STS News

THE SOCIETY OF THORACIC SURGEONS

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# STS National Database Enhancements Include Continuous Harvesting, Reporting Dashboard, Aortic Section


The Society is rolling out several new features and upgrades that will make it easier for STS National Database participants to submit files, access interactive progress reports, and include information on evolving procedures.

One new feature is continuous data harvesting. Previously, data files for a particular harvest could be submitted only within a designated 3-week timeframe. Any data errors had to be cleaned up within that same period. At the conclusion of those 3 weeks, sites would sign off on their data files before analysis reports were created.

Soon, Adult Cardiac Surgery Database (ACSD) participants will be able to submit data files at any time throughout the year, receive data quality reports after each submission, and clean up their data in smaller batches.

"Continuous harvesting will allow Database participants and data managers to submit data in close to real time, which may be a less labor-intensive process and may increase the ease of capturing complete and accurate data," said Jeffrey P. Jacobs, MD, Chair of the STS Workforce on National Databases.

There still will be a "lockdown" four times per year, when submissions will close and analysis reports will be generated based on the current data submitted. Instead of sites needing to sign off on their data files, sites that do not want their data included in the analysis at that time will need to opt out.

> "These interactive features will allow participants to examine unique aspects of the data not currently available in feedback reports."
> *–Jeffrey P. Jacobs, MD*

ACSD sites can start submitting data on January 9 under this new continuous harvesting protocol, and the first lockdown will be from February 24 through March 6. Reports based on those data will be available by late April.

The spring 2017 harvests for the General Thoracic Surgery Database (GTSD) and Congenital Heart Surgery Database (CHSD) will be conducted via the traditional 3-week data submission period, and continuous harvesting will begin this summer for those two Databases.

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## Don't Wait: Register Today for the Annual Meeting

The STS 53rd Annual Meeting is just a few weeks away, but it's not too late to join your colleagues in Houston, Texas, for one of the largest cardiothoracic surgery meetings in the world. Save $100 off onsite pricing by registering before January 20 at **www.sts.org/annualmeeting**.

Annual Meeting registration has been simplified this year. Registration provides access to all educational sessions on Sunday, January 22, Monday, January 23, and Tuesday, January 24. Additionally, you will receive complimentary access to Annual Meeting Online. Separate tickets are required to attend the STS Social Event (Monday, January 23) and STS University courses (Wednesday, January 25).

You also can register for STS/AATS Tech-Con 2017, which will be held on Saturday, January 21.

View course descriptions and agendas for educational sessions, as well as oral and poster abstracts, in the *STS 53rd Annual Meeting Abstract Book* at **www.sts.org/abstractbook**.

### THE BEST FORUM FOR SCIENTIFIC RESEARCH

The always-popular general session on Monday will include presentation of the J. Maxwell Chamberlain Memorial Papers and the Richard E. Clark Memorial Papers, which represent some of the top-rated abstracts at the meeting.

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# Shattering the Paradigm with Innovation

Joseph E. Bavaria, MD, President

Advances in cardiothoracic surgery have been nothing short of remarkable over the past few decades.

We've progressed from crude surgical techniques that kept patients in the hospital for weeks to minimally invasive operations that allow patients to be released from the hospital in only a few days. These innovations are good for patients and their families; in many cases, patients experience better outcomes and easier recoveries, which also lead to lower health care costs.

Adoption of new technology can be a very slow process, especially in cardiothoracic surgery. We have a mandate for quality, which is critically important, but sometimes great quality can be at odds with innovation, especially for "early adoption."

We can't stay stuck in old paradigms, however. Quality and innovation need to travel on the same path—in the same direction—so that our patients can lead longer and better lives.

## TECHNOLOGY AT OUR DOORSTEP

Some of the most recent technological advancements in our specialty relate to treating heart valve disease.

Transcatheter aortic valve replacement has evolved rapidly with good outcomes. In late 2011, TAVR received regulatory approval; a few months later, CMS issued a National Coverage Determination for the technology. In the months leading up to the regulatory approval, I personally worked closely with several organizations to establish criteria for the safe introduction of TAVR into clinical practice for high-risk patients. These criteria included participation in the STS/ACC TVT Registry to track short- and long-term outcomes.

Now, more than 5 years later, TAVR use has expanded to patients at moderate operative risk and even some with low operative risk.

A recent STS survey of surgeon participants in the STS Adult Cardiac Surgery Database found that, among those surgeons with TAVR programs at their hospitals, 91% played an active role in the TAVR process, including participating in multidisciplinary meetings, performing TAVR procedures, and conducting follow-up patient care.

I'll provide more results from this important and revealing survey on Tuesday morning during the upcoming STS Annual Meeting in Houston, which also will feature dozens of presentations on use of new technology, including results from early feasibility trials for transcatheter mitral valve replacement.

