

"We are in danger of being unable to evolve and grow as a specialty if we do not aggressively support and promote young and female surgeons."

Barbara C.S. Hamilton, MD, MAS



Although the current cardiothoracic surgery workforce is predominantly male, female trainee numbers are rising.

An Important Shift May Be Happening in CT Surgery

With a current pipeline showing steady gains of female trainees, the cardiothoracic surgery workforce may be on the verge of changing.

This is according to research that examined data from the active membership directories of four cardiothoracic surgery societies: STS, the American Association for Thoracic Surgery (AATS), the European Association for Cardio-Thoracic Surgery (EACTS), and the Asian Society for Cardiovascular and Thoracic Surgery (ASCVTS).

The comprehensive analysis—which offered a snapshot of the global cardiothoracic surgery workforce—was presented during the Society's Annual Meeting in January.

"What is unique about this work is the breadth of our capture," said study author Barbara C.S. Hamilton, MD, MAS, from the University of California San Francisco (UCSF). "Understanding our global workforce is challenging, and survey data are inherently biased. Our data acquisition was novel, with our research using membership data that did not require any additional input from members. We attempted to obtain a more global and less biased representation of our workforce."

Dr. Hamilton and colleagues queried the organizations' membership directories. A total of 12,053 profiles were included in the study. The researchers found that the membership is overwhelmingly male (93%). As far as female members, EACTS has the highest proportion (9%), and ASCVTS has the lowest (3%). STS membership is 6% female.

The Shift

Although the current workforce still is predominantly male, more female representation awaits in the trainee population, according to Dr. Hamilton. The researchers found that 25% of EACTS trainees were female (trainee data were not available for STS, AATS, or ASCVTS). In addition, data from the Association of American Medical Colleges (AAMC) show that the proportion of female cardiothoracic surgery trainees has grown—from 15% in 2007, to 19% in 2011, and 26% in 2020.

"Thankfully there seems to be a larger proportion of female trainees in cardiothoracic surgery than the proportion of practicing female surgeons, which gives hope that we are beginning to change and progress," said Dr. Hamilton.

Importantly, the representation of women in the active cardiothoracic surgery workforce also has consistently increased, from 4% in 2007 to 8% in 2020, according to AAMC data. However, cardiothoracic surgery remains one of the most unevenly gender-distributed specialties.

CONTINUED ON PAGE 6

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

IN THIS ISSUE

- 1 Global Membership
- 2 New Leaders Elected
- **3** Member News
- 4 President's Column
- 7 Tech News
- 8 Annual Meeting Recap
- **12** News Briefs
- **14 Member Experience**

16 The Thoracic Surgery Foundation

- 17 STS-PAC Contributors
- 18 Washington Scene

STS News is a quarterly publication for members of The Society of Thoracic Surgeons. If you have a comment regarding the content of this publication or story ideas for future issues, please contact us. STS is not responsible for the opinions expressed by its writers and/or editors.

© 2022. It is acceptable to duplicate and distribute *STS News* for personal use.

Managing Editor Jennifer Bagley, MA

Writer Evonne Acevedo, MFA 633 N. Saint Clair St. Suite 2100 Chicago, IL 60611 312-202-5800 stsnews@sts.org

STS News

Editorial Advisors

Grahame Rush, PhD William Seward, MA Charles Simpson Elaine Weiss, JD

STS Board Expands, New Leaders Elected

Several important Bylaws changes were approved, and STS officers and directors were elected or reelected during the virtual Annual Membership (Business) Meeting on Sunday, January 30. The meeting was held in conjunction with STS 2022, the Society's 58th Annual Meeting.

Two Bylaws changes were to the makeup of the Board of Directors. The Society's membership voted to remove the Editor of *The Annals of Thoracic Surgery* from the Board. In addition, the number of International Directors was increased from two to three. This change will allow for greater diversity and a wider variety of perspectives on the Board.

Leading the Board and the Society for 2022-2023 is John H. Calhoon, MD, from San Antonio, Texas, who was elected STS President. Thomas E. MacGillivray, MD, from Houston, Texas, was elected First Vice President, and Jennifer C. Romano, MD, MS, from Ann Arbor, Michigan, was elected Second Vice President.

The following also were elected or reelected:

Secretary Wilson Y. Szeto, MD Philadelphia, Pennsylvania

Treasurer Vinod H. Thourani, MD Atlanta, Georgia

International Directors Alessandro Brunelli, MD Leeds, United Kingdom

Alan D.L. Sihoe, MBBChir, MA(Cantab), FRCSEd(CTh) Hong Kong Directors-at-Large Leah M. Backhus, MD, MPH Stanford, California

Anthony L. Estrera, MD Houston, Texas

Ara A. Vaporciyan, MD Houston, Texas

John D. Mitchell, MD Aurora, Colorado

Historian Keith S. Naunheim, MD St. Louis, Missouri

Changes to the Society's governance structure also were approved at other recent meetings. Several workforces were assigned to different councils to better align the emphases and missions of the affected groups, and some workforce names were changed. In addition, to help with the development of future STS leaders, vice chairs were appointed for most workforces and two of the council operating boards.



Learn more about the Society's governance structure at sts.org/governance.

Member News



Mosca Leads CT Surgery at NYU Langone

Ralph S. Mosca, MD, is the chair of the Department of Cardiothoracic Surgery at NYU Langone Health in New York. In addition to this new role, he will continue to serve as chief of the Division of Pediatric and Adult Congenital Cardiac Surgery and director of the Congenital Heart Center at NYU Langone, as well as professor at the NYU Grossman School of Medicine. Dr. Mosca has been an STS member since 1995.



Takayama Promoted at Columbia University

Hiroo Takayama, MD, PhD, has been named chief of the Adult Cardiac Surgery Section at NewYork-Presbyterian/ Columbia University Irving Medical Center in New York City. He also will continue as co-director of the Columbia Aortic Center and the Hypertrophic Cardiomyopathy Center, director of the Cardiovascular Institute, and professor of surgery at Columbia University Medical Center. Dr. Takayama has been an STS member since 2012.



Moon Moves to Texas

Marc R. Moon, MD, has been named chief of the Division of Cardiothoracic Surgery at Baylor College of Medicine in Houston, Texas, chief of the Adult Cardiac Surgery Section at Baylor St. Luke's Medical Center, and chief of adult cardiac surgery at the Texas Heart Institute. Previously, he served as chief of cardiac surgery, director of the Center for Diseases of the Thoracic Aorta, and co-director of the Heart and Vascular Center at the Washington University School of Medicine in St. Louis, Missouri. Dr. Moon has been an STS member since 2001.



Ouzounian Appointed Division Head in Toronto

Maral Ouzounian, MD, PhD, is the new head of the Division of Cardiovascular Surgery in the Sprott Department of Surgery and the Peter Munk Cardiac Centre at University Health Network (UHN), both in Toronto, ON, Canada. She also is an associate professor of surgery in the Department of Surgery at the University of Toronto and the Peter Munk Cardiac Centre Chair in Advanced Cardiac Therapeutics at UHN. Dr. Ouzounian has been an STS member since 2017.



Fraser Directs New Cardiovascular Institute

Charles D. Fraser Jr., MD, has been named the inaugural executive director of the new Institute for Cardiovascular Health, a collaboration between Ascension Texas and The University of Texas at Austin, which includes the Dell Medical School. He will continue his roles as professor of pediatrics and surgery and founding chief of pediatric and congenital heart surgery at the Texas Center for Pediatric and Congenital Heart Disease at Dell Children's Medical Center in Austin. Dr. Fraser has been an STS member since 1997.



Fiedler Joins UCSF

Amy G. Fiedler, MD, has joined the Department of Surgery at the University of California San Francisco (UCSF) as a cardiac surgeon and assistant professor of clinical surgery. She also will serve as director of global cardiac surgery within the UCSF Center for Health Equity in Surgery and Anesthesia. Dr. Fiedler previously was an assistant professor at the University of Wisconsin School of Medicine and Public Health in Madison. She has been an STS member since 2021.



Lazzaro Guides Thoracic Surgery in South Jersey

Richard S. Lazzaro, MD, will serve in the newly created role of southern region chief of thoracic surgery for RWJBarnabas Health in Monmouth County, New Jersey. Before accepting this position, he was the director of thoracic robotic surgery and associate professor of cardiothoracic surgery at Northwell Health in New York City. Dr. Lazzaro has been an STS member since 2007.



Samy Is Promoted to Albany Chief

Sanjay A. Samy, MD, has been named the Alley Sheridan Chair in Cardiothoracic Surgery and chief of the Division of Cardiothoracic Surgery at Albany Medical Center in New York. With the institution for more than 5 years, he also will continue his role as professor of surgery. Dr. Samy 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.



Not by Revolution, but by Evolution...

