

# **STS** News

"What makes this work special is we are doing it in places where no one else wants to go."

William M. Novick, MD



Dr. William Novick champions the expansion of pediatric cardiothoracic surgery in under-resourced countries, both operating on children and training others to do so.

## **Undaunted and Determined, Surgeon Saves Lives in Ukraine**

While the fighting in Ukraine rages on, global congenital heart surgeon William M. Novick, MD, can be found in the operating rooms of hospitals throughout the war-torn country, saving lives of the littlest patients.

These operations are considered challenging; they are complex, dynamic, and often timeand resource-constrained. Not to mention the additional risks that result from the fighting and life-threatening danger on the other side of the hospital walls.

"When I hold a child's heart in my hands, I experience an extremely scary, humbling, and challenging series of thoughts," said Dr. Novick. "Scary, because that child might die. Humbling, in that God gave me the ability to do this. Challenging, because we want to save every child no matter how bad the defect is." Dr. Novick, from the University of Tennessee Health Science Center in Memphis, and his team from the Novick Cardiac Alliance have traveled to Ukraine several times over the years, and they've committed to four visits in 2022. So far, they have completed three traveling to the country in January, March, and, most recently, in June.

"The physical damage being caused in the country is going to set back medical care in Ukraine years, maybe decades," he said. "We were in the country during the last week of January and the first week of February. While our team was there, there was a developing threat of a Russian invasion, with troops already staging on the border and in Belarus." Then, while the team was in Lviv this spring, the far western Ukraine city was bombed, said Dr. Novick. Even so, they worked day and night, desperately trying to complete as many surgeries as they could in a short amount of time.

"They put us up in the hospital," he said. "There's no room anywhere in the city, in any hotel, because of all the refugees. We took a nap, I talked to the administrator, and then we got started." Dr. Novick and his team operated on six children: three newborns, and another three who were just days old.

Each year, 1 million children in low- and middle-income countries are born with congenital heart disease, according to Dr. Novick, and most do not have adequate pediatric cardiac care.

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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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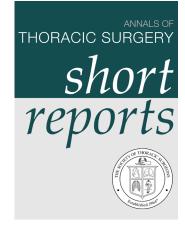
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## Annals Digital Platform Is Open, Offering Visibility, Speed

As the world around us becomes increasingly digital, so does the way we communicate, connect, share, and publish scientific research.

The Annals of Thoracic Surgery recently launched Annals Short Reports—the new fully open access companion journal. This e-only publication provides a contemporary venue for authors to present their research in a digestible format, while also making it available immediately, permanently, and universally.

"Annals Short Reports is a great way to publish and access concise research, reviews, feature articles, and videos—all peer reviewed by *The Annals* Editorial Board," said Joanna Chikwe, MD, FRCS, *Annals* Editor-in-Chief. "Our expanded digital



platform will allow readers to combine content from both journals to reflect their interests, with much more frequent updates and mobile access."

Annals Short Reports welcomes a wide range of short-form original research related to clinical advances, current surgical methods, and controversial topics and techniques in the following areas:

- Adult acquired and congenital cardiovascular disease
- ► Thoracic surgery
- Cardiothoracic transplantation
- Mechanical circulatory support
- Perioperative medicine
- Education and training

The "short report" article type requires the following:

- ▶ < 2,500 words
- < 4 combined tables/figures</p>
- <10 references</p>

Also featured are engaging editorials, focused mini-reviews, educational and impactful case reports, "how to do it" technique papers, and images in cardiothoracic surgery. In addition, *Annals Short Reports* includes a special emphasis on digital media and supplemental content, designed for easy and open sharing of data, results, and content across social media and other channels.

According to Dr. Chikwe, this format facilitates a more efficient review process, with a shorter time to decision. All published articles are expected to be indexed in PubMed within the next 6 to 12 months.

Annals Short Reports follows the high standards of *The Annals* and is supported by the same expert Editorial Board team. The open access journal now is accepting submissions.



For more information, visit **sts.org/annals**.

## Member News



#### **Carpenter Named Assistant Dean**

A.J. Carpenter, MD, PhD, has been appointed assistant dean of graduate medical education for health science systems within the Long School of Medicine at University of Texas (UT) Health Science Center at San Antonio. She has served on the faculty at UT Health San Antonio since 2002 and was appointed director of the residency program in 2014. Dr. Carpenter has been an STS member since 1998.



### **Kachroo Directs Thoracic Aortic Center**

Puja Kachroo, MD, has been named surgical director of the Center for Diseases of the Thoracic Aorta at the Washington University School of Medicine in St. Louis and Barnes-Jewish Hospital in St. Louis, Missouri. She also will continue as cardiac surgeon, with expertise in aortic dissection and thoracic aortic aneurysms. Dr. Kachroo has been an STS member since 2010.



#### **Bowdish Assumes Full Professorship**

Michael E. Bowdish, MD, has been named professor and vice chair of the Department of Cardiac Surgery in the Smidt Heart Institute at Cedars-Sinai in Los Angeles, California. Previously, he worked as an associate professor of surgery in the Division of Cardiac Surgery at the Keck School of Medicine at the University of Southern California in Los Angeles. An STS member since 2012, Dr. Bowdish serves as chair of the STS Adult Cardiac Surgery Database Task Force.



#### **Reddy Oversees Surgical Innovation** in Michigan

Rishindra M. Reddy, MD, MBA, has been named director of the Center for Surgical Innovation at the University of Michigan in Ann Arbor. Dr. Reddy, chair of the Comprehensive Robotic Surgery program and associate director of the Thoracic Quality Collaborative, will continue his research in lung and esophageal cancer, medical education, and health disparities. He has been an STS member since 2011.



#### **Guy Is Vice Chief in PA**

T. Sloane Guy, MD, MBA, has been appointed vice chief of the Division of Cardiac Surgery and clinical director of cardiac surgery at Jefferson Health in Philadelphia, Pennsylvania. Dr. Guy adds this position to his current roles as professor of surgery and director of minimally invasive and robotic cardiac surgery at Thomas Jefferson University Hospitals. He has been an STS member since 2006.