Quality and innovation need to travel on the same path—in the same direction—so that our patients can lead longer and better lives.

Other innovations that will be highlighted, discussed, and debated at the Annual Meeting include novel ways to treat the thoracic aorta and the lungs.

All of these innovations have been made possible by new technologies and treatments, such as sutureless valves, TEVAR devices, state-of-the-art cardiopulmonary bypass platforms, third or fourth generation LVADs, and advanced VATS techniques.

If you're like me, you get really excited about new technology and dream about ways it can help your patients. But then you realize that the traditional rollout paradigm makes it difficult to adopt these technologies as quickly as we would like.

That's where STS can play a crucial role.

## STEERING INNOVATION AND QUALITY IN THE SAME DIRECTION

The Annual Meeting and upcoming STS standalone educational programs, including an ECMO course, a robotics course, and a structural heart course, will help you see and experience the present and future of cardiothoracic surgery. It is through educational activities such as these that we learn from the experts, experience hands-on training, and review and analyze outcomes data—all vital in the process to adopt new technologies.

Clinical outcomes databases, such as the STS National Database and the STS/ACC TVT Registry, also play a role in the process. Our databases are valuable assets in medicine because they provide opportunities for quality improvement and patient safety.

It is through participation in the STS National Database that you also can take part in STS Public Reporting. The initiative, one of the most sophisticated and highly regarded overall measures of quality in health care, offers risk-adjusted outcomes for common cardiothoracic surgical procedures. STS Public Reporting was launched in 2010 and has expanded over time (see page 13).

Because continuous improvements in quality and rapid adoption of innovation can be inherently at odds with one another, I will use my Presidential Address on Monday at the Annual Meeting to examine these colliding imperatives.

Complementary to my address will be the C. Walton Lillehei Lecture on Tuesday by Dr. Samer Nashef, who co-developed the EuroSCORE risk-assessment system. Dr. Nashef, author of *The Naked Surgeon: The Power and Peril of Transparency in Medicine*, will provide his overview of quality initiatives and their unintended consequences.

## CLARION CALL

Although medicine adopts technology very slowly, we can shatter that paradigm by working together to drive innovation and quality along the same path. We need to see the big picture; we need to connect the dots.

Please join me in Houston at the STS Annual Meeting so that we can begin an accelerated journey into a new era of medicine where patients benefit more quickly and today's innovations truly become tomorrow's standard of care. ■

The Society's mission is to enhance the ability of cardiothoracic surgeons to provide the highest quality patient care through education, research, and advocacy.

IN THIS ISSUE



*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.


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*The Centers for Medicare & Medicaid Services (CMS) has made it clear that the future of physician payments will be linked to quality and value. It is more necessary than ever for cardiothoracic surgeons to stay informed on how these payment models will affect their practices. In this issue of* STS News, *Dr. V. Seenu Reddy explains a CMS rule to bundle payments for coronary artery bypass grafting (CABG) surgery.*

Frank L. Fazzalari, MD, MBA, Chair, Workforce on Practice Management

# Bundled Payments for CABG: What CT Surgeons Need to Know

V. Seenu Reddy, MD, MBA, TriStar Cardiovascular Surgery, Nashville, TN

*This text is accurate as of December 20, 2016. It is possible that the incoming administration will change or reverse the rule.*

Since the passage of the Affordable Care Act, CMS has been seeking to promote cooperative, value-based care. Alternative payment models are one way CMS is attempting to drive quality and value.

This past April, CMS implemented a bundled payment model for hospitals participating in the mandatory Comprehensive Care for Joint Replacement (CJR) program. A few months later, without any results from the CJR program, CMS proposed to mandate that randomly selected hospitals throughout the country participate in new bundled payment models for cardiac care, specifically the care of acute myocardial infarction (AMI) and CABG surgery.

What this means for cardiothoracic surgeons may be gleaned from what has gone on in the orthopedic specialty regarding the care of patients undergoing joint replacement. The key premise for CMS is that bundling payments for the episode of care surrounding bypass surgery will incentivize increased quality, lower costs, and more care coordination.

Here are some highlights from the final rule, which was issued on December 20.

**1. Cases related to Medicare fee-for-service patients admitted for heart attacks and bypass surgeries are eligible for the new cardiac bundled payment program.** Cases covered by Medicare Advantage plans and Accountable Care Organizations are excluded.

**2. The bundle will make hospitals accountable for the cost and quality of care provided during the inpatient stay and for 90 days after discharge.** Hospitals initially will be paid at the current reimbursement rates under the Inpatient Prospective Payment system. However, a retrospective reconciliation will occur relative to a predetermined fixed target price for each episode of care. At the end of each performance year, hospitals will have the opportunity to earn shared savings based on how they performed relative to the target price.