John H. Calhoon, MD

"The cardiothoracic surgery specialty continually faces challenges, all of which are best viewed as opportunities."

These words from my mentor, Dr. J. Kent Trinkle truly infuriated me as a young, often too mercurial, and impetuous resident and faculty member. So much needed to be changed and it seemed (to me) the only way to make it happen was by force.

With much time, his words and wisdom have begun—though not fully yet—to sink in.

The Challenges Ahead

The cardiothoracic surgery specialty continually faces challenges, all of which are best viewed as opportunities. Most recently, our adult cardiac brethren have been confronted with guidelines for the treatment of coronary disease which simply missed the mark. Our general thoracic colleagues are repeatedly confronted by less invasive ablative techniques offered by radiology, bronchoscopy, and the like. The kiddie heart teams, and valve and aortic disciplines, also face similar emerging technologies.

Fortunately, STS, through a wonderful network of volunteer surgeons and a robust staff, does its best to address these challenges daily.

It has been a wonderful experience to watch as Dr. Sean Grondin deftly navigated these challenges with the STS team this past year. I've learned from him and so many of our leaders throughout my career.

Now, with the help of Drs. Tom MacGillivray, Jenna Romano, Wilson Szeto, Vinod Thourani, and the rest of the Board of Directors, it is my honor and pleasure to take the helm of the organization for a short time. For that, I am very humbly grateful.

All of us learned a great deal from Dr. Joe Sabik and continue to call on him for support and insights from his 6 years of service as STS Secretary and 5 additional years on the STS Board. I am particularly grateful to Dr. Sabik for agreeing to chair the STS Workforce on Evidence Based Surgery, as he has great knowledge and experience in this area.

The Decision to Go Virtual

Congratulations to Dr. John Mitchell for a successful annual meeting in January. When Omicron could not be ignored, the decision to go virtual was made, and the STS 58th Annual Meeting was developed in just 3 weeks. Dr. Grondin made a wonderful call to have a 2-day meeting, with a tight, efficient schedule that made the meeting as enjoyable and accessible as I can ever remember. This proved to be the perfect "fit" for the situation.

Principles and Process behind Guidelines

As this year unfolds, the challenges we face continue to evolve, but the solutions remain much the same. We will address the process by which guidelines are created. It should be by asking for the best experts available to look at the best evidence, while keeping our patients in mind.

With an ever-increasing overlap in surgical treatment and medical/interventional treatment of cardiac and thoracic diseases, STS and any guideline processes need to remain focused on what is best for the patients, not for a particular technique or discipline.

While STS and the American Association for Thoracic Surgery (AATS) were involved in the development of the 2021 Guideline for Coronary Artery Revascularization, the organizations withdrew their support due to concerns about the interpretation of scientific evidence and challenges related to the guideline development process.

The process for writing what we believe were failed coronary disease "guidelines" (I still consider them recommendations) is being examined by STS and our AATS colleagues. We also have the unanimous, unsolicited support from the European Association for Cardio-Thoracic Surgery (EACTS) and other global cardiac surgical societies.

The principles by which guidelines should be created are: using best evidence, removing bias from their interpretation, and fielding solid expert teams. Many of the global surgical societies are aligned on this coronary disease guideline opportunity and we should all collaborate to address it. There is a great faith that we can get this right with time. We must.

What Is Happening at STS

STS is doing some impactful things. CEO Elaine Weiss has begun to enhance the STS team. She has added Charlie Simpson as Senior Vice President of Marketing and Communications. He joins Bill Seward and Grahame Rush in the senior leadership team.

Elaine also has begun to implement some of the organizational changes provided from a special Presidential task force that was started by Dr. Grondin. Led by Drs. Richard Prager and Doug Mathisen, the Task Force on Governance has offered operable suggestions and a modified organizational chart to make the Society more efficient and productive.

As we are hopefully emerging from COVID for the last time, the ability of and need for STS to refocus on key services for us—the surgeon members—has never been greater.

Over the next few months, we will be looking hard at the STS National Database to continue its evolution. It should be easier to enter data, more malleable to our needs, and in my humble opinion, it must begin to capture longer term data. It is the long-term data that differentiate surgical treatment from all others. We must figure out how to highlight that.

A productive educational retreat was held last summer, and there are many initiatives that we can begin to stage and address. Likewise, the STS advocacy arm remains crucial to the specialty, so we will continue to leverage our data and voice in Washington, DC.

Similarly, the opportunity for collaboration on a global scale is present. We are excited about the EACTS annual meeting in Milan this October and look forward to partnering with EACTS on other international meetings as well.

One of my late heroes, Dr. Alfonso Chiscano always signed his notes with "More to come." So in his honor, "More to come."

In Memoriam

The cardiothoracic surgery community recently lost one its revered leaders: Dr. Marian Zembala. This internationally renowned cardiac surgeon a past president of EACTS and former Health Minister of Poland—was known for his humility and passion. He will be greatly missed.

An Important Shift May Be Happening in CT Surgery

CONTINUED FROM COVER

Þ

"We have come a long way since the original STS membership survey in 1976, when a question on sex was not even included," the researchers stated in the study article.

'Long Way to Go with Diversity'

One of the first women to pursue a career in cardiothoracic surgery was Nina Starr Braunwald, MD. Dr. Braunwald achieved many other female firsts as well: She was the first woman to perform open heart surgery; the first woman to be certified by the American Board of Thoracic Surgery; and the first woman to be elected to AATS.

But more than 60 years after she entered the specialty, men still dominate the world of cardiothoracic surgery. This is despite the fact that women now outnumber men in US medical school enrollment-in 2019, for the first time, the majority of medical students were women (50.5%), according to the AAMC.

"We are in danger of being unable to evolve and grow as a specialty if we do not aggressively support and promote young and female surgeons," Dr. Hamilton said. "We must work harder to not just attract but also retain, support, and increase the visibility of female and other underrepresented trainees and surgeons for our specialty to find longevity and sustainability."

Among the four organizations-STS, AATS, EACTS, and ASCVTS-there are 788 female members. Interestingly, within this group, most practice academic medicine (60%), but only 5% are full professors.

"With such a dearth of female representation in the upper echelons of cardiothoracic surgery academia, it can be hard for young and especially female trainees to believe this is a specialty in which they can achieve success," said Dr Hamilton

In addition, Dr. Hamilton explained that cardiothoracic surgery has a "long way to go with diversity, both in terms of age and sex." Her team's research showed that the median age within the specialty is 63 years, and 64% of members are in the later stages of their careers.

"We are very unbalanced in terms of who makes up our surgical practice, and we are overwhelmingly male and old," said Dr. Hamilton. "We work in a fantastic field that medical students, both male and female, find exciting and unique, but we lose many of these candidates, especially women, along the way."

Why? Other research has shown that the perceived barriers for female trainees considering a career in cardiothoracic surgery include implicit and explicit bias, lifestyle factors, and lack of mentorship and role models. A study from Maria S. Altieri, MD, MS, et al. determined that cardiothoracic surgery was perceived as the least receptive specialty for women. Further, 57% of cardiothoracic surgeon respondents would advise only men to pursue a career in the specialty.

Cardiothoracic surgery holds a serious responsibility to change this narrative and create action on both individual and leadership levels, and additional research focusing on the disparities in cardiothoracic surgery is a must, Dr. Hamilton emphasized.

"We have made small strides in some areas, but plentiful opportunities exist for continued growth and development. It is crucial that we wake up to these issues," she said.

Coauthor Tom C. Nguyen, MD, from UCSF, added, "This is the first and largest global snapshot of our cardiothoracic surgery workforce. Understanding who we are is incredibly important as we shape the future of where we are going."



Characteristics of Female Members

Intraoperative Molecular Imaging: The Next Frontier in Thoracic Surgical Oncology

By Natalie S. Lui, MD, from Stanford University School of Medicine in California; and Sunil Singhal, MD, from the University of Pennsylvania in Philadelphia

Intraoperative molecular imaging (IMI) is a promising technology with several potential applications in thoracic surgical oncology.

The techniques involve an imaging agent, which is given intravenously and accumulates in the area of interest, and a fluorescence camera that detects the signal from the imaging agent intraoperatively. Imaging agents can be nontargeted or receptor targeted.

The ideal imaging agent is specific enough to produce a high mean fluorescence intensity (MFI) in the area of interest but not surrounding areas, yielding a high signal to background ratio (SBR).

The most commonly used nontargeted imaging agent is indocyanine green (ICG), the only FDA-approved near-infrared agent. At low doses, ICG imaging relies on vascular perfusion and has been used to define the intersegmental plane during segmentectomy, evaluate gastric conduit perfusion during esophagectomy, and identify the phrenic nerve during mediastinal mass resection.