### Varghese Accepts New Quality **Role at Huntsman**

Thomas K. Varghese Jr., MD, MS, MBA, has been named associate chief medical quality officer at Huntsman Cancer Institute (HCI) in Salt Lake City, Utah. He also will continue to serve as HCI chief value officer, chief of the Section of General Thoracic Surgery at the University of Utah, and professor of surgery at the University of Utah School of Medicine. In addition, Dr. Varghese recently earned his Executive Master of Business Administration degree from the University of Utah. An STS member since 2009, he currently chairs the STS Council of Meetings and Education and is a member of the Workforce on Media Relations and Communications. Dr. Varghese also is the Deputy Editor of Digital Media and Digital Scholarship for The Annals of Thoracic Surgery.



#### Gunn Takes Helm of ECMO Program

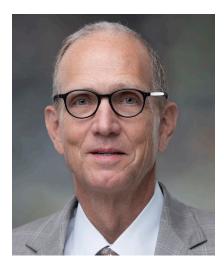
Tyler Gunn, MD, has joined the Department of Cardiac Surgery at Cedars-Sinai in Los Angeles, as assistant professor of cardiac surgery. He also will serve as director of the Extracorporeal Membrane Oxygenation Program (ECMO) within the Cedars-Sinai Health System. Dr. Gunn has been an STS member since 2014.



#### **MacGillivray Leads Cardiac Surgery** at MedStar

Thomas E. MacGillivray, MD, this fall will assume the position of physician executive director of cardiac surgery at MedStar Health and chair of Cardiac Surgery at MedStar Washington Hospital Center in Washington, DC. For 5 years, Dr. MacGillivray has served as the chief of the Division of Cardiac Surgery and Thoracic Transplant Surgery at Houston Methodist in Texas. An STS member since 2003, he is the STS First Vice President and serves on the boards of The Thoracic Surgery Foundation and The Annals of Thoracic Surgery.

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



## Social Quicksand— Staying Grounded

John H. Calhoon, MD

## "There are moments in life—like this—when people depend on our leadership to reassure those around us, build connectedness, and inspire confidence."

Just a couple of months ago, I was sitting in my office thinking about the importance of leadership during crisis and trying to make sense of the latest tragedy within our borders and the ongoing conflict thousands of miles away in Ukraine. So much violence and so little sense.

The Uvalde shooting hit very close to home as the school is located approximately 80 miles from where I live, work, and raise my family, and some of the victims were treated by the trauma team at The University of Texas at San Antonio.

And not as close, but just as devastating, are the war in Ukraine and its terrible consequences. Major powers have been unable to stop the fighting, and the war continues with an ongoing loss of life and mounting strife realized by the entire world.

Where do we sit in all this, and what should we be doing?

#### Leaders Everywhere, Every Day

We are leaders in our communities, our institutions, and our departments and teams. In these times, it is especially important to do our best to serve as wise and measured voices as we keep in mind the duties beyond those of our careers and professions. There are moments in life—like this—when people depend on our leadership to reassure those around us, build connectedness, and inspire confidence.

#### **Building Community**

Importantly, we must recognize the importance of CT surgeons and our professional associations collaborating with and supporting one another. We all have skin in the game and are working toward a common goal of advancing the specialty and providing quality care for our patients. Of course, we all are enthusiastic and excited to return to in-person meetings and resume live learning and networking.

Thankfully, once again we are experiencing the power of face-to-face interactions—deeper, more meaningful conversation, handshakes and hugs, a joyful respite from our phones and computers.

#### **Meeting Successes**

The inaugural in-person STS Coronary Conference in Ottawa, Ontario, Canada, was a great success, with nearly 150 attendees gathering from 18 countries last month to discuss the latest techniques for coronary artery bypass surgery. The sold-out, hands-on Workshop on Robotic Cardiac Surgery in Atlanta, Georgia, this spring was another highly regarded success.

Right around the corner is the Critical Care Conference in Denver, to be held Sept. 8–10. Boot Camp, scheduled for Sept. 29–Oct. 2, will provide 60 residents with an experiential foundation and hands-on practice in basic cardiothoracic operating skills. Other upcoming meetings include the LatAm meeting in Cartagena, Colombia, being held Dec. 1–3, in conjunction with our colleagues from EACTS.

The Society also recently organized a leadership retreat, attended by Drs. MacGillivray, Romano, and Szeto, key STS staff, and me. Together, we began to map out critical initiatives and discussed future opportunities, including a variety of quality education programs that will ensure STS has a clear direction and purpose for years to come.

#### **Modernization of the Database**

During the AATS meeting in May, Dr. Vinay Badhwar, on behalf of his multidisciplinary co-authors, presented an invited landmark paper on mitral valve repair that used data from the STS National Database. This paper, along with several others, showcased the value of the information from the Database.

Overall, the Database continues to get stronger, although it has not been without some hurdles as we evolve to a fully digital platform. The Society is continuing to transition data capture and data analytics to internal STS staff, eliminating the need to rely on outside vendors and giving us more authority and responsibility for accurate and timely reports. We are very resolute in this goal.

#### **Important Advocacy Work**

On the advocacy front, the cardiothoracic surgery specialty remains under attack with the possibility of additional cuts to clinical reimbursement.

As a founding member of the Surgical Care Coalition, the Society continues to work with the American College of Surgeons and other associations to find longer-term solutions to Medicare's broken payment system, while also protecting access to necessary surgical procedures and high-quality care for all patients.

The STS Government Relations team also remains focused on other important regulatory and legislative issues that are relevant to cardiothoracic surgeons and our patients.

There remains much to do—in the ORs, in our institutions, in our communities, for our specialty, and for each other. But I am optimistic that with the help of wise and selfless leaders like you, we have a much better chance.

Stay grounded, and do not fall prey to the quicksand around us all.

More to come, John.

## Undaunted and Determined, Surgeon Saves Lives in Ukraine

#### CONTINUED FROM COVER

The most challenging place in which he's operated was Tashkent, Uzbekistan. The conditions included ancient equipment, unclean operating rooms, and dangerous power supplies.

"There was a bypass machine—unplugged—on a counter," said Dr. Novick. "Sitting on the floor next to the machine was a pair of heavy rubber gloves and rubber boots. Our perfusionist went to plug in the bypass machine. Simultaneously, six Uzbeks screamed, 'NYET! Put on gloves! Put on boots!' So he did, and when he plugged in the machine, sparks flew."

Dr. Novick explained that many of these countries don't have any options for heart surgery unless it's charitable. "And, what makes this work special is we are doing it in places where no one else wants to go," he said.