**3. Hospitals will be chosen from 98 randomly selected metropolitan statistical areas for the cardiac bundling program.** Initially, hospitals outside of these selected areas will not participate in the cardiac bundles. Hospitals in rural counties will be excluded, and financial risk will be limited for rural hospitals that fall into the areas selected. More information on the selected hospitals is available at **www.sts.org/CABG-MSA**.

> Much like the "usual and customary" fee schedule of the past, the future of physician payments will be based on and linked to quality, care coordination, and overall value.

**4. The bundles will begin on July 1, 2017.** CMS will roll out the bundles in phases so that hospitals can adapt to the new payment scheme and establish support processes. Penalties will not be levied until the third program year (although participants are allowed to assume risk in 2018 if they so choose). For those who assume risk in 2018 and for all participants beginning January 1, 2019, through the third program year, penalties will be capped at 5% (referred to as the stop-loss amount). The stop-loss amount will increase to 10% in the fourth year and 20% in the fifth year. Potential gains also will be phased in. In the first two performance years, hospitals will be able to earn maximum bonuses of 5% (referred to as stop-gain amounts). These potential gains will then grow, in step with penalties, up to 20% in performance year 5.

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# On Pace

Robert A. Wynbrandt, Executive Director & General Counsel

Regular readers of this space (both of you, not counting members of my family) know that I regularly use this issue of *STS News* as an opportunity for a personal "year in review" and "what's on deck preview" from the vantage point of an STS staffer who has witnessed a lot over the course of these past 30 years working with and for the Society. Those who are really attentive also know that I see much of life through the prism of professional sports. And so, it is no surprise that as I simultaneously look back on 2016 and ahead to 2017, I see a parallel between this organization and a striking trend in the National Basketball Association: picking up the pace.

This story fittingly begins on Friday evening, January 22, 2016, the eve of our 52nd Annual Meeting in Phoenix, when I received a text message from Cousin Amy: "Did you hear? The Cavaliers just fired David Blatt!" This news of a coach's dismissal came as something of a shock, as my hometown basketball team possessed a 30-11 record at the time and was solidly on top of the NBA's Eastern Division. The next shock coming out of Cleveland occurred 2 days later, after newly appointed head coach Tyronn Lue had lost his first game; he lamented that the team was "out of shape" and would not achieve its full potential until its players were physically able to pick up the pace.

The rest, as they say, is history. The Cavaliers—led by LeBron James—proceeded to meet Coach Lue's demands, picked up the pace, and won the NBA championship in dramatic fashion, bringing a major sports crown to Cleveland and ending a 52-year drought.

Either the stars were magically aligned that January weekend in Phoenix or newly elected STS President Joe Bavaria and others within the Society's surgeon leadership were listening to Tyronn Lue. As evidenced in these pages throughout the course of the STS year now ending, as well as in our *STS Weekly* e-newsletter, on www.sts.org, and through social media and our other communication vehicles, this has been a year of enhanced pace, starting with the Board of Directors' adoption of a new strategic plan in Phoenix and extending to such achievements as the launch of a new patient website (**www.ctsurgerypatients.org**), the expansion of the STS Research Center (including the rollout of a game-changing PUF Program and a new Business Plan; see page 12), and the enactment of a US law that includes STS-driven language on "clinician-led clinical data registries" (see December 2016 issue of *Advocacy Monthly*). This acceleration of the pace has even translated to our corporate life, where the dial was turned up a notch or two in 2016 with the Society's merger with the Joint Council on Thoracic Surgery Education and our reorganization/expansion of the STS governance structure that added a fourth Council (see page 11). Even our admission of Active and International Members occurs more rapidly now, with three opportunities for applicants to be admitted by the Board of Directors each year pursuant to a Bylaws amendment approved by the membership in Phoenix.

Students of the NBA who are reading this column know that Tyronn Lue was definitely on to something when he brought a new philosophy of accelerated pace to the Cleveland Cavaliers last January. The entire league appears to have heeded his call, and both pace and scoring are up—way up—throughout the NBA a year later.

And so it is with The Society of Thoracic Surgeons. In line with the plan adopted by our Board in Phoenix, strategic initiatives are well under way in the spheres of database optimization (with exciting developments in process for 2017 as to both functionality and scope; see page 1), education (where we will be rolling out a new symposium on robotic mitral valve repair this spring in Chicago, just a few weeks after our second annual ECMO course in Tampa), and globalization (with a number of initiatives aimed at serving the global interests of all cardiothoracic surgeons and their patients).

There are of course risks and challenges associated with this world of accelerated pace, as well as benefits and opportunities, whether in professional basketball or in cardiothoracic surgery. In that context, I am looking forward to reading *New York Times* writer Thomas L. Friedman's recently published book, *Thank You for Being Late: An Optimist's Guide to Thriving in the Age of Accelerations*. The jacket note accompanying this book indicates that it "serves as a field manual for how to . . . think about this era of accelerations. It's also an argument for 'being late' – for pausing to appreciate this amazing historical epoch we're passing through and to reflect on its possibilities and dangers."