At high doses, ICG relies on the enhanced permeability and retention effect and has been used for lung tumor identification; it is called TumorGlow to emphasize its higher dose and purpose. Clinical trials of IMI using ICG in patients undergoing surgery for lung cancer have shown good fluorescence signaling in tumors but also in peritumoral inflammation, demonstrating the advantage of receptortargeted imaging agents.

Receptor-targeted imaging agents are composed of a probe, which targets a receptor in tumors, conjugated to a dye, which fluoresces at a certain wavelength. For example, one IMI agent in clinical trials is OTL38 (On Target Laboratories in West Lafayette, Indiana). The probe is a folate analog, and the dye is S0456, a fluorophore in the near-infrared spectrum. The folate receptor is highly expressed in lung adenocarcinoma. Another IMI agent being studied is panitumumab-IRDye800. The probe is panitumumab, an anti-epidermal growth factor receptor (EGFR) antibody, and the dye is IRDye800, another fluorophore in the nearinfrared spectrum. EGFR is overexpressed in both lung adenocarcinoma and squamous cell carcinoma. Near-infrared dyes have been found to have greater depth of penetration compared to those in the visible spectrum.

One important application of IMI is tumor localization during sublobar resections, which are performed more frequently as we diagnose earlier stage disease. IMI techniques are particularly suitable for minimally invasive surgery, because the small incisions make it difficult for surgeons to palpate nodules. In addition, fluorescence cameras are built in to the newer endoscopic and robotic cameras and are easy for surgeons to learn.

There are several advantages to IMI tumor localization compared to our current methods of computed tomography (CT)guided or bronchoscopic marker placement for lung nodules that are small, part solid, or deep to the pleural surface. IMI avoids an additional procedure before surgery and does not require radiation exposure to the patient or surgical team. The methods have been shown to be faster than intraoperative frozen section. Since IMI agents are given systemically, surgeons may be able to find synchronous lesions not identified on preoperative CT scans.

Additional research is needed before IMI is standard in clinical practice. There are currently no approved IMI agents, although OTL38 is currently being studied in a randomized clinical trial of patients with lung adenocarcinoma.

Development of probes that target different types of tumors, and allowing multiple probes to be used at once, would be important advancements. A current limitation is depth of penetration, and new fluorophores and fluorescence cameras are needed for reliable identification of deeper tumors.



This example of IMI uses the imaging agent OTL38, with the lung nodule viewed in vivo under (A) white and (B) near-infrared light, as well as (C) ex vivo on the back table.

Another area of inquiry is evaluation of lymph nodes, which may be difficult to assess because they can take up the imaging agents even if not involved.

IMI is an exciting new technology with many potential applications for thoracic surgical oncology. Additional trials are needed before these techniques are approved for clinical use. ■

Annual Meeting Highlights

More than 2,800 professional registrants joined the Society's 58th Annual Meeting, January 29–30. To read articles from the STS Daily Bulletin, visit **sts.org/annual-meeting-archive**.

Plenary Sessions Celebrated Diversity, Bravery, Psychological Safety

STS 2022's plenary sessions allowed attendees to come together as a community in real time, with lectures exploring psychological safety in the workplace, the wartime lessons of a surgeon soldier, and the revelation that diversity can save academic medicine.



► Amy C. Edmondson, PhD, presented the Thomas B. Ferguson Lecture during STS 2022.

Henri R. Ford, MD, MHA, delivered the Vivien T. Thomas Lecture, in which he illustrated how disparities among Black and Latino populations in the United States have a precipitous effect on medicine—academic medicine in particular—and how solutions to existing health disparities will require a more racially, ethnically, and culturally diverse research workforce.

Racial disparities are dragging down efforts to address impending shortages of physicians in various specialties, Dr. Ford explained. He presented compelling statistics that reveal how education opportunities—afforded and missed—from childhood onward can have a cumulative effect on an individual's success.

Thomas B. Ferguson Lecturer Amy C. Edmondson, PhD, shared insights from her groundbreaking work on psychological safety in the workplace. She described how cultivating a team that feels they can openly and honestly speak up can create a professional environment that moves beyond "just get it right" and makes strides toward excellence. "We've got to learn to welcome the discoveries and do our very best to prevent the mistakes and accidents," Dr. Edmondson said.

A stance of humility and of openness to feedback can help foster a psychologically safe environment, she continued. "Any person in an operating room might see something that you miss. A patient's family member might notice that something seems wrong. Anyone's voice can be mission-critical."

During the C. Walton Lillehei Lecture, Cameron D. Wright, MD, Army Medical Corps, USAR (ret.), shared unforgettable experiences and lessons learned while caring for servicemembers and civilians.

Dr. Wright took attendees on a journey through his time served, painting vivid pictures of the physical and political climate during tours of duty in Iraq and Afghanistan. He also described several massive-severity wounds and hidden hazards that he "certainly never saw in surgical residency."

He expressed his pride in serving alongside his son James, a Marine Corps machine gunner, in Iraq, and he touted the bravery of military dogs, some of whom he cared for in the trauma bay, and how soldiers paid them tribute for their service. Dr. Wright honored fellow military surgeons and pioneers—including the lecture's namesake, C. Walton Lillehei, MD, PhD—and told stories of survivors as well as of those lost in conflict.

These lectures, along with a rich selection of additional STS 2022 content, is available via Annual Meeting Online—free to STS 2022 registrants and available for purchase to those who couldn't attend. Visit **sts.org/amonline** for more information.

By the Numbers





70 Countries represented

The most registrants came from the United States, Canada, South Korea, Japan, and Mexico.





11,017 Parallel and plenary session views



7.8 million Social media impressions for #STS2022 during the meeting

Presidential Address Urged Factoring Satisfaction into Success to Find the Right Fit

Sean C. Grondin, MD, MPH, FRCSC, closed his term as STS President with an address to STS 2022 attendees describing the evolving process of finding career fit. He relayed the concepts of understanding one's own metrics of success and satisfaction to an assembly of live attendees who joined virtually from across the globe.

In his presentation, Dr. Grondin shared lessons learned over his career related to professional success and satisfaction and how these two forces can work together to create professional "fit."

"A position can look good on paper and tick all the boxes," Dr. Grondin said. "You can be doing the job well; you can be a strong member of a strong team. It can all look good from the outside. But if it doesn't feel right, it likely isn't." He illustrated to the audience that in finding the right fit, surgeons need to not only rely on standard metrics of success that are often used for promotion, but also to consider other factors that contribute to one's own personal sense of fulfillment and satisfaction.

Dr. Grondin went on to describe that the price of poor fit and low levels of satisfaction can sometimes be high, and over time they may be among the contributing factors that lead to burnout among cardiothoracic surgeons.

An STS member for more than 20 years, Dr. Grondin reflected that being part of the STS community has contributed greatly to his overall career satisfaction. He expressed gratitude to a long line of surgeon mentors, including Douglas J. Mathisen, MD, who many



▶ In his Presidential Address, Sean C. Grondin, MD, MPH, FRCSC, shared important lessons learned during his career.

years ago challenged him to seek greater benefit from the organization by becoming more actively involved in the Society.

"Building a successful and satisfying career requires self-awareness and frequent selfevaluation," Dr. Grondin concluded. "It requires paying attention to the things that bring you satisfaction, and finding fit is worth the effort."

Award Winners Recognized for Outstanding Achievements



Distinguished Service Award

The Distinguished Service Award recognizes individuals who have made significant and farreaching contributions to STS and the specialty. This year, Joseph A. Dearani, MD, and Joseph E. Bavaria, MD, each were honored for their extraordinary efforts and steadfast service.



Earl Bakken Scientific Achievement Award Internationally recognized medical researcher Thomas K Waddell MD MSc PhD was

Thomas K. Waddell, MD, MSc, PhD, was presented with the Earl Bakken Scientific Achievement Award. Dr. Waddell is best known for his work in the fields of stem cell and regenerative medicine, lung and airway disease, and lung transplantation. The Bakken Award honors individuals who have made outstanding scientific contributions that have enhanced the practice of cardiothoracic surgery and patients' quality of life.



President's Award

Michael J. Pienta, MD, MS, from the University of Michigan in Ann Arbor, received the 2022 President's Award, for his paper, "Advancing Quality Metrics for Durable Left Ventricular Assist Device Implant." Selected by the STS President, this award recognizes an outstanding scientific abstract by a lead author who is either a resident or a surgeon 5 years or less in practice.

STS 2022 Presentations Combat Health Disparities with Hard Data

During the STS Annual Meeting, faculty tackled inequities among different racial, gender, and socioeconomic groups, not only in patient populations but among the surgeons who provide their care.

"There are opportunities for intervention in health care and policy in addressing disparities to access—and in particular, in workforce diversity issues and capacity building," said Hannah Valantine, MD, from Stanford University in California.