#### So Much More than Surgery

In addition to their surgical skills and expertise, Dr. Novick and his team in March brought to Ukraine 14 massive bags of supplies to support pediatric heart surgery and pediatric cardiology, and for the trip in June, he shipped 12 pallets of equipment and materials. This is important to note because the Cardiac Alliance works to save lives, but also helps local teams assemble and sustain cardiac centers. In fact, the centers that the Cardiac Alliance builds typically are sustainable within 3 years.

"We do pediatric heart surgery, but we also train pediatric cardiologists, and nurses in the ICU, respiratory therapists, those who run the heart-lung machine, and the catheterization lab technicians. We try to get all these people trained up to improve their diagnostic skills, or work on catheterization or anesthesia, and we do a lot of it in conflict zones," said Dr. Novick.

#### 'You Protect People...That's Your Job'

Dr. Novick is not only doing much of the surgery himself, but he's also gathering donated supplies, lining up financial contributions, and organizing training programs.



> Dr. Novick and the Cardiac Alliance team visited Lviv, Ukraine in June.

Described as the undisputed leader of the Novick Cardiac Alliance, he's known to run the team with a "thundering hand." And his work in these countries—especially in Eastern Europe holds personal significance for Dr. Novick. His grandmother, who is Ukrainian, and his grandfather, who is Russian, escaped Soviet Russia many years ago to settle in the US.

With these roots, Dr. Novick credits his father for his "Russian temperament, tenacity, and persistence." From his mother, he learned "all the soft things" such as his concern for children regardless of where they are in the world and his deep desire to repair children's hearts.

Just as importantly, his parents taught him, "You never, ever intimidate anybody. You protect people that are intimidated or bullied by other people. That's your job. You're big enough to do it.' So that's the way I was brought up: help those who are not able to help themselves," Dr. Novick said. Over the years, he has done just that—made saving and protecting lives his life's work, helping more than 10,000 children in 30+ countries, including places like Libya, Iraq, the Democratic Republic of the Congo, Russia, and China.

"I'm very passionate about this work," Dr. Novick said. "Unless you go to these places, I don't think you can really grasp how desperate the situation is for these kids and their parents. Our team showing up, and their kid getting operated on—they truly consider it a miracle. I'm very humble about what we do, but you're in a country of 85 million people and there's no heart surgery for kids, and your child is one of 18 who gets operated on? I mean, holy moly."

For more information about the Novick Cardiac Alliance, visit cardiac-alliance.org. ■



The Society of Thoracic Surgeons

## **REGISTER NOW!**

## 19TH ANNUAL PERIOPERATIVE AND CRITICAL CARE CONFERENCE

## DENVER, COLORADO

SEPTEMBER 8-10, 2022



For more information, visit **sts.org/criticalcare**.

### TECH NEWS

### The Promise of Polymer Valve Technology: An Update from the Tria Valve Clinical Trials

By Steven J. Yakubov, MD, and Steven B. Duff, MD, from OhioHealth Physician Group in Columbus

Valve replacement technology has focused on solving the challenges of lifetime durability, excellent hemodynamic performance that is persistent, avoidance of anticoagulation, and providing access to coronary arteries.

Approximately 80% of surgical valve implants (SAVR) are bioprosthetic valves, despite the concerns of long-term durability. Since the advent of transcatheter aortic valve technology (TAVR), some of the durability concerns are lessened due to the availability of TAVR in SAVR.

Newer designs in surgical bioprostheses have focused on the ability to enlarge the aortic surgical valve at the time of TAVR in SAVR, as well as newer leaflet treatment techniques to enhance durability of the initial implant. Surgical techniques to enhance hemodynamics have concentrated mostly on root enlargement techniques to allow for implantation of larger surgical valves, thus minimizing the chance of patient prosthesis mismatch and allowing best possible residual gradients.

The Tria valve technology is designed to enhance durability and hemodynamic performance of aortic valve replacement. The Tria valve is composed of polymer leaflet technology using proprietary biomedicalgrade siloxane-based polyurethane-urea— LifePolymer (LP) from Foldax, Inc. LP has undergone extensive in vitro and in vivo testing. The aortic valve is composed of three flexible LP leaflets solution-cast onto a radiovisible polyether-ether ketone stent with a polytetrafluoroethylene felt sewing ring. This is performed using a robotic manufacturing process, which is highly precise and obviates the need for direct human contact. The valve is prepared in a dry state and requires no preparation prior to implantation.

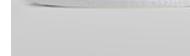
The initial surgical experience or early feasibility was performed as a singlearmed clinical study in patients with severe, symptomatic aortic valve disease, evaluating 15 patients at five clinical centers. This demonstrated excellent and sustained outcomes with regard to effective orifice area and hemodynamics, transvalvular gradients, and improvements in New York Heart Association functional classification with a 1-year follow-up. Two postoperative deaths (60 and 90 days) resulted, one related to an unplanned surgery on a renal carcinoma and another not well defined.

One patient experienced coronary thrombosis at day 92 with thrombus possibly related to the valve sewing ring. The specific leaflet design with linear closure and diastolic inward flexion of commissural posts contribute to the excellent hemodynamics. The early experience was continued for a total enrollment of 40 patients, the results of which are not yet available. An early feasibility surgical aortic valve study has begun in India. An early feasibility study with a surgical mitral valve is underway in the US.

The latest iteration of polymer leaflet technology is the development of a transcatheter aortic valve replacement system. This consists of a nitinol frame designed for accommodation to coronary reaccess and a suprannular leaflet design for optimization of hemodynamic performance. The initial experience with this valve system consists of implantation in six ovine subjects for assessment of feasibility.

Long-term outcomes with polymer-based leaflet technology, including freedom from anticoagulation and leaflet tearing, will not be known for many years. However, it holds the promise of durability without anticoagulation and hemodynamic performance comparable to transcatheter valve technology.

These ideas, as well as improvements in supply chain/production (i.e., fully robotic production and no need for animal products) hold tremendous promise for the advancement of valve replacement technology.



Surgical aortic valve prosthesis



Surgical mitral valve prosthesis



► TAVR prosthesis



## CAN WE DO MORE

Despite successful surgery, rates of disease recurrence are high in resectable NSCLC<sup>1</sup>

Recurrence or death within 5 years after surgery<sup>1\*†</sup>:



IB **62**%

**76**% (n=1247)

Stage 2

Stage 3

**M** 

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.<sup>2</sup> 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.<sup>1</sup> <sup>†</sup>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%.<sup>3</sup> <sup>‡</sup>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.