On behalf on the entire STS staff, I hope that the holiday season now ending has afforded you adequate opportunity to "pause and reflect," particularly on the good things in life, as all of us prepare for what undoubtedly will be another year of accelerated pace. We wish you and yours the best for 2017, and look forward to seeing you soon for a special 53rd Annual Meeting in Houston! ■

# Member News

### TRIBUTE TO LEVITSKY AT BETH ISRAEL DEACONESS

STS Past President Sidney Levitsky, MD (second from right, pictured with his family) recently was honored with the dedication of the Sidney Levitsky Cardiac Surgery Service and the establishment of the inaugural Sidney Levitsky Visiting Professorship in Cardiac Surgery at Beth Israel Deaconess Medical Center in Boston. Dr. Levitsky serves as Senior Vice Chairman of the Department of Surgery at Beth Israel Deaconess and as Director of Cardiothoracic Surgery for BID's parent company, CareGroup. He also is the David W. and David Cheever Professor of Surgery at Harvard Medical School. Dr. Levitsky received the Society's Distinguished Service Award in 2001 and the Earl Bakken Scientific Achievement Award in 2012; he served as STS President from 2005 to 2006 and has been an STS member since 1968.

### NAUNHEIM RECEIVES RCSED FELLOWSHIP

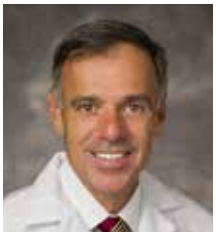
Keith S. Naunheim, MD (left) was honored with the Fellowship *ad hominem* of the Royal College of Surgeons of Edinburgh this past October. The Fellowship *ad hominem* is awarded to current or former practitioners or other individuals of distinction whose professional status is of a high order and who are deemed worthy of the honor. Dr. Naunheim holds the Vallee L. and Melba Willman Endowed Chair in Surgery and is the Chief of Cardiothoracic Surgery at St. Louis University School of Medicine. He currently serves as the Society's Second Vice President and Secretary, and has been an STS member since 1988.

### YUH NAMED CHAIR AT STAMFORD

David D. Yuh, MD has been appointed Chairman of the Department of Surgery at Stamford Hospital in Connecticut, a teaching hospital affiliated with Columbia University. Previously, he was Professor and Chief of the Section of Cardiac Surgery at Yale University. Dr. Yuh has been an STS member since 2003.

### MACGILLIVRAY MOVES TO HOUSTON

Thomas E. MacGillivray, MD is the new Chief of Cardiac Surgery and Thoracic Transplant Surgery, as well as the Jimmy Howell Endowed Chair in Cardiovascular Surgery, at Houston Methodist Hospital. Previously, he was Co-Director of the Thoracic Aortic Center and Surgical Director of the Adult Congenital Heart Disease Program at Massachusetts General Hospital in Boston. Dr. MacGillivray currently serves as the Society's Treasurer-Elect; he previously was Chair of the Council on Education and Member Services. He has been an STS member since 2003.



### SABIK CHAIRS DEPARTMENT OF SURGERY

Joseph F. Sabik III, MD is now the Chair of the Department of Surgery at University Hospitals Cleveland Medical Center, as well as Surgeon-in-Chief and Vice President for Surgical Operations for the University Hospitals System. Previously, he was Chair of Thoracic and Cardiovascular Surgery at the Cleveland Clinic. Dr. Sabik currently serves as the Society's Secretary-Elect; he previously was an STS Director-at-Large. He has been an STS member since 1999.

### UY EXPANDS ROLE AT UMASS

Karl Fabian L. Uy, MD has been named Chief of the Division of Thoracic Surgery at the University of Massachusetts Medical School and UMass Memorial Medical Center. Dr. Uy has been an attending surgeon and faculty member at the University of Massachusetts since 2006. He has been an STS member since 2009.

### RUSSO MOVES TO UPMC ALTOONA

Louis Russo, MD is now the Director of Cardiac Surgery at the University of Pittsburgh Medical Center Altoona. Previously, Dr. Russo was Vice Chairman of the Department of Cardiovascular Medicine and Surgery at UPMC Hamot in Erie, Penn. He has been an STS member since 2003. ■

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

# STS National Database Enhancements Include Continuous Harvesting, Reporting Dashboard, Aortic Section

→ continued from cover

View the complete data submission schedule for 2017 at **www.sts.org/harvestschedules**.

### REPORTING DASHBOARD ON THE HORIZON

Also in the works is a web-based reporting dashboard that will give sites more flexibility over how they view their feedback reports.