Dr. Valantine, who serves as chief officer for scientific workforce diversity at the US National Institutes of Health, gave an invited lecture during the Vivien T. Thomas Symposium, a series of STS Annual Meeting presentations which, in addition to the Vivien T. Thomas Lecture, aim to address challenges with diversity in cardiothoracic surgery.

The Symposium and Lecture are named for Thomas, a black surgical technician who was instrumental in the landmark 1944 "blue baby" operation at The Johns Hopkins Hospital in Baltimore, Maryland—and who, in accordance with segregationist restrictions, was employed as a janitor and wasn't allowed to use the front entrance of the hospital.

Alongside Dr. Valantine, three young researchers presented data underscoring why inclusion matters. Olugbenga T. Okusanya, MD, from Thomas Jefferson University in Philadelphia, Pennsylvania, outlined a study demonstrating that black race, Asian/Pacific Islander race, and insurance status had strong associations with patients deferring radiation therapy after surgery for non-small cell lung cancer. In the realm of clinical trials, Gianmarco Cancelli, MD, from Weill Cornell Medicine in New York City, New York, revealed that only nine of 51 recent cardiac surgery trials reported the race of participants and, when race was reported, only 11.2% represented racial minorities. Future trials should either guarantee a balanced inclusion of racial minorities or be specifically designed to enroll them, Dr. Cancelli said.



▶ Hannah Valantine, MD, Olugbenga T. Okusanya, MD, and others discussed important research during the Vivien T. Thomas Symposium.

It's not just patient inclusion that needs compulsory accountability, said Dr. Valantine, but also the physician workforce. She cited data illustrating that underrepresented scientists are more likely to study topics in disproportionately affected communities, and that in clinical research, quality is enhanced when the researchers are diverse themselves.

Physicians from underrepresented groups are twice more likely to work in underserved communities, and patients are twice more likely to adhere to medical advice when it's given by providers of their own race, Dr. Valantine explained. "That's where we need to take action," she said. "We've come to the point that, in order to fix these problems, we have to fix our institutions."

Also during this Symposium, Katherine A. Giuliano, MD, from The Johns Hopkins Hospital, presented survey results that illustrated subspecialization and work/life balance for women practicing cardiothoracic surgery. Among the key findings were that, while 94% of congenital surgeons reported practicing in academia, none of the women who responded were full professors.

Data tracking—and incentivizing—is the first step toward culture change at institutions, said Dr. Valantine. She urged keeping records and acting on those records within an institution's hiring and promotion policies, employing a central equity committee, and compelling department chairs to provide annual demographic data, with transparent reporting of positions and salaries broken down by gender and race. "It's amazing how competitive departments can get and how that leads to action," she said.

"Through a systematic way, you can identify candidates from a diverse talent pool," she continued. "Do not accept the old adage that there's nobody in the pool—we must not use that as the excuse for not having a diverse faculty or a diverse residency."



Access STS 58th Annual Meeting Online

If you were unable to attend the virtual Annual Meeting, or if you are looking for online learning opportunities, you now can purchase access to STS 58th Annual Meeting Online.

This digital product offers nearly 40 educational sessions—including practice changing research, thought-provoking lectures, and cutting-edge techniques and technologies—and the ability to earn up to 44.50 CME credits. Annual Meeting attendees receive free access to Annual Meeting Online. STS members who did not attend STS 2022 receive a discount—and Resident/Fellow and Medical Student Members can access for free!

More details are available at sts.org/AMOnline.



CAN WE DO MORE

Despite successful surgery, rates of disease recurrence are high in resectable NSCLC¹

Recurrence or death within 5 years after surgery^{1*†}:



Stage 1B

62%

Stage 2

76^{%‡} Stage 3

61

EGFR MUTATION TESTING IS GUIDELINE-RECOMMENDED IN YOUR PATIENTS WITH RESECTABLE STAGE IB-IIIA NSCLC. THE ONLY WAY TO KNOW EGFR MUTATION STATUS IS TO TEST FOR IT.² DISCOVER HOW AT PostResectionPlan.com

*Based on Pignon et al (2008), a pooled clinical analysis of postoperative cisplatin-based chemotherapy vs no chemotherapy or cisplatin-based chemotherapy plus postoperative radiotherapy (administered sequentially) vs postoperative radiotherapy alone in 4584 patients with completely resected NSCLC.¹ [†]In a separate study, the 2016 IASLC database shows that 5-year survival rates in NSCLC are as follows: stage I, 68-92%; stage II, 53-60%; stage III, 13-36%; stage IV, 0-10%.³ [‡]In stage III resectable patients.

EGFR, epidermal growth factor receptor; IASLC, International Association for the Study of Lung Cancer; NSCLC, non-small cell lung cancer.

References: 1. Pignon JP, Tribodet H, Scagliotti GV, et al; LACE Collaborative Group. Lung Adjuvant Cisplatin Evaluation: a pooled analysis by the LACE Collaborative Group. *J Clin Oncol.* 2008;26(21):3552-3559. **2.** Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Non-Small Cell Lung Cancer V.6.2021. ©National Comprehensive Cancer Network, Inc. 2021. All rights reserved. Accessed September 30, 2021. To view the most recent and complete version of the guideline, go online to NCCN.org. NCCN makes no warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way. **3.** Goldstraw P, Chansky K, Crowley J, et al; IASLC. The IASLC Lung Cancer Staging Project: proposals for revision of the TNM stage groupings in the forthcoming (eighth) edition of the TNM classification for lung cancer. *J Thorac Oncol.* 2016;11(1):39-51.



The Information Center at AstraZeneca 1800 Concord Pike, PO Box 15437, Wilmington, DE 19850-5437 ©2021 AstraZeneca. All rights reserved. US-59775 11/21



Coronary Conference Early Bird Registration Ends April 14

The 2022 STS Coronary Conference, June 4–5 in Ottawa, ON, Canada, will connect attendees with advanced educational content on the latest techniques for coronary artery bypass grafting (CABG) surgery. The agenda will feature didactic presentations, "How I Do It" video sessions, practical tips and tricks, and case-based panel discussions.



STS **Coronary Conference**

Presented by experts from around the globe, session topics will focus on the current state of revascularization, conduit selection and harvest, graft configuration, off- and onpump CABG, endarterectomy, low ejection fraction, minimally invasive CABG, myocardial revascularization, CABG and fractional flow reserve, and postoperative medical therapy.

"This is the first STS conference entirely dedicated to advanced coronary artery surgery," said program director Marc Ruel, MD, MPH, FRCSC, from the University of Ottawa Heart Institute in Ontario, Canada. "It comes at the right time for cardiac surgeons, as so many new advances have taken place in coronary surgery over the last few years. The STS Coronary Conference will be very interactive and provide surgeons and trainees with practical tips and tools to enhance their skills, knowledge, and the overall care of their patients with coronary artery disease."

Early bird discounts are available until April 14. For more information, see **sts.org/coronaryconf**.

STS Urges Participation in Two Congenital Surveys

Congenital and adult cardiac surgeons should be on the lookout for two important surveys: The 5-year Congenital Heart Surgery Practice Survey exploring surgeons' practice landscapes, workloads, and satisfaction, and another that will help a growing and underserved population—adults with congenital heart disease (ACHD).

"Responding to these surveys is vital to helping us improve care for patients and advocate for the surgeon workforce," said STS President John H. Calhoon, MD. "It's important to have accurate, inclusive representation of our community. The way to do that is for each recipient to participate, and to participate promptly."

In early April, STS members should receive an email containing a SurveyMonkey link for the STS Congenital Heart Surgery Practice Survey. The survey will continue for 6 weeks—recipients are encouraged to follow the link in the email and answer questions as fully as possible. The second survey, co-sponsored by STS and the Congenital Heart Surgeons' Society, is designed to help define the adult congenital patient, while also determining how to organize data that are captured for ACHD within the STS National Database.

Adult cardiac and congenital cardiac surgeons in the US who participate in the Adult Cardiac Surgery Database, Congenital Heart Surgery Database, or both, should have received this survey via email in mid-March. There's still time to respond—the deadline is April 12.

For more information about these surveys, contact marketing@sts.org.



It's Time to Assemble a Team for CT Surgery Masters Showdown

Surgical residents are encouraged to find a partner and join the 2022 CT Surgery Masters Showdown, a Jeopardystyle competition of cognitive skills.

Two-person teams of residents will face off against one another in a test of knowledge in five cardiothoracic surgery categories cardiac, congenital, thoracic, history of the specialty, and decision making. When a North American champion emerges, they'll compete against the winning European team in a final competition at the 2023 STS Annual Meeting.

Registration opens June 1, and each individual participant will need to take an initial online qualifying exam. For more information, visit **sts.org/showdown**.