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## Leadership Institute Graduates Emerge with Crisis Management, Branding Skills



Anita R. Krueger, MD, connected with fellow faculty members Robert S.D. Higgins, MD, MSHA, and Mara B. Antonoff, MD, at the Leadership Institute capstone event.

In April, a select group of STS members gathered in Chicago for the capstone event of the 2021-2022 STS Leadership Institute.

This program is designed to arm early- and mid-career cardiothoracic surgeons with the skills to lead teams in complex and everchanging health care environments.

During the event, participants had plenty of face-to-face time with a world-class faculty—surgeons with exceptional experience in leadership and mentorship roles.

Presenters explored the impact of organizational culture and how to influence change, identified tools for effective communication within a diverse working environment, examined strategies for achieving personal goals inside and outside the workplace, defined wellness, and pinpointed skill sets for obtaining work/life balance.

In the months leading up to the event, Leadership Institute participants completed three virtual training courses that formed the core curriculum: "Leading During Crisis," "Building Your Practice and Your Brand," and "Promoting Your Brand."

The STS Leadership Institute is an educational opportunity with a limited number of seats, and it's available only to STS members. The 2022-2023 program is underway, and the next application round will be for the 2023-2024 track.

Learn more at sts.org/leadershipinstitute.

## STS 2023 Abstract Deadline Is Approaching Fast



The STS 59th Annual Meeting—to be held January 21–23 in San Diego, California—is the premier forum for sharing research findings, quality initiatives, and cutting-edge techniques with the global cardiothoracic surgery community. Abstract submission closes July 22; there's still time to submit materials for oral presentations, scientific posters, and surgical videos in:

- Congenital heart surgery
- General thoracic surgery
- ▶ Basic science research
- Quality improvement
- ► Cardiothoracic surgical education
- Physician/provider wellness
- Perioperative management and critical care

For authors involved in Phase I, II, or III clinical trials for which no preliminary data will be available by the July deadline, the Society will consider promissory abstracts (data must be available by December 16).

In addition, the Society is accepting compelling session proposals that showcase emerging, innovative, and/or critical issues facing the specialty. The deadline for promissory abstracts and session proposals also is July 22.

More information is available at **sts.org/annualmeeting**.

## **Coronary Conference Marked First-of-Its-Kind Experience in Ottawa**



Attendees from 18 countries converged in June for the 2022 STS Coronary Conference, which delivered state-ofthe-art training in

coronary artery surgery, late-breaking science abstracts, and a world-renowned faculty.

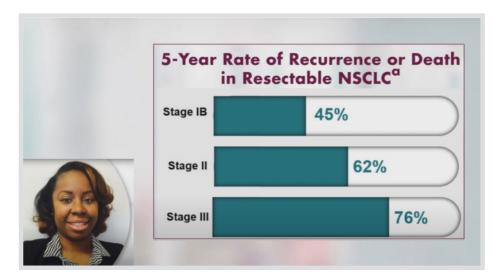
The 2-day conference, held in Ottawa, Ontario, Canada, was a unique experience, featuring didactic presentations, "How I Do It" video sessions on surgical techniques, practical tips and tricks, in-depth abstracts sessions, and case-based panel discussions. Topics focused on the current state of revascularization, conduit selection and harvest, graft configuration, off- and onpump coronary artery bypass grafting (CABG), endarterectomy, low ejection fraction, minimally invasive CABG, myocardial revascularization, CABG and fractional flow reserve, and post-operative medical therapy.

Sessions were highly interactive, with audience participation and questions encouraged throughout the conference.

"We are pleased to report that the conference—the first of its kind—was a resounding success," said course director Marc Ruel, MD, MPH, who serves as STS Canadian Director. "It is germane that cardiac surgeons specialize deeply in advanced coronary surgery, as the field experiences a resurgence, represents about half of what adult cardiac surgeons do, and has been greatly promoted through a widespread emphasis on heart team discussions. More than ever, we need to regularly meet as a strong and innovative community."

Those who registered for the Coronary Conference will receive free access to its recorded content. For those who couldn't attend, the content will be available for purchase in the STS Learning Center at **learningcenter.sts.org**.

## Industry Spotlight Videos Illuminate Unmet Needs, Optimal Screening for Lung Cancer



The latest videos in Industry Spotlight, a collection from industry partners that highlights cutting-edge techniques, medical devices, and other industry news and education, cover clinically important findings and developments in lung cancer diagnosis and treatment.

"Addressing Unmet Needs for Patients with Resectable NSCLC and the Benefits of an MDT Approach" and "The Importance of Early Detection of Lung Cancer: Best Practices to Optimize Screening Programs," sponsored by AstraZeneca, are ready to watch now at sts.org/industryspotlight.



Once posted, Industry Spotlight videos are available for a limited time. New videos will be added periodically.

## Upcoming STS Course Offers In-Person Critical Care Training



Now is the time to join colleagues for faceto-face fellowship, the newest scientific breakthroughs, and the opportunity to learn state-of-the-art techniques in critical care.

The 19th Annual Perioperative and Critical Care Conference will take place September 8–10 in Denver, Colorado. This event—which attracts attendees and faculty from around the world—is designed to enhance knowledge and expertise in cardiovascular and thoracic critical care as well as in enhanced recovery after surgery.

Abstracts are being accepted through July 13 and registration is open at **sts.org/criticalcare**.

## Latest Webinars Offer Hours of Self-Paced Learning

The STS Webinar Series is designed to give participants access to training, techniques, and expert perspectives on a variety of topics in cardiothoracic surgery, allowing them to learn on their own time. The latest installments include:

- "Dos and Don'ts of the Mobile ECMO Team," in which a multidisciplinary panel shares their expertise in establishing and maintaining an effective mobile ECMO unit.
- "Coronary Revascularization Guideline: Why STS and AATS Did Not Endorse," paneled by senior leaders from STS and the American Association for Thoracic Surgery. The panelists discuss the concerns that informed the decision not to endorse the 2021 Guideline for Coronary Artery Revascularization published in December.
- "Bronchoscopy: Electromagnetic, Robots, & Ablation," featuring an international panel of surgeons who share their experiences with electromagnetic and robotic approaches to bronchoscopy, as well as ablation of lung cancers.
- "Understanding and Implementing the New CoC Lung Cancer Standards," in which an expert panel discusses the new Quality of Care Measures updated by the American College of Surgeons Commission on Cancer (CoC).
- "Management of Type B Aortic Dissection: Takeaways from the STS/ AATS Guideline," presented by guideline coauthors, who discuss the key takeaways from this comprehensive, up-to-date summary of the state of the evidence.



