucshon, MD (R-IN), a cardiothoracic surgeon, who provided perspective about the current Congress and his focus for the remainder of 2021.

Rep. Bucshon emphasized the importance of surgeon participation in advocacy and answered questions from participants. He also explained how he helped temporarily halt Medicare reimbursement cuts for surgeons and supports tools like the STS National Database to facilitate innovation and quality improvement.

During the conference, STS members met with House and Senate representatives in Congress and their staff, urging them to take action on three issues that are especially important to the specialty.

1 Ask #1: Stop Medicare Reimbursement Cuts

Sign an important letter led by Reps. Bucshon and Ami Bera, MD (D-CA), asking Congressional leadership to stop pending payment cuts for surgeons and work on long-term reforms that would bring stability to the Medicare program. In late 2020, surgical specialties, including cardiothoracic surgery, narrowly avoided cuts to Medicare reimbursement that were set to take effect in January 2021. Congress stepped in at the last second and added new money to the Medicare pool, providing all physicians with a 3.75% increase on top of already reduced physician payments. This fix was temporary, though, and expires in January 2022. Unless Congress steps in again, cardiothoracic surgeons could see Medicare payment cuts of up to 9%. Reductions of this magnitude represent a very real threat to the financial viability of clinical practices and could limit patient access to care.

2 Ask #2: Support Access to Claims Data and Preserve Medicare CED

Cosponsor the Meaningful Access to Federal Health Plan Claims Data Act of 2021 sponsored by Reps. Bucshon and Kim Schrier, MD (D-WA), as well as urge Reps. Fred Upton (R-MI) and Diana DeGette (D-CO) to include the following in the 21st Century Cures 2.0 legislation:

- ▶ Guarantee clinician-led clinical data registry access to claims data from Medicare, Medicaid, and the State Children's Health Insurance Program
- ▶ Codify Medicare coverage with evidence development (CED) to ensure that patients have access to new technologies that may provide lifesaving care

Claims data, when linked with clinical outcomes data in registries such as the STS National Database, allow researchers to conduct longitudinal analyses to measure quality improvement and improve patient safety. Currently, regulatory barriers prevent registries from linking claims data with clinical outcomes data. In order to perform these studies, registries need timely, cost-effective, and continuous access to these data.

In addition, a key priority for the Society in 2021 has been preserving CED as a Medicare pathway. This would provide Medicare beneficiaries with earlier and more predictable access to coverage for new technologies.

Ask #3: Support the Resident Physician Shortage Reduction Act

Ask Senators and Representatives to support the Resident Physician Shortage Reduction Act of 2021 (S.834 / H.R.2256). By 2034, a shortage of up to 124,000 physicians is expected. This bill would help mitigate the physician shortage by creating 14,000 new Medicare-supported graduate medical education (GME) slots over 7 years.

A key factor impacting the shortage of physicians is the artificial cap placed on Medicare-supported GME positions. In December 2020, Congress provided 1,000 new Medicare-supported GME positions—the first increase of its kind in nearly 25 years. While 1,000 additional positions is progress, more support is needed. The Resident Physician Shortage Reduction Act of 2021 is a step in the right direction.

A share of these new positions would be targeted to hospitals with diverse needs, including those:

- ▶ In rural areas
- ▶ Serving patients from health professional shortage areas
- ▶ In states with new medical schools or branch campuses
- ▶ Already training over their caps

The Resident Physician Reduction Act has been introduced in every Congress for more than a decade and regularly receives bipartisan support.

Miss the STS Advocacy Conference? You still can be involved!

If you could not attend the STS Advocacy Conference, you still have a chance to meet with your federal representatives.

STS members are the most effective advocates for the specialty and patients; contact the STS Government Relations office at advocacy@sts.org or 202-787-1230 for help in setting up a meeting or site visit. ■



▶ STS members met with legislative decision makers during the virtual Advocacy Conference.

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Mark Your Calendar

Upcoming STS Educational Events

▶ Advances in Quality & Outcomes: A Data Managers Meeting

Virtual · Oct. 12–15

▶ Transforming Pediatric & Congenital Heart Surgery Education and Practice Webinar

Webinar · Oct. 21

▶ 2021 STS/EACTS/ESTS Latin America Thoracic Surgery Symposium

Virtual · Nov. 19

▶ 2021 STS/EACTS Latin America Cardiovascular Surgery Symposium

Virtual · Dec. 3

▶ STS Leadership Capstone Event

Miami Beach, Florida · Jan. 28, 2022

▶ STS 58th Annual Meeting

Miami Beach, Florida · Jan. 29–31, 2022


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Thank You!

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