Robotic Cardiac Workshop Offers State-of-the-Art Team Training

The STS Workshop on Robotic Cardiac Surgery is taking place April 21–22 in Atlanta, Georgia. Specially designed for surgical teams, this 2-day workshop—being held at a state-of-the-art robotics facility will provide hands-on training in robotic mitral valve repair, coronary bypass, and more. The world-renowned instructors include T. Sloane Guy, MD, MBA, Husam H. Balkhy, MD, Joanna Chikwe, MD, FRCS, Joseph A. Dearani, MD, Vinay Badhwar, MD, Stephanie L. Mick, MD, Marc Ruel, MD, MPH, FRCSC, and many others.

Registration slots and hotel blocks are available on a first-come, first-served basis. Visit **sts.org/roboticcardiac** for more information.

Annals Readers Favor Content on Unethical Research, Blood Management, Exercise Therapy

The most-downloaded articles on *The Annals* of *Thoracic Surgery* website in 2021 focused on a wide variety of topics, including ventricular septal defects, the aorta, unethical research studies, and mechanical heart valves.

Interestingly, one of the top articles—which highlights exercise therapy after coronary artery bypass grafting surgery—is among the most downloaded papers year after year. Others, such as the "Update to the Clinical Practice Guidelines on Patient Blood Management," published in September 2021, demonstrate the continued importance of practice guidelines.

A subscription to *The Annals* is a benefit of STS membership. Log in to read any of these articles at **annalsthoracicsurgery.org**.

Coming Soon! Later this spring, the new openaccess journal from STS—*Annals of Thoracic Surgery Short Reports*—will issue a call for papers, which may include short-form original research related to clinical advances, current surgical methods, controversial topics and techniques, case and image reports, and more.



Visit www.journals.elsevier.com/ annals-of-thoracic-surgeryshort-reports to follow the updates.

Title	Number of Downloads in 2021	Date of Publication
Classification of Ventricular Septal Defects for the Eleventh Iteration of the International Classification of Diseases—Striving for Consensus	9,098	Nov. 2018
Surgical Treatment of the Dilated Ascending Aorta: When and How?	8,907	June 1999
Adjust for Multiple Comparisons? It's Not that Simple	7,983	May 2016
The St. Jude Medical Cardiac Valve Prosthesis: A 25-Year Experience with Single Valve Replacement	6,343	Mar. 2005
Publication of Unethical Research Studies: The Importance of Informed Consent	6,138	Feb. 2003
STS/SCA/AmSECT/SABM Update to the Clinical Practice Guidelines on Patient Blood Management	5,949	Sept. 2021
Safety of Magnetic Resonance Imaging in Patients with Implanted Cardiac Prostheses and Metallic Cardiovascular Electronic Devices	4,985	June 2011
Bilateral Cervical Lung Hernia with T1 Nerve Compression	4,958	Feb. 2006
Exercise Therapy after Coronary Artery Bypass Graft Surgery: A Randomized Comparison of a High and Low Frequency Exercise Therapy Program	4,424	May 2004
Mechanical Heart Valves: 50 Years of Evolution	4,020	Dec. 2003

Don't Miss These Popular Podcast Episodes

The STS Surgical Hot Topics podcast generated 55,700 downloads in 2021, helped by the addition of a new series, "The Resilient Surgeon," which features game changers in the wellness space who describe evidencebased practices and real-world strategies to help reduce burnout and achieve optimal performance. The popular "Same Surgeon, Different Light" podcast also returned in 2021 with a second season. Of the 46 Surgical Hot Topics episodes published last year, the most downloaded were:

- Beyond the Abstract: Women in Thoracic Surgery Scholarship—Impact on Career Path and Interest in Cardiothoracic Surgery (June 30, 2021)
- The Resilient Surgeon: Dr. Robert Lustig (September 3, 2021)
- The Resilient Surgeon: Dr. Monique Valcour (July 9, 2021)
- The Resilient Surgeon: Wendy Wood (August 6, 2021)
- Same Surgeon, Different Light: Dr. Ourania Preventza (March 5, 2021)

Already in 2022, STS has published several podcast episodes, including "Same Surgeon, Different Light" interviews with Susan D. Moffatt-Bruce, MD, PhD, MBA, Jacques Kpodonu, MD, Gail E. Darling, MD, Raja M. Flores, MD, Jennifer C. Romano, MD, MS, Sharon Ben-Or, MD, and Allan Pickens, MD. The final episode in Season 2 of Same Surgeon, featuring Edward P. Chen, MD, will air at the end of April.

Season 2 of "The Resilient Surgeon" will launch this summer.



All episodes are available at sts.org/podcast.

Former Guatemalan Vice President Is a Legendary Heart Surgeon

A witness to historic surgical advancements, a champion of tide-turning social reform, and the only physician to have served as Vice President of Guatemala, senior STS Member J. Rafael Espada, MD, devotes his days to repairing hearts and reforging the heart of his nation.

Since he began practice in the mid-1970s at the Methodist DeBakey Heart Center in Houston, Texas, and teaching cardiothoracic surgery at Baylor College of Medicine, Dr. Espada felt Guatemala tugging him back home.

His 3-decade career in the US began with a residency in general thoracic surgery at Baylor—where Dr. Espada met the hospital's namesake and the man who had inspired him to practice medicine, Michael E. DeBakey, MD.

Dr. DeBakey was one of the first surgeons to perform coronary artery bypass surgery and among the first to successfully employ a left ventricular bypass pump; he's also known for his pioneering work in the development of artificial hearts.

"I remember when I was a kid, seeing an issue of *Look* with Dr. DeBakey on the cover," Dr. Espada said. "That magazine, along with *Life*, was our information line from the US at the time. I knew then that I wanted to do cardiovascular surgery. It was a new field, one that hadn't yet reached Guatemala."

After an accelerated primary and secondary education, Dr. Espada enrolled as a medical student at Universidad de San Carlos de Guatemala in Guatemala City. He described himself as "kind of active politically," and through grassroots advocacy, he developed relationships with international emissaries. In his first year of training, he received a unique invitation. "The US Ambassador asked me one day if I'd been in the States," he recalled. "I said no, we're not very popular there—this was 1965, just after the time of the '61 Castro invasion. He said they were going to give scholarships to four medical students who were members of the association of medical schools, funded by Kodak and Eli Lilly. They would send us to Washington, DC, for 6 months to see how the government worked."

Dr. Espada accepted, and while he was in New Orleans visiting Tulane Medical School and Charity Hospital, he picked up a letter directing him to the office where he'd begin his internship. It was the office of Robert F. Kennedy, US Senator from New York.

"I was there with three other kids from different parts of the world, one from Africa, two from Ser Asia. I was lucky to have Bobby Kennedy—he helped me to look at injustices in power, and to see that I was responsible for helping others."

Dr. Espada, who was raised by a single mother amid stigma and poverty—he didn't meet his father until he was 55 years old—recalled a tapestry of "two Guatemalas," one where the rich enjoyed sheltered living flush with new technology, while the country's poor felt the sting of the nation's corruption, tax evasion, money laundering, and violence.

Over the next 30 years, by then working and living in Houston with his wife and daughters, Dr. Espada made monthly trips back to Guatemala. He used that time to perform free surgeries for children and adults who had complex cardiothoracic conditions but limited access to sophisticated health care.



Senior STS Member J. Rafael Espada, MD, serves as senior academic surgeon at UNICAR, the Guatemalan Heart Institute.

Dr. Espada was part of a founding community that established a cardiac program at Roosevelt Hospital, then Guatemala's largest health care institution. He would perform up to 10 vital surgeries during one trip—and he provided advanced training to the surgeons in residence so that they could perform even more.

With the assistance of the Guatemalan Ministry of Public Health, the cardiac program grew from a six-bed charitable operation to become UNICAR, the Guatemalan Heart Institute, which since its establishment in 1989 has expanded to serve thousands of patients each year, not only in Guatemala, but from neighboring Honduras, Belize, and Nicaragua. Dr. Espada's training and mentorship continued to bolster the surgical staff, leaving them better equipped with each visit. "It's only a 2-hour flight," he said. These monthly trips didn't seem to be enough for Dr. Espada. "Every year I would say to my colleagues at DeBakey, 'I want to move back.' They said, you're crazy, it won't be good for training; the technologies are not current there; the facilities are very poor."

But that's precisely why he wanted to return to flatten the frontiers of those two Guatemalas. "We have a prosperous part with tall buildings and Porches going around," he'd said in a *New York Times* interview in 2007. "Then, 10 blocks away, there's misery."