"Robotic Mitral Valve Repair Essentials," with world-renowned robotic cardiac surgeons, explores the essential components of successful robotic mitral valve repair and implications for the future of cardiac surgery.

These videos and more are available at **sts.org/webinars**.

## **Annals Impact Factor Reaches Record High**

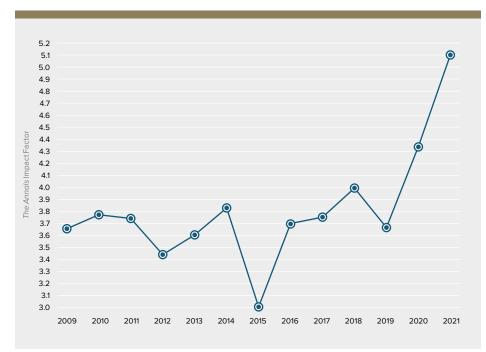
The Society's peer-reviewed journal, *The Annals* of *Thoracic Surgery*, has earned its highest impact factor to date—and the first one over five.

The impact factor, an important metric indicating a journal's influence, measures the frequency with which the average article has been cited in a particular year. For 2021, the impact factor was 5.102, as reported by Clarivate Analytics in its Journal Citation Reports.

Notably, *The Annals* was the most cited journal in cardiothoracic surgery, with more than 45,000 total citations in 2021.

Article topics that received the most citations last year include: the Intermacs and STS National Database annual reports; representation of women in STS authorship and leadership positions; adult cardiac infection mitigation strategies; tiered patient triage for adult cardiac and thoracic surgery; sexual harassment in cardiothoracic surgery; and social media's influence in cardiothoracic surgical literature dissemination.

A subscription to *The Annals* is a benefit of STS membership. To read the journal online, visit **annalsthoracicsurgery.org**.



## Surgical Teams Encouraged to Send Data Managers to AQO



By attending the 2022 Advances in Quality Outcomes (AQO): A Data Managers Meeting, data managers will learn the newest research discoveries, clinical guidance, and master techniques for harnessing the STS National Database.

AQO, October 26–28 in Providence, Rhode Island, will offer tracks for all four components of the Database: Adult Cardiac, Congenital, General Thoracic, and Intermacs/Pedimacs. Surgeon leaders, data managers, and Database platform experts will share valuable findings and approaches to clinical data analysis. Attendees also can submit abstracts for presentation, highlighting the research and performance of participating sites.

"Cardiothoracic surgery departments can benefit greatly from the insights presented at AQO," said Felix G. Fernandez, MD, MSc, Chair of the STS Workforce on National Databases. "I encourage every data manager who works with the STS National Database—or who wants to see how it can help transform quality improvement methods at their site—to join us at the meeting, so that we can keep building upon the Database and optimize the care we provide to our patients."

To learn about AQO abstract submission and registration, visit **sts.org/AQO**.

## STS Leadership Positions: Are You Interested?

All members are invited to participate in the Society's self-nomination process for standing committee and workforce appointments.

In order to represent the full gender and ethnic diversity of the membership, STS encourages submissions from all practice types, career levels, disciplines, geographic areas, and other demographics.

Submissions will be accepted in August; information on how to self-nominate is available at **sts.org/selfnomination**.

A full list of the Society's leadership and governance structure can be found at **sts.org/leadership**.

## Scholarships Support Attendance at STS Annual Meeting

Aspiring cardiothoracic surgeons—and general surgery residents looking for a glimpse at a career in cardiothoracic surgery—have the opportunity to experience the STS Annual Meeting and see what a future in the specialty has to offer.

The STS Looking to the Future Scholarship (LTTF) is intended for medical students and general surgery residents.

Benefits of the 2023 LTTF scholarship include:

- Complimentary registration for STS 2023—the Society's 59th Annual Meeting—being held January 21–23 in San Diego, California
- A 3-night stay at an STS-designated hotel
- Participation in exclusive events
- ▶ Reimbursement of up to \$500 in related travel expenses

The following are eligible to apply:

- ▶ Medical students training at an institution in the United States or Canada
- Clinical PGY1, PGY2, or PGY3 general surgery residents training at an institution in the United States or Canada
- General surgery residents on dedicated research time who have not started their PGY4 clinical year training at an institution in the United States or Canada

Application details will be available later this summer at **sts.org/lttf**. Previous scholarship recipients are not eligible; however, previous applicants are encouraged to re-apply.

## Season 2 coming this summer!

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## Through Valleys and Peaks, STS Member Harnesses Trauma to Inspire New Generations



> During his final year of residency, Dr. Balters underwent emergency repair for an aortic rupture.

Four open heart surgeries and a kidney transplant represent stark milestones for STS member Marcus Balters, MD, whose career as a surgeon has been interspersed with stints as a patient, brushes with mortality, new perspectives on teaching, and solidified faith.

Dr. Balters directs the general surgery residency program and serves as vice chair of surgical education at Creighton University in Omaha, Nebraska. His experiences as a young patient he underwent a coarctation repair at age 6 and a repeat repair at age 16—made a career in cardiothoracic surgery a natural choice.

"My mother would probably tell you I was talking about being a cardiac surgeon from a very young age, probably 7 or 8," he said. "I remember thinking my pediatric cardiologist was very cool, and even when I moved on to an adult cardiology group, I was imagining him as my surgeon. I have a memory of him standing over me in scrubs as I was going to sleep."

Dr. Balters studied medicine at the University of Nebraska Medical Center. In 1999, while a fourth-year resident, he experienced a descending aortic graft rupture. "This rupture presented as an aortobronchial fistula, and it was very emergent," he recalls. "I started that morning with massive hemoptysis; I was exsanguinating."

Dr. Balters credits the world-renowned Lars Svensson, MD, PhD, now at the Cleveland Clinic in Ohio, for saving his life at the Lahey Clinic that day—the first of two such occasions, he'd later discover. Notably, that operation also revealed an ascending aortic aneurysm that warranted a close watch.

"I made it back to residency in about 8 weeks after a very near miss with death," Dr. Balters said.