Instead of receiving a static PDF report, participants will be provided access to a secure online dashboard where they can drill down into specific procedures. Eventually, individual surgeons will be able to review their own private reports.

"These interactive features will allow participants to examine unique aspects of the data not currently available in feedback reports," said Dr. Jacobs. "In the past, participants were required to submit Minor Data Requests to get access to individualized institutional data benchmarked to national aggregate data. Soon, participants will have real-time access to such data."

With guidance from STS staff and surgeon leaders, professionals from the Duke Clinical Research Institute are working to make the reporting dashboard available for ACSD participants by the third quarter of 2017 and for GTSD and CHSD participants in 2018.

### ACSD SPEC UPGRADE EXPANDS AORTIC FIELDS

On July 1, version 2.9 of the ACSD will go into effect, and an extensive section on aortic and aortic root procedures will be included in the Data Collection Form.

"These fields are really important as we expand treatment options for our patients. Some of my colleagues started changing their operative notes a few months ago so that their data managers could start adding the information as soon as possible," said STS President Joseph E. Bavaria, MD, who was a strong promoter of the expanded aortic fields. "People are very excited about this upgrade."

The new section includes detailed fields on primary indication, specific interventions (such as arch procedures, descending thoracic aorta or thoracoabdominal procedures, and endovascular procedures), and inserted devices. These new elements may help improve risk stratification and further harmonization with other registries.

"The art and science of analyzing medical and surgical outcomes, as well as the assessment and improvement of medical and surgical quality, continue to evolve; these updates confirm the Society's commitment to maintaining the STS National Database as the premier platform in the world to facilitate these objectives," Dr. Jacobs added. ■

## SOCIETY LEADERS SPEAK AT QUALITY CONFERENCE

Two STS leaders were the keynote lecturers at a November 21 conference that highlighted how data are used across disciplines to drive quality improvement and innovative treatments. The 2016 Bakken Symposium: How Data Drives Quality, Safety, and Innovation was held at the University of Minnesota. ■

STS Past President Frederick L. Grover, MD gave a lecture on "The Development of National Cardiac Surgery Databases for Quality Improvement – From the Origins of the VA and STS Databases to the Present."

STS First Vice President Richard L. Prager, MD gave a lecture on "Using STS Data for Quality Improvement: It Is a Natural Fit!"

# New Fellowship Created to Honor Robert Replogle

The Thoracic Surgery Foundation has created a new fellowship in honor of a legendary pediatric cardiac surgeon. The Robert L. Replogle Traveling Fellowship will facilitate the continuing education of a deserving young faculty surgeon committed to the treatment of congenital heart disease in neonates, infants, children, and adults.

Dr. Replogle, who served as STS President from 1996 to 1997, was an educator, researcher, and national leader in cardiothoracic surgery. The fellowship will help early career congenital heart surgeons travel to another institution for the purposes of learning a novel technique, adapting innovative technology, and/or fostering collaboration among surgical investigators in order to further the progress of congenital heart surgery at the recipient's home institution.

You can celebrate Dr. Replogle's life and dedication to education and congenital heart surgery by donating to fund this fellowship at **www.thoracicsurgeryfoundation.org/donate.** Fellowship applications will be available in July 2017; visit **www.thoracicsurgeryfoundation.org/replogle** for more information. ■

# CT Surgery Residents Prepare to Win Jeopardy Title

Cardiothoracic surgery residents from Europe and the United States will face off at the STS 53rd Annual Meeting in the ultimate cognitive challenge—the STS Cardiothoracic Surgery Jeopardy Championship.

Qualifying competitions were held at the European Association for Cardio-Thoracic Surgery Annual Meeting in October 2016 and the Southern Thoracic Surgical Association Annual Meeting in November 2016. The winners from each meeting will compete for international bragging rights on Sunday, January 22, in the Exhibit Hall at the George R. Brown Convention Center in Houston, Texas. ■


Tamashis Mukherjee, MD and Aayush Poddar, MD (center) from G. Kuppuswamy Naidu Memorial Hospital in Coimbatore, India, won the EACTS Jeopardy competition.


Eric Krause, MD (left) and Greg Bittle, MD from the University of Maryland Medical Center in Baltimore won the STSA Jeopardy competition.