That year, Dr. Espada moved permanently home. And, recognized as a sort of folk hero in his native country—the doctor who performs heart surgeries for the needy he successfully ran for Vice President of Guatemala. He served in office 2008 to 2012 alongside President Álvaro Colom, on a platform dedicated to boosting the nation's economy, strengthening international relations, and improving quality of life for its underrepresented citizens. Dr. Espada spoke fondly of meetings and correspondence with world leaders, including then-Secretary of State Hillary Clinton and Presidents Barack Obama and Joseph Biden, and of the importance of maintaining relationships across countries to identify arenas—particularly in health care, public spending, and climate action—where common ground can lead to programs that uplift people.

Many in the specialty know Dr. Espada as an established and highly skilled cardiothoracic surgeon in Houston, but may not be aware of the true extent of his influence, said Douglas E. Wood, MD, FRCSEd, from the University of Washington in Seattle. "Dr. Espada has initiated and helps to lead a private foundation that provides education and health care for rural Mayan children. His efforts have affected the lives of millions of people within Central America."

"Dr. Espada's selfless leadership transcends his position as vice president of Guatemala and is an inspiration for each of us as we consider the ways we may make an impact on the world," added Dr. Wood. In addition to serving as dean of the School of Health Sciences at the Mariano Galvez University of Guatemala, a consultant at the Social Security Systems of Guatemala, and as UNICAR's senior academic surgeon, Dr. Espada is vice chair of an international think tank, Global Financial Integrity, that uses datadriven analysis to expose illicit financial flows, corruption, illicit trade, and money laundering.

Guatemala has stringent term limits and party restrictions in place to safeguard against dictatorship and nepotism—lessons learned from a tumultuous past, though these limitations play out in intriguing ways. For example, former President Colom divorced his wife, Sandra Torres, in 2011, to give her a shot at the presidential election. Dr. Espada has waited out a similar situation, noting that he couldn't serve in office because a family member was serving.

But he isn't done with politics yet. Over the noise and bustle of the heart center, where he still operates at age 78, he confided that some political groups have asked him to run for President in the 2023 election.

"I can't say which party yet, because it's illegal," he said.

In his aspirations for the future, Dr. Espada emphasized that leaders must pay attention to young voices. The mentality of young people is changing; in fact, the minds of young people are changing, he insisted. His curriculum includes a presentation he calls "New Brains, New Education," in which he describes how the thought processes of younger generations are wired differently and how educators can evolve their teaching plans to fit newer generations' learning styles.

"It's not their job to accommodate older people's way of thinking," Dr. Espada said. "It's our responsibility to adapt to theirs."



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



STS Members and surgical pioneers E. Stanley Crawford, MD, Michael E. DeBakey, MD, John W. Kirklin, MD, and Dr. Espada came together at a Houston meeting in 1988.

THE THORACIC SURGERY FOUNDATION

TSF Fun Runners Uplift Virtual Community, Fund CT Surgery Research

Surgeons, residents, medical students, perfusionists, industry representatives, and STS staff showed off their best times and team spirit to raise \$33,000 for surgical research and innovation during the Thoracic Surgery Foundation (TSF) Fun Run & Walk in conjunction with STS 2022.

Participating solo or as part of teams, 113 registrants ran, walked, or rolled a 5k course, many bringing along children in strollers or athletic pets. They shared their finish times and photos on the TSF Fun Run leaderboard and on social media with the hashtag #TSF5K.



► The Fun Run was a family affair for Matthew A. Steliga, MD, with Allie, Claire, Margot, and Ruby at Rattlesnake Ridge in Arizona.

Funds raised through donations and pledges will benefit TSF, the Society's charitable arm, and will support grants and scholarships that will enable the brightest minds in cardiothoracic surgery to perform research, education outreach, and quality improvement programs in the US and abroad.



An all-virtual STS 2022 enabled participants like Andrew C. Chang, MD, and his well-geared companion to join from wherever they hail, even in "sunny Michigan."

Awards and accolades were given to record-setting individuals, including "fastest woman" Emily Wood and "fastest man" Dov Gertzulin. Wood also was part of the fastest participating team, UW Stamina, led by team captain Douglas E. Wood, MD, while Gertzulin ran with the largest team, Palisades Running Group, under captain Andrea Wolf, MD.

The top fundraising team was the Cardinal Chest Cutters, led by captain Leah M. Backhus, MD, MPH. Other notable winners were the Thoracic Surgery Medical Student Association team led by Zach Brennan, the Women in Thoracic Surgery team led by Lauren C. Kane, MD, and the Medtronic corporate team under Amy Devries.

"I'm always proud to see how enthusiastically the STS community participates in this event," said STS Immediate Past President Sean C. Grondin, MD, MPH, FRCSC. "It shows their commitment to the community, to supporting the specialty, and to literally 'walking the walk' when it comes to cardiovascular health."

New Leadership, Bold Award Increases Welcomed in February

During its February meeting, the TSF Board of Directors appointed Joseph A. Dearani, MD, to succeed Joseph E. Bavaria as TSF President. Virginia R. Litle, MD, will serve as the new Vice President, and Anthony L. Estrera, MD, as Treasurer. In addition, the Foundation dramatically elevated funding for three critical research awards beginning in 2023. The STS Research Award increased from \$100,000 to \$180,000; the TSF Research Award increased from \$100,000 to \$170,000; and the TSF Resident Research Award increased from \$80,000 to \$120,000.

Since its inception in 1998, TSF has awarded more than \$23 million in grants for cardiothoracic surgery research and education. Learn more at **thoracicsurgeryfoundation.org**. ■



▶ Dr. Backhus captained the Cardinal Chest Cutters, the top fundraising team for the 2022 TSF 5K Fun Run.

Mark J. Mever

Thank You 2021 STS-PAC Contributors

PLATINUM ►

\$2,500-\$5,000 Vinav Badhwar Joseph E. Bavaria Devinder S. Bhatia John H. Calhoon Edward P. Chen Joseph C. Cleveland Jr. Anthony P. Furnary Mark A. Groh J. Robert Headrick Dawn S. Hui Karen M. Kim Thomas E. MacGillivray Keith S. Naunheim Raymond L. Singer Alan M. Speir Ibrahim Sultan Wilson Y. Szeto Vinod H. Thourani James S. Tweddell Thomas K. Varghese

GOLD ►

\$1,000-\$2,499 Kevin D. Accola Michael A. Acker Marvin Douglas Atkins Jr. Hugh G. Auchincloss Emile A Bacha Carl Lewis Backer Bruce Allen Bollen Mary J. Boylan Scott M. Bradley Anthony D. Caffarelli Alfred S. Casale Richard S. D'Agostino James Edward Davies Jr. George P. Davliakos Joseph A. Dearani Kim F. Duncan Aaron W. Eckhauser Melanie A. Edwards Richard M. Engelman Anthony L. Estrera Gregory P. Fontana David A. Fullerton Iohn & Galat Arnar Geirsson Joshua B. Goldberg James D. Hall Walter H. Hallorar John R. Handy Jr. David A. Heimansohn Robert S.D. Higgins John A. Howington George Chad Hughes IV Kenneth & Kesler Jesse L. Madden lames R Martin Douglas J. Mathisen Thomas L. Matthew Michael C. Maunev John E. Mayer Jr. Patrick M. McCarthy Robert J. McKenna Jr. Rita C. Milewski Daniel L. Miller Kevin B. Miller Cullen D. Morris Nabil A. Munfakh Tom C. Nauven Patroklos S. Pannas Bernard J. Park G Alexander Patterson

Ronald L. Pohl Thomas R. Pollard Richard L. Prager Jerry W. Pratt John D. Puskas V. Sreenath Reddy Robert I Robison Jennifer C. Romand Joseph F. Sabik III Mark E. Sand James R. Scharff Thomas A. Schwann Steven M. Schwartz Esfandiar Shafii Scott C. Silvestry James D. St. Louis Vaughn A. Starnes Cynthia N. Steimle Victor F. Tedesco IV Robert F. Tranbaugh Fric Vallieres Elaine C. Weiss Douglas E. Wood David W. Wormuth Tom C. Wozniak Stephen C. Yang Joseph B. Zwischenberger

SILVER ► \$250-\$999 Gorav Ailawadi Shahab A. Akhter Mark S Allen Petros V. Anagnostopoulos Shahriyour Andaz George John Arnaoutakis Constantine L Athanasuleas Pavan Atluri Erle H. Austin III Fouad M. Azoury Peter L. Baay Frank A. Baciewicz Jr. Nataliya Bahatyrevich* Faisal G. Bakaeen Joseph W. Baker William A. Baumgartner Thomas M Beaver Daniel L. Beckles Edward M. Bender Steven Bibevski Oliver A. A.R. Binns Thomas J. Birdas Shanda H. Blackmon William M. Boedefeld II Daniel J. Boffa Linda J. Bogar Michael E. Bowdish Frederick O. Bowman Jr. Preben Brandenhoff Ross M. Bremner Alexander A. Brescia* William T. Brinkman Paul Sherman Brown Jr E. Curtis Bryan II William Burfeind Jr. Lamar J. Bushnell Tung H. Cai Andrea J. Carpenter John B. Casterline DuyKhanh P. Ceppa Andrew C. Chang Subhasis Chatterjee E. J. Chauvin Aaron M. Cheng