He went on to a cardiothoracic surgery fellowship at the State University of New York in Syracuse (SUNY-Syracuse), and from there to a private practice group back in his home state of Nebraska. The group joined Omaha's Creighton University in late 2005.

A few months later, his aneurysm had grown to the point of needing repair.

"I called Dr. Svensson, and he graciously and adeptly saved my life again in April 2006 at the Cleveland Clinic," recalled Dr. Balters. "By the grace of God, once again I made it back to work in 8 weeks, and I resumed a very busy clinical practice." Being very busy, he now reflects, kept him on a sort of "autopilot," turning his focus to work, which served as a distraction from what he now recognizes as a form of post-traumatic stress.

"During residency, colleagues would at times take me aside and ask, 'Are you sure you want to go into this? This is what your life is going to be like.' And looking back, I realize that I probably spent 10 or 15 years after that third operation wondering, 'Am I going to die today?' Every time I would cough, every time I would have a pain, it would remind me of those dramatic events," he said.

Throughout those years, however, Dr. Balters had a support system that presented him with avenues he'd never considered and with the revelation that it's okay to lean on colleagues and loved ones, to accept the grace of a higher power, and to employ a little creative assistance.

Early in his fellowship, Dr. Balters recalls, he was watching a surgeon deftly perform a procedure, and while observing he had a moment of anxiety about the tremor in his own hands.

"I was thinking to myself, 'I'm not sure I'm going to be able to do this.' And right at that moment, without any prompting, my attending said to me, 'You know, Marcus, I'm resting my hand on the sternum while I do this.'"

Dr. Balters had been so focused on the narrow view through the magnification lenses that he'd never appreciated that his attending surgeon was using a technique to alleviate his own tremor.



Medical students training with Dr. Balters have named him "Most Inspirational Educator."

Another opportunity to broaden Dr. Balters's viewpoint occurred in early 2006, when he approached the department head to inform him of his plans to undergo the aneurysm repair. "When I had to have that fourth surgery, I went to my chairman and broke down in tears," he recalled. "He assured me that no matter what happened, even if I could never operate again, there would be a place for me."

The chair, R. Armour Forse, MD, PhD, suggested that Dr. Balters consider a teaching position, and that recommendation altered the course of Dr. Balters's professional life.

Meanwhile, Dr. Balters's wife, Sarah Beth whom he has known since they were 14 and with whom he celebrated 25 years of marriage this year—was a steady source of spiritual support. "She is the person that lifts me," he said.



Dr. Balters cherishes the family he's built with his wife, Sarah Beth.

Dr. Balters began honing his clinical practice from a mixed bag of cardiac, thoracic, and vascular operations to focus mostly on lung surgery and hemodialysis access at Creighton University Medical Center, now part of CommonSpirit Health, and the Veterans Affairs Nebraska-Western Iowa Health Care System.

The dean of the School of Medicine at Creighton University, Robert W. "Bo" Dunlay, MD, recommended that Dr. Balters turn his talents toward teaching both medical students and general surgery residents.

In the intervening years, Dr. Balters's kidneys began to fail.

Ultimately diagnosed with idiopathic glomerular nephropathy, he "continued to work the surgeon's life, though I had stopped doing cardiac surgery back in 2006 when I had the arch repair." Eventually he required a transplant, and in 2010 he received a kidney from his brother.

"Again, back to work in 8 weeks, though I had multiple issues come up in the next 18 months related to the transplant," he said. "I have stayed with Creighton—and they have stayed with me—since 2005."

Dr. Balters has become a source of inspiration for his students and residents.

"I tell them—the students, at least—that I don't care what kind of doctor they decide to be. There's of course some satisfaction in 'converting' residents to cardiothoracic surgery, but my ultimate goal is to help them be the best doctors they can and save lives. I can only touch so many people in my lifetime as a surgeon, but if I teach people what I think is important, my effects can ripple out to lots of people across years and locations."

He notes that the students seem to appreciate that he thinks out loud in the operating room. Dr. Balters says that while it's easy to become silently focused on the task at hand, especially during difficult procedures, he tries to offer insights into his thought processes and decisions by talking them out among the team as he operates.

In 2018, the fourth-year medical student class named him "Most Inspirational Educator" in their yearbook, and this year he achieved the rank of full professor.

And how do his patients benefit from his experiences on—and over—the operating table?



> Dr. Balters has learned the value of rethinking his focus.

"Once we've gotten through the plans for the proposed operation, I'll say something like, 'Well, I've never had lung cancer, but I've had four open heart surgeries and a kidney transplant. And I'm not telling you this because this conversation is about me, but because I want you to know that I've sat in those chairs before, and I've asked the questions: Why is this happening to me? Who is this person in front of me, and do they know what they're doing?"

Dr. Balters answers that he's just a former kid from Nebraska, but that he's spent years preparing to be a proficient surgeon, he's performed hundreds of operations like these, he's certified by the American Board of Surgery and the American Board of Thoracic Surgery, and he'll "do everything in my powers to try and make this as uneventful of a valley as possible in what is hopefully an otherwise long and prosperous life."

A long and prosperous life has realized itself in Dr. Balters, despite a seemingly relentless series of valleys. With his renewed perspective through the lenses of fellowship, family, and faith, he says that he feels blessed.



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

## THE THORACIC SURGERY FOUNDATION

## **Thoracic Surgery Foundation Enabled Mission to Save Hearts in Peru**

From research funding to traveling fellowships to specialized training that can help surgeons introduce state-of-the-art programs worldwide, The Thoracic Surgery Foundation (TSF) offers career-changing opportunities for surgeons at every experience level. Support from TSF can fuel projects like Salvando Corazones ("Saving Hearts"), led by Aldo Rafael, MD, a recipient of the TSF Every Heartbeat Matters award.

On their latest mission trip this spring, Dr. Rafael's team was able to save the lives of 11 patients from underserved regions of Peru. These patients had rheumatic and degenerative cardiac conditions such as rheumatic valvulopathies, aortic aneurysms, and severe coronary artery disease. The team focused on minimally invasive valve replacement, working alongside local surgeons, anesthesiologists, perfusionists and nurses at Dos de Mayo hospital in Lima—and giving them hands-on training in new techniques.

"We had the pleasure of showcasing this novel approach to the cardiac surgery department at the hospital," wrote Dr. Rafael in his TSF report. "There was a collaborative effort with the education and hands-on teaching involved with each surgical case."