## New Clinical Practice Guidelines on Atrial Fibrillation Released

STS has released new clinical practice guidelines examining surgical ablation for atrial fibrillation. The recommendations assess the safety of performing surgical ablation as a concomitant or principal procedure for three surgical approaches: primary atriotomy operations, primary non-atriotomy operations, and standalone operations. The guidelines, posted online in December, appear in the January 2017 issue of *The Annals of Thoracic Surgery*. Read the guidelines at **www.sts.org/guidelines** or access the document on the STS Clinical Practice Guidelines mobile app, available for free at the iTunes store. ■

# TEVAR "Treatment Revolution" Highlighted at STS Symposium

In response to the seismic shift occurring in the treatment of thoracic aortic disease, the Society held a Thoracic Endovascular Aortic Repair (TEVAR) Symposium on December 2-3 in Chicago. During this 1.5-day course, expert speakers shared the latest developments regarding thoracic aortic trauma, coarctation, distal arch and descending disease, thoracoabdominal aneurysm, thoracic aortic dissection, and proximal arch and ascending disease. Attendees even were able to submit their own cases for discussion with the audience and experts. ■


STS President Joseph E. Bavaria, MD said that TEVAR is transforming the practice of "cardio-aortic" surgery.

## CME Credit Available for *Annals* Manuscript Reviewers

*The Annals of Thoracic Surgery* is now offering manuscript reviewers an opportunity to earn continuing medical education credit for their efforts. Reviewers can claim up to 3 *AMA PRA Category 1 Credits*™ for each original manuscript reviewed by filling out the reviewer CME credit request form and submitting it on or before the annual deadline of February 1. CME certificates will be provided to all qualifying requests once per year.

Credit requests will be considered by the handling editor, who will rate each manuscript review on a scale of 1 to 5, looking at factors such as adherence to reviewer guidelines, specificity and accuracy, completeness, usefulness of recommendations, internal consistency, tone, and mindfulness of the needs of the surgical community. Only reviews that score 3 or above will be approved for CME credit.

Visit **www.annalsthoracicsurgery.org/Reviewer_CME** for more information. ■

## STS CODING WORKSHOP HELD IN THE BIG EASY

Approximately 160 surgeons, coders, and others involved in cardiothoracic surgery coding and reimbursement gathered in New Orleans this past November for the 2016 STS Coding Workshop.

In addition to reviewing new and revised 2017 codes for each subspecialty, attendees learned about the new Merit-Based Incentive Payment System, a Centers for Medicare & Medicaid Services (CMS) proposal to implement a mandatory coronary artery bypass grafting payment bundle, and the new CMS reporting requirements for 10- and 90-day global services. ■

Attendees learned how to navigate several changes in store for 2017 coding and reimbursement.

# STS Joins European and Chinese Colleagues at CSTCVS Meeting

Several STS surgeon leaders, along with leadership from the European Association for Cardio-Thoracic Surgery, gave presentations at the Chinese Society for Thoracic and Cardiovascular Surgery's Annual Meeting in Xi'an, China, last October. One of the Society's strategic plan goals is to foster collaboration and connection worldwide. Participating in international cardiothoracic surgery meetings is an important part of this initiative. ■

STS President Joseph E. Bavaria, MD gave several speeches during the meeting, including one on "TAVI Expansion to Intermediate and Low Risk Patients?" and another titled "Fate of Dissected Aortic Arch after Ascending Replacement in Acute Type A Aortic Dissection."

From left: Joseph E. Bavaria, MD (STS), Peter Licht, MD, PhD (EACTS), Keith S. Naunheim, MD (STS), Steven A. Livesey, MD (EACTS), Jolanda Kluin, MD, PhD (EACTS), Lorenzo Galletti, MD, PhD (EACTS), and Joseph F. Sabik III, MD (STS).

# STS Engages the General Public via Press Release Program

As part of its continuing effort to raise public awareness about STS, cardiothoracic surgery, and the role that cardiothoracic surgeons play in the health care arena, the Society issued four press releases September 6–November 3, 2016. Brief recaps can be found below. To read the full press releases, visit **www.sts.org/media**.

September 6: "**Patient and Provider Groups Urge Medicare Not to Undercut Lung Cancer Screening"** warned that a proposal by the Centers for Medicare & Medicaid Services to reduce reimbursement for low-dose computed tomography (LDCT) shared decision-making sessions and LDCT scans by 64% and 44%, respectively, may scuttle recently established screening programs and deter local providers from starting screening programs.

September 8: **"New Website from The Society of Thoracic Surgeons Puts the Power of Information at the Fingertips of Patients"** heralded the formal public release of the Society's patient information website, **ctsurgerypatients.org**, which offers immediate and easy access to expert, multimedia content on heart, lung, and esophageal diseases and operations.

September 13: **"Cardiothoracic Surgeons Love the Job Even With Its Intense Demands"** reported on the results of an STS member survey, which found that despite the significant challenges associated with a career in cardiothoracic surgery, heart and lung surgeons report a very high level of job satisfaction.

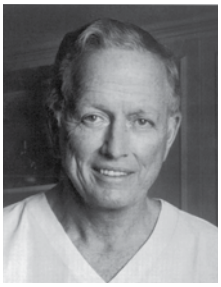
October 6: **"Frailty in Older Surgery Patients May Be Under Recognized"** described how identifying frailty in older patients could increase their chances of surviving surgery, as well as improve their overall outcomes, according to a study in *The Annals of Thoracic Surgery*. ■

For more information on the Society's press release program and other public outreach efforts, please contact media@sts.org.