William C. Conner Mark W. Connolly John V Conte Scott Cook Hannah Copeland Traves D. Crabtree Juan A. Crestanello Greg A. Crooke Robert J. Dabal David A. D'Alessandro Elizabeth A. David Hakob G. Davtyan Jonathan D'Cunha Abelardo DeAnda Jr. Malcolm M. DeCamp Jr. Gregory K. Dedinsky G. Michael Deeb Alphonse Del ucia III William P. Deschner Stephen J. Dewan J. Michael DiMaio Daniel H. Drake Andrew M. Duda Brett F. Duncan* Gansevoort Hurlbut Dunnington Jr. Cornelius M. Dyke James R. Edgerton Afshin Ehsan Cherie P. Erkmen Robert S. Farivar Felix G. Fernandez Hector Aleiandro Flores Richard K. Freeman Divyakant B. Gandhi Scott M. Goldman Daniel J. Goldstein David Bennet Graham David Tyler Greenfield Gary Grosner Frederick L. Grover Sr. Kendra J. Grubb Mark David Guadagnoli Julian Guitron T. Sloane Guv Jonathan W. Haft Michael E. Halkos Ionathan A Hammond Ir Zane T. Hammoud John L. Harlan Steven D. Harrington Lacy E. Harville III Sabetsabet W. Hashim Jeremiah A. Hayanga Meghana Ram Kunkala Helder' Jeremy L. Herrmann Anthony A. Holden William L. Holman Robert L. Hooker Jr. Charles B. Huddleston S. Adil Husain Jeffrev P. Jacobs Harsh Jain Arminder Singh Jassar Robert G. Johnson Scott D. Johnson* Clayton Allen Kaise Louis T. Kanda Lauren Kane Kushaqra Katariya Mario W. Katigbak William Brent Keeling Rosemary F. Kelly Kamal G. Khalil

Robbin G. Cohen

Junaid H. Khan Sandeep Jitendra Khandhar William C. Kitchens Svetlana Kotova Alexander I Kraev Robert Scott Kramer Anita Raquel Krueger Paul A. Kurlansky Rudy P. Lackner Kiran H. Lagisetty Stephen J. Lahev Raj B. Lal John J. Lamberti Michael Lanuti Scott A. LeMaire James M. Levett Sidney Levitsky Virginia R. Litle Kevin W. Lobdell Jason M. Long Douglas Lowell Frank J. Lutrin Mitchell J. Magee Michael L. Maggart George J. Magovern Jr. lan A. Makev Jose M. Maguilan Robert J. March Daniel Marelli John G. Marklev Daniel P. McCarthy James B. McClurken Nathaniel R McElhanev Jeremy R. McGarvey Walter H. Merrill Robert Ezra Merritt HelenMari Louise Merritt-Genore Bryan F. Meyers Scott Millikan John D. Mitchell Daniela Molena Rohinton J. Morris Keith D. Mortman Joseph Motta Anthony L. Moulton Ashok Muralidaran Michael C. Murphy Alvkhan S. Nagji Cesar Nahas Jeffrey H. Newman Duc Q. Nguyen Francis C. Nichols III Todd E. Nixon Marcos A. Nores James E. O'Brien Jr. Olusola Oduntan John C. Ofenloch James P. O'Rourke Mark B. Orringer Francis D. Pagani Gaetano Paone Kalpai R. Parekh Sara Jane Pereira Yaron Perry Joseph D. Phillips Allan Pickens Mark D. Plunkett Veera Porapaiboon Eric R. Presser Ourania A. Preventza Cemil M. Purut Joe B. Putnam Jr. Xingyi Que Siva Raia

Mahesh K. Ramchandani M. Paul Randhawa Rishindra M. Reddy Matthew Reinersman Jeffrey B. Rich Fric F. Roselli Todd K. Rosengart Rawn Salenger Christopher T. Salerno Sanjay A. Samy Guillermo Sanabria Edward B. Savage Frank G. Scholl Steven S. Scott Frank W. Sellke Craig H. Selzman William E Seward David M. Shahian Mahesh S. Sharma Christian Shults William Benjamin Smith Ernesto R. Soltero Joshua R. Sonett Russell F. Stahl M. Denton Stam Sandra L. Starnes Brvan M. Steinberg Ram Kumar Subramanyan Thoralf M. Sundt Dominic J. Tedesco Neil J. Thomas Mathew Thomas Jess L. Thompson III Betty C. Tong Bruce Toporoff Reid W. Tribble Andy C. Tsen Elaine E. Tseng Ara A. Vaporciyan Jeffrey Scott Veluz Edward D. Verrier Salim M. Walji Jason Morgan Wallen Garrett L. Walsh Alison F. Ward* T. Benton Washburn Jr. Glenn J.R. Whitman Richard I. Whyte James K. Wu Bo Yang Sai S. Yendamuri Sanford M. Zeigler

BRONZE ►

\$1-\$249 Muhammad Aftab Douglas Anderson* Mara B. Antonoff Arman Arghami Ralph W. Ave Leah M. Backhus Craig J. Baker Charles T. Bakhos Keki R. Balsara Nicholas R. Beek Mark F. Berry Amit Bhargava David Blitzer Iordan P Bloom* Natalie Boden Peter J. Bolan Zachary Brennan* Lisa M. Brown Alfred John Casillan Edward Y. Char

Joshua Chan* Andrei Churyla Melissa Clark George Michael Comas David Tom Cooke Garrett N. Covan* Reza Robert Dabir Thomas A. D'Amico Uday K. Dasika Benjamin C. Degner John R. Dein Krish C. Dewan* Elisabeth U. Dexter Stephen E. D'Orazio Adam Doty Robert D. Dowling Thomas M. Egan Daniel T. Engelman Daniel H Enter* Loretta Erhunmwunsee James I. Fann Farhood Fariah G. Reza H. Farsad Victor A. Ferraris Andrew C. Fiore Michael Sol Firstenberg Stephanie M. Fuller Robert M. Gasior Ravi K. Ghanta Barry Gibney Erin A. Gillaspie Thomas G. Gleason Luis Armando Godoy* Ramavva U. Gowda John G. Grieco Mateo V. Guanzon Emily C. Guderian Robert A. Gustafson George B. Haasler Irbaz Hameed' Clif S. Hamilton Jr. Baron L. Hamman Robert B. Hawkins' Kimberly A. Holst* Frederick M. Howden Mark D. Jannettoni Robert D.B. Jaquiss Mark R. Katlic Minoo N. Kavarana John Kennedy III* Michael S. Kent John M. Kessinger Onkar V. Khullar Ahmet Kilic Nicholas T. Kouchoukos Beniamin David Kozower Seth Brandon Krantz Carole Krohn Raymond Lee David Glenn Lehenbauer Jules Lin Philip A. Linden Stanley K. Lochridge Clauden Louis* Natalie S Lui Venkat R. Machiraiu Michael P. Macris Trent Magruder* Yashwanth Makkapati* Aubyn Marath Curtis C. Marder M. Blair Marshall Linda W. Martin G. Robert Mason Fenton H. McCarthy

Kelly McCone

Jeffrey C. Milliken Timothy Scott Misselbeck lason I. Muesse Sudish C. Murthy John C. Myers Michael Nathanson Amrit P. Naya James H. Nee Jennifer S. Nelson Norman A. Odyniec J. Edward Okies Anna Olds* Ana M. Parsee Himanshu J. Patel Ariun Pennathur Marvin D. Peyton Matthew D. Pichert* Ross M. Reul John W Rhee Michael P. Robich Matthew A. Romano Evan P. Rotar* John R. Rowles Robert M. Sade John D. Sadoff Peter Sassalos Stefano Schena Dean P. Schraufnagel* Alexander Bradley Schutz* Christopher W. Seder Annie W. Shrover Saket Singh* I Marvin Smith III Benjamin Franklin Smood* Howard Song Philip J. Spencer Elizabeth H. Stephens Randy Michael Stevens Raymond J. Strobel* Lars G. Svensson Paul Chun Yung Tang John F. Tejeda John O. Thayer Jr. Norman W. Thoms Christopher W. Towe Gabriele Trainvte Gonzalo M. Vargas Julio C. Vasquez Michael J. Walker Tyler J. Wallen* Tessa Watt* Warren D. Widmann Daniel Wilkinson* Seth Wolf* Stephanie G. Worrell David A. Wyatt Courtney Yohe Savage Brittany A. Zwischenberger



*STS Resident/Fellow or Medical Student Member

Medicare Payment, CMS Policies: What Cardiothoracic Surgeons Need to Know

Payments for individual physician services have been regulated for nearly 3 decades by policies that are designed to control against dramatic increases in Medicare spending. The following are existing issues that likely will impact proposals for Medicare reimbursement in the coming years.