All of the patients did well postoperatively, with no significant surgical complications, the team reported.

Dr. Rafael has a special place in his own heart for Dos de Mayo because it served as his training ground—he was the first graduate from the institution's cardiovascular surgery program. Born and raised in Jauja-Junin, Peru, about 6 hours outside Lima, he says he now has the privilege of giving back to his Peruvian community. "Salvando Corazones has allowed me to form a close friendship—a brotherhood with many healthcare professionals, including doctors, nurses, technicians, and administrative staff," Dr. Rafael said.



The March 2022 Salvando Corazones mission saved the lives of 11 patients who otherwise had no recourse to correct their heart defects.

#### Minimally Invasive Techniques Help Combat Ripple Effects of Rheumatic Fever

As a surgeon at Baylor University Medical Center in Dallas, Texas, Dr. Rafael has access to new procedural techniques that under-resourced countries don't, he stated. "Minimally invasive valve replacement surgery for rheumatic heart disease is the current standard of care. Salvando Corazones focuses on training the local Peruvian medical staff while providing free-of-charge cardiac surgeries to an underserved population."

In 2013, Dr. Rafael's team introduced Peru's first minimally invasive valve surgery via mini-sternotomy and utilized new techniques to protect the brain during cardiopulmonary bypass. Then, in 2015, Dr. Rafael performed the first minimally invasive aortic and mitral valve replacements in Peru that were accessed via right mini-thoracotomy. "The March 2022 trip allowed me to introduce a left atrial appendage exclusion device to the surgeons at Dos de Mayo Hospital," he said.

These surgeries helped to ensure improved quality of life for the patients by providing a long-term solution in a region where rheumatic cardiopathy remains an ongoing concern. In low- and middle-income countries, rheumatic fever complicated by rheumatic heart disease still contributes to morbidity and premature death—accounting for up to a quarter of a million deaths every year, Dr. Rafael said. "In our patients at Dos de Mayo Hospital, we found high frequency of rheumatic valve disease most of them in young patients. These patients usually contract rheumatic fever in childhood or adolescence and develop symptoms between 20 and 40 years of age."

In under-resourced countries, up to 3% of schoolaged children have evidence of rheumatic heart disease detected by echocardiography. Dr. Rafael identifies this as a public health problem, one that, thanks to the generosity of donors to TSF and other entities, can be addressed in a concrete way, and can certainly make all the difference for individual patients.

#### Amidst Pandemic, Mission Sent Lifesaving Equipment from Afar

In 2020 and 2021, the COVID-19 pandemic prevented the Salvando Corazones team from traveling to Peru. However, they were able to ship two donated heart-lung machines to the hospital. "These costly machines are a limiting factor for regional hospitals in Peru to start cardiac surgery programs," Dr. Rafael explained. "This has led to a 1,000-person waitlist at Dos de Mayo Hospital, the national referral center for cardiac surgery for 65% of the population on government insurance." This insurance only partially covers the cost of the surgery and does so for only a limited number of patients per year, he said.

The team also was able to partner with several companies for supply donations, including valves, sutures, lap sponges, cannulas, hemoconcentrators, and more, said Dr. Rafael. Supplies that remain after the Salvando Corazones team's departure will be used year-round by the Peruvian staff to continue saving lives.

Salvando Corazones will celebrate its 10th anniversary this year, and to mark the occasion, Dr. Rafael will host a minimally invasive cardiac surgery symposium at Dos de Mayo, imparting new techniques to more Peruvian surgical teams as part of a cross-continental faculty. "Together, we have delivered—and will continue to deliver—superior patient care, and we have served a role in advancing minimally invasive surgery and therapies for advanced heart failure among the cardiothoracic surgery residency program at Dos de Mayo Hospital," Dr. Rafael said. "On behalf of all those involved, we are grateful for your generosity, your trust, and—most importantly—your commitment to our medical mission."

### Every Heartbeat Matters Is One Among Many TSF Opportunities

The TSF Every Heartbeat Matters Award, is only one of a wide array of grant and scholarship opportunities offered by the Society's charitable arm.

Applications are open for TSF awards, and the deadline to apply for most is September 15. Learn more at **thoracicsurgeryfoundation.org**.



> Dr. Rafael's staff teamed up with Peruvian surgeons, perfusionists, nurses, technicians, and administrative support personnel—leaving them with the tools and skills to continue the work.



## Annual Report Highlights Results of Awardee Innovation, Donor Generosity

Illustrating the stories behind the Foundation's scholars, investigators, volunteers, and donors, the 2021 TSF Annual Report now is available.

The report features breakdowns of award disbursements, testimonials from grant recipients, photos from clinical projects and mission trips, and a listing of major gift donors.

In 2021 alone, TSF dispersed more than \$1 million in funding for cardiothoracic surgery research, education, and outreach. All TSF administrative costs are absorbed by the Society and corporate grants, meaning that 100% of donations is directed toward award funding.



Scan the QR code to read the 2021 TSF Annual Report.

### **SCENE**

## Surgeons Strengthen Lung Cancer Screening Efforts at Grassroots Level

Grassroots advocacy is action that grows organically from the heart of a constituency—its members. And, one of the most powerful types of this grassroots work is patient advocacy.

Meet two STS members who have taken patient advocacy to the next level.

The 2019 STS Key Contact of the Year, Rob Headrick, MD, MBA, from CHI Memorial Chest and Lung Cancer Center in Chattanooga, Tennessee, traveled to the White House in late spring to advise the Administration on the mobile lung cancer screening program that he started. The program, known as "Breathe Easy," features a built-from-scratch bus with a portable computed tomography scanner and brings opportunities for early detection of lung cancer directly into the community. Learn more about the program and Dr. Headrick's grassroots efforts in the Q&A on page 19.

Former STS President Douglas E. Wood, MD, from the University of Washington in Seattle, has taken his patient advocacy to a global level, demonstrating that early detection of lung cancer can have a significant impact in reducing overall cancer mortality.

Dr. Wood chaired the Lung Cancer Screening Panel of the National Comprehensive Cancer Network (NCCN) when it was created in 2009. The panel was in the process of creating the first lung cancer screening guidelines when the National Lung Screening Trial (NLST) was published in 2010 (the trial was launched in 2002, and the initial findings were released in November 2010).