In Memoriam

## DENTON A. COOLEY, MD

STS FOUNDER MEMBER AND PAST PRESIDENT (1993-1994)



A legendary cardiothoracic surgeon who had a towering presence inside and outside of the operating room has died at the age of 96.

Known for his kindness, as well as his technical speed and perfection, Denton A. Cooley, MD was responsible for many firsts. Among them were the first human heart transplant in the US and the world's first mechanical heart transplant.

Over his long and illustrious career, he performed approximately 100,000 open-heart procedures, many of them at the Texas Heart Institute, which he founded in his native Houston. His groundbreaking work resulted in many honors and awards, including the Presidential Medal of Freedom and the National Medal of Technology.

Dr. Cooley attended The University of Texas on a basketball scholarship. After starting medical school at the UT Medical Branch in Galveston, he transferred to Johns Hopkins University in Baltimore.

"He was at Johns Hopkins Hospital as an intern at the operating table on November 29, 1944, when Dr. Alfred Blalock performed the world's first operation on a blue-baby resulting from tetralogy of Fallot. Dr. Cooley later helped pioneer many aspects of cardiac surgery; he was a remarkable person and had a remarkable career," said STS Past President Vincent L. Gott, MD.

An STS Founder Member who served on the Society's Council (precursor to the current Board of Directors) during the organization's formative years in the late 1960s, and later succeeded Dr. Gott as STS President, Dr. Cooley reflected on that historic Blalock operation during his 1994 Presidential Address: "One can only imagine the excitement we felt when the clamps were released from the vessels, and the infant's lips changed from deep blue of cyanosis to a glorious pink. That may have been the dawn of the modern era in heart surgery."

Although he acknowledged that he had a unique opportunity to begin his career at a time when virtually every heart operation was a new experience, Dr. Cooley challenged current cardiothoracic surgeons to advance the specialty: "Today's surgeons are in a unique position to develop the discipline further if they will recognize and seize their opportunities. I implore each of us to maintain our dignity and to revere the traditions of our forebearers."

Dr. Cooley stopped performing surgery when he was 87, but remained active at the Texas Heart Institute until his death on November 18. ■

## STS OFFERS HANDS-ON SAMPLING IN CT SURGERY

General surgery residents and medical students got a glimpse of what it's like to be cardiothoracic surgeons at the 2016 Cardiothoracic Surgery in the Future course, an educational activity jointly presented by STS and the American College of Surgeons. More than 80 people attended the October 17 course, held during the ACS Clinical Congress in Washington, DC.

After listening to talks on the projected needs of CT surgery and the 6-year integrated CT surgery program, attendees participated in hands-on wet labs covering aortic valve replacement, off-pump coronary artery bypass grafting surgery, video-assisted thoracoscopic lobectomy, chest wall reconstruction, and more. ■

The popular course provided individual instruction from experts in the field.

## Staff Updates

**Lily Aduana** joined the Society on November 16 as an Editorial Assistant for *The Annals of Thoracic Surgery* after filling the role on a temporary basis since July. She coordinates the journal's continuing medical education activities and assists with the peer-review process, among other editorial duties. Previously, Lily was a Legal Administrative Assistant at Flanagan Bilton LLC in Chicago. She holds a bachelor's degree in international studies from Indiana University. To contact Lily, e-mail laduana@sts.org.

**Sonny Hidic** joined the Society on November 16 as its Information Technology Coordinator after filling the role on a temporary basis since August. He is responsible for handling technical support issues and other system administration tasks. Previously, Sonny was an IT Technician/Assets Assistant at Deloitte in Chicago. He holds a bachelor's degree in computer science from Northeastern Illinois University. To contact Sonny, e-mail shidic@sts.org.

# Bundled Payments for CABG: What CT Surgeons Need to Know

→ continued from page 3

**5. Hospitals will receive quality-adjusted target payments for each episode of care.** These target payments will be based on a blend of historical hospital-specific and regional data and will be adjusted to account for case complexity. Hospital targets also will be adjusted for quality, so that hospitals delivering the best care have the opportunity to share in more savings. If hospitals do not meet the baseline standards for quality, they cannot share in savings.

**6. At the end of each performance year, hospitals that meet quality standards can earn additional payments based on cost.** This means CMS will compare the actual spending for each episode to the target prices paid to the hospital. Those that are able to deliver care for less than the target price will be paid the achieved savings. Hospitals that exceed the target will be required to repay Medicare.

**7. The proposed rule also includes a model for cardiac rehabilitation services.** The model aims to test whether payments incentivize use of cardiac rehabilitation during the 90-day period following hospital discharge.