Budget Neutrality

Changes to Medicare reimbursement go into effect every January 1 based on reallocation of relative value units (RVUs), which represent estimates of physician work, practice expense, and malpractice. Adjustments to RVUs that result in a cumulative change of more than \$20 million must be budget neutral, meaning that increased payment for one service or procedure must result in a proportional decrease for others.

Base Updates to the Conversion Factor

Medicare payment is the product of RVUs and the Medicare "conversion factor," which the Centers for Medicare & Medicaid Services (CMS) sets annually. When the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) was first passed, it provided base updates to the conversion factor through the 2019 payment year to encourage providers to migrate from the Merit-based Incentive Payment System to Alternative Payment Models (APM).

Beginning in payment year 2026, MACRA will provide small base updates to the conversion factor that will differ based on whether CMS views the provider as delivering the service under the jurisdiction of MIPS (0.25%) or under participation in an Advanced APM (0.75%). Although the Society's efforts to create its own APM have been unsuccessful, STS negotiated to have its quality measures included as alternative measurement options in the CMS Bundled Payments for Care Improvement–Advanced program.

E/M Adjustments

Medicare currently pays surgeons and other specialists a single fee (global payment) covering the costs of the procedure plus related care within a 10- or 90-day timeframe.

In 2015, CMS declared that postoperative visits included in the global surgical reimbursement were not taking place and proposed to eliminate global surgical payment. As a result of STS advocacy demonstrating that the elimination of global surgical payments would undermine quality of patient care and increase the administrative burden on cardiothoracic surgeons, Congress passed legislation that required CMS to collect data on global codes before making a change.

CMS still claims to be studying this issue while continuing to publicly express doubt that all postoperative visits included in the global period valuation are performed.

In 2020, CMS increased evaluation and management (E/M) payments for in-office visits but did not make the analogous changes to similar services included in the globals. The agency also created an add-on code that could be used to increase the relative value of an in-office E/M visit even more. The surgical community advocated against these changes, and Congress required CMS to postpone payment for the add-on code until at least 2024.

Because these changes are subject to budget neutrality requirements, cardiothoracic surgeons not only miss out on the increase commensurate with the E/M adjustments and add-on payments, but end up paying for the increase out of their own reimbursement.

Inflation

Unlike other aspects of Medicare reimbursement, Medicare Part B reimbursement has not been updated for inflation. This year, the absence of an inflationary update could be devastating as there already has been dramatic inflation, and the global economy is in tremendous flux.

Help Fight to Preserve Medicare Reimbursement Rates

Cardiothoracic surgeons will experience a 2% pay cut in 2022 (averaged over 12 months)—even as the health care system begins to recover from the COVID pandemic. Alarmingly, these cuts resulted from budgetary policies impacting the entire health care system, not just the Medicare Part B policies described above.

The specialty can expect cuts from any or all of these policies in the coming year. The voices of all STS members will be needed to defend against this swelling crisis.

If you are interested in getting involved in advocacy efforts, plan to attend the 2022 STS Advocacy Conference in Washington, DC, September 13–14. Additionally, to have a direct impact on legislative issues that affect cardiothoracic surgeons, sign up for the Key Contact Program at **sts.org/keycontact**.

For more information, contact the Government Relations Department at advocacy@sts.org.

Actual and Projected Conversion Factor \$70 \$6**5** \$60 **Conversion Factor** \$55 \$50 \$45 \$40 \$35 \$30 1998 2002 2006 2010 2014 2018 2022 2026 2030 Conversion Factor Index if Updated for Inflation Historical and Current Conversion Factor

▶ This figure illustrates the conversion factor benchmarked against inflation.

Key Contact of the Year Encourages Members to Get Involved



The Society's Key Contact of the Year Award recognizes STS members who have gone above and beyond to advocate for the specialty. 2021 recipient Raymond Strobel, MD, MSc, an integrated cardiothoracic surgery resident at the University Virginia in Charlottesville, shared his thoughts on the importance of grassroots advocacy, his experience working with legislators, and why he believes his STS colleagues must become involved in advocating for the specialty.

Why are you involved in STS advocacy? Why is it so important?

The health of our nation depends on informed policy that ensures access to cardiothoracic surgical expertise for all Americans. My goal in participating in STS advocacy is to provide a surgeon's perspective on issues facing our specialty and patients, with the hope that this will improve health policy.

How has your experience been serving on the STS Workforce on Health Policy, Reform, & Advocacy?

My involvement on the STS Workforce on Health Policy, Reform, & Advocacy has been educational and productive. As a resident, the opportunity to learn from thought leaders in the field and develop my advocacy skillset early in my career is invaluable. No background in advocacy is required; I had no prior experience when I joined. STS staff and members go out of their way to support new participants. I highly recommend participation in the workforce.

How have you engaged with your lawmakers at home?

In addition to using the Legislative Action Center, I participated in the 2021 STS Virtual Advocacy Conference, meeting with the offices of Rep. Bob Good (D-VA), Sen. Tim Kaine (D-VA), and Sen. Mark Warner (D-VA). This was very worthwhile and helped me establish ongoing relationships with Congressional staff. Also, I have found emailing directly with policy advisors and staff to be effective, and it provides a more personal touch and increases engagement. I encourage STS members to reach out to their representatives. The STS Government Relations team is willing and eager to help facilitate these meetings.

What would you say to your fellow STS Members to encourage them to become involved?

I would emphasize how easy it is to get involved, that all contributions matter, and that ultimately the future of our specialty and the health of our neighbors depends on it.

THE SOCIETY OF THORACIC SURGEONS

633 N. Saint Clair St., Suite 2100 Chicago, IL 60611-3658 Phone 312-202-5800 | Fax 312-202-5801 Email sts@sts.org | Web sts.org

PRESIDENT

John H. Calhoon, MD

FIRST VICE PRESIDENT Thomas E. MacGillivray, MD

SECOND VICE PRESIDENT Jennifer C. Romano, MD, MS

SECRETARY Wilson Y. Szeto, MD

TREASURER Vinod H. Thourani, MD

IMMEDIATE PAST PRESIDENT Sean C. Grondin, MD, MPH, FRCSC

INTERNATIONAL DIRECTORS

Alessandro Brunelli, MD J. Rafael Sádaba, MD, PhD, FRCS(CTh) Alan D. L. Sihoe, MBBChir, MA(Cantab), FRCSEd(CTh)

CANADIAN DIRECTOR Marc Ruel, MD, MPH, FRCSC RESIDENT DIRECTOR Kimberly A. Holst, MD

PUBLIC DIRECTOR Debra A. DaRosa, PhD

DIRECTORS-AT-LARGE

Kevin D. Accola, MD Leah M. Backhus, MD, MPH Anthony L. Estrera, MD Gregory P. Fontana, MD Thomas G. Gleason, MD John D. Mitchell, MD James S. Tweddell, MD Ara A. Vaporciyan, MD

HISTORIAN

Keith S. Naunheim, MD

CEO/EXECUTIVE DIRECTOR Elaine Weiss, JD

THE ANNALS OF THORACIC SURGERY EDITOR-IN-CHIEF Joanna Chikwe, MD, FRCS



Mark Your Calendar

Upcoming STS Educational Events

- 2022 STS Workshop on Robotic Cardiac Surgery
 Atlanta, Georgia · Apr. 21–22, 2022
- 2022 STS Coronary Conference Ottawa, ON, Canada - Jun. 4–5, 2022
- 2022 Structural Heart Symposium: Mastery in Mitral Valve and Tricuspid Valve Therapies Chicago, Illinois - Aug. 19–20, 2022
- STS 19th Annual Perioperative and Critical Care Conference Denver, Colorado · Sep. 8–10, 2022
- 2022 STS Boot Camp Chicago, Illinois · Sep. 29–Oct. 2, 2022
- 2022 Advances in Quality & Outcomes: A Data Managers Meeting Providence, Rhode Island · Oct. 26–28, 2022
- STS 59th Annual Meeting San Diego, California - Jan. 21–23, 2023

- The Society of Thoracic Surgeons (STS)
- **STS_CTSurgery**
- **o** thesocietyofthoracicsurgeons
- **In** The Society of Thoracic Surgeons
- ThoracicSurgeons
- Society of Thoracic Surgeons

Thank You!

The Society of Thoracic Surgeons gratefully acknowledges **Medtronic**, **Abbott**, and **Bristol Myers Squibb** for supporting STS 2022 with educational grants.