The NLST demonstrated that a lung cancer screening program could reduce lung cancer mortality by 20%. As Dr. Wood explained, until that point, lung cancer screening hadn't been accepted as a screening modality and the NLST results "changed the conversation." However, there was still considerable work to do to get patients access to low-dose CT (LDCT) lung cancer screening. In December 2013, the United States Preventive Services Task Force (USPSTF) granted a B rating for lung cancer screening in adults aged 55 to 80 years who had a 30 pack-year smoking history and were currently smoking or had quit within the past 15 years. The B rating required that private insurance companies cover LDCT scans, but did not extend to Medicare beneficiaries.

A Medicare advisory panel advised against screening for Medicare beneficiaries, withholding early detection from those at highest risk for lung cancer. Dr. Wood helped lead a coalition of health professionals to work with Medicare administrators on the safe implementation of screening. In February 2015, Medicare issued a National Coverage Decision providing lung cancer screening as a covered benefit for Medicare beneficiaries.

The USPSTF updated its LDCT lung cancer screening recommendations in March 2021 to include adults aged 50 to 80 years who have a 20 pack-year smoking history, and Medicare followed a year later. Unfortunately, they both maintain an upper age limit and the requirement that eligible patients must currently smoke or have quit within the past 15 years.

Dr. Wood more recently worked with the President's Cancer Panel on a report issued in early 2022 that highlighted lung cancer as one of the top four cancers of focus. He also is the vice chair of the National Lung Cancer Roundtable from the American Cancer Society, a consortium of public, private, and voluntary organizations that work together to fight lung cancer by engaging in research and projects that no one organization can take on alone.

In addition, Dr. Wood participates in the Lung Cancer Collaboration—a partnership between the World Economic Forum and the Lung Ambition Alliance. This coalition of patient organizations, scientific and medical societies, and industry—which shares the urgent ambition to double 5-year survival in lung cancer by 2030—developed a report that examined lung cancer as global public health issue. The report was presented to the World Health Assembly in May 2022.



And finally, Dr. Wood's work helped demonstrate that early detection of lung cancer is perhaps one of the most effective ways to help meet a principal goal of the Sustainable Development Solutions Network: "by 2030, reduce by one-third premature mortality from non-communicable diseases through prevention and treatment." Through this work, Dr. Wood hopes to make early detection of lung cancer a priority goal of the World Health Organization.

Importantly, Dr. Wood stresses that early lung cancer detection works. "We have a way to identify lung cancer early enough for surgeons to treat it. And when surgeons treat lung cancer, patients can be cured. When patients are cured, lung cancer mortality goes down. And when lung cancer mortality goes down, overall cancer mortality goes down as well," he said.

More information, including important lung cancer references and documents, is available at **sts.org/washscene**.

## Q&A with Dr. Rob Headrick



► Dr. Headrick visited the White House in May to discuss lung cancer screening and the importance of programs such as "Breathe Easy."

## How did you get invited to the White House?

We lobbied Washington, DC, and the Tennessee state government for funding to expand the mobile lunger cancer screening concept, but the pandemic put those efforts on hold. In 2021, we announced a partnership with the GO<sub>2</sub> Foundation for Lung Cancer, AstraZeneca, Merck & Co., Inc., Bristol Myers Squibb, and a nonprofit foundation to expand the program.

This collaboration caught the attention of the Biden Administration and the Cancer Moonshot initiative, and we received an invitation to the White House to help highlight important publicprivate partnerships that are critical to achieving the Cancer Moonshot goal of decreasing overall cancer mortality by 50% over the next 25 years. It was the highlight of my career to have our many years of work recognized by the White House and used as an example for the type of partnership they are looking for.

#### What did you learn about the Administration's work to advance lung cancer screening?

It was clear to all involved that the quickest way to make progress toward the goal of reducing cancer mortality by 50% is through screening. Lung screening is the biggest first step that will start improving overall cancer mortality rates which is why the White House was highlighting our mobile program and its effort to reach at-risk rural and underserved populations. The Moonshot leadership recognizes the importance of supporting continued improvements in screening policy.

## What is the latest on the mobile lung cancer screening bus initiative?

The next mobile lung cancer screening bus is currently in the build stage and will hopefully be on the road by January 2023. In order to provide further value to these high-risk patients, the bus will include continued advancements in screening technology such as artificial intelligence (AI), calcium scoring, and possibly bone density assessment. Reliability, remote connectivity, and throughput also will remain priorities in the design.

#### What innovations are there in the lung cancer screening space that STS members and patients should know?

Low dose lung screening is much more than just finding lung cancer early. This population also is at high risk for ischemic cardiac mortality. We already use non-gated calcium scores with each lung screening to help protocolize patient risk and make sure appropriate medications are being prescribed. Smoking cessation also is encouraged. There is an opportunity to reduce the cardiac mortality in this population by 30%—similar to the lung screening benefit. In addition, so much data from these scans are not being used. For example, Al will play a role in our future by helping the radiologists read these scans and make better use of the data on the scans to improve the overall health of this population. We will become more efficient at predicting future risk for disease and focusing efforts to help mitigate that risk—all while staying within the low dose parameters and with a short single breath CT scan.

#### How can STS members get involved in supporting the mobile lung cancer screening initiative?

The Lung Ambition Alliance—with our help currently is organizing an international mobile lung screening meeting that will feature all current mobile programs in the US (3) and United Kingdom (1). This meeting will allow those who are interested in developing such a program to learn from the existing programs and ask questions. We are hoping to have the meeting by the fall of 2022. It will likely be held in conjunction with one of the international lung meetings and will include a virtual option for those who cannot attend in person.

Mobile lung screening isn't for everyone, but for many, it is a great way to find lung cancer at an early stage and educate patients in areas where geographic or economic barriers prevent patient engagement. We are always willing to talk with STS members about the business model, discuss how we set up our program, and organize site visits to see the bus.

#### THE SOCIETY OF THORACIC SURGEONS

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## **Mark Your Calendar**

**Upcoming STS Educational Events** 

- STS 19th Annual Perioperative and Critical Care Conference Denver, Colorado · Sep. 8–10, 2022
- 2022 STS Advocacy Conference Washington, DC · Sep. 13–14, 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/EACTS Latin America Cardiovascular Surgery Conference Cartagena, Colombia · Dec. 1–3, 2022
- STS 59th Annual Meeting San Diego, California - Jan. 21–23, 2023

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