**8. The AMI and CABG bundles can qualify as Advanced Alternative Payment Models in 2018 under the Medicare Access and CHIP Reauthorization Act (MACRA).** The cardiac bundled payment program established pathways for physicians potentially to qualify under the Quality Payment Program for Advanced APMs. Surgeons participating in Advanced APMs will earn a 5% bonus payment from 2019 to 2024. The mandatory CABG bundle will qualify as an Advanced APM. Physicians in participating hospitals can get credit for participating in an APM (and therefore be exempt from participating in the Merit-Based Incentive Payment System) as early as January 2018, provided that their hospitals are willing to assume downside financial risk sooner than is required under the rule finalized on December 20. Physicians in these hospitals will be eligible to receive bonus payments in 2019.

STS has actively advocated on behalf of cardiothoracic surgeons in relation to this new payment program, including meeting with CMS in person last September and sending a subsequent comment letter outlining specific concerns. In particular, the Society has noted that there are already too many payment policy changes in store for 2017 for physicians to have a reasonable expectation of success under this proposal. STS also has argued that clinical data, such as those in the STS National Database, should be used instead of Medicare claims data to determine the risk methodology of such payments. The final rule issued in late December incorporated some of the Society's recommendations on quality measurement.

The key for cardiothoracic surgeons, whether in an employment or private practice model, is that the system of independent physician payment for volume of services provided will soon be of historic interest. Much like the "usual and customary" fee schedule of the past, the future of physician payments will be based on and linked to quality, care coordination, and overall value. ■

## Changes Made to STS Governance Structure

To better serve the needs of STS members, the Society's Board of Directors has divided the Council on Education & Member Services into two new Councils that each will focus on more tailored priorities.

The Council on Meetings and Education groups workforces relating to the STS Annual Meeting, international meetings, clinical education efforts, e-learning activities, new technology, and issues facing cardiothoracic surgery residents. Wilson Y. Szeto, MD is the Chair of the new Council.

The Council on Clinical Practice and Member Engagement includes workforces that focus on each cardiothoracic surgery subspecialty, practice management, career development, and associate membership. Francis D. Pagani, MD, PhD is the Chair of the new Council.

To review the complete list of STS councils, standing committees, and workforces, visit **www.sts.org/leadershipstructure.** ■

# Scholarships Encourage CT Surgery Careers

The Society's Looking to the Future Scholarship program will welcome 60 medical students and general surgery residents to the upcoming STS 53rd Annual Meeting in Houston.

The program was developed to identify and encourage general surgery residents and medical students who are considering, but not yet committed to, a career in cardiothoracic surgery. Since its inception, the program has awarded 430 scholarships.

"The scholarship recipients get amazing exposure to the field," said LTTF Task Force Chair Rishi Reddy, MD. "They can sit in on any Annual Meeting session, and we also have special programming to answer questions about training pathways, lifestyle, and more."

> "The scholarship recipients get amazing exposure to the field."
> *–Rishi Reddy, MD*

Each scholarship recipient is assigned a surgeon mentor to provide one-on-one insights into the life and career of a cardiothoracic surgeon. But the recipients aren't the only ones who benefit from the LTTF program.

"The surgeons get the opportunity to engage with a young person from outside their institution and really 'light a fire' within that person. Most of our mentors reapply year after year, as they find the engagement process so exciting for themselves," Dr. Reddy said.

With the shrinking CT surgery workforce and fewer training programs, Dr. Reddy sees LTTF as an "equalizer" for medical students and residents at institutions that may not have CT residency programs.

"One of my former LTTF mentees, Ed Bergeron, was at a community general surgery program," Dr. Reddy said. "He joined my lab, was extremely productive, and is now finishing his CT fellowship at the University of Colorado. Ed would not have had the connections or the broader mentorship without the LTTF program's assistance." ■

To view a list of the 2017 scholarship winners, visit **www.sts.org/lttf.** For information regarding the LTTF program, contact Rachel Pebworth, Senior Coordinator, Affiliate Organizations, at rpebworth@sts.org or (312) 202-5835.

# PUF Research Program Provides Faster Access to Quality Data

With the launch of the STS Participant User File (PUF) Research Program last fall, participants in the STS National Database now have the opportunity to request national-scale de-identified data for use in research projects.

The PUF Program was designed primarily as an affordable option for investigators to pose research questions, quickly obtain quality data, analyze these data themselves with appropriate biostatistics resources, receive feedback, and develop their efforts into abstracts and manuscripts.

"Over the last several years, it had become clear that STS members wanted to use our data locally and that local use would increase the amount of research using STS data," said Fred H. Edwards, MD, Chair of the STS Workforce on Research Development. "After a recent strategic planning meeting, a group was formed to develop an approach that would allow the concept to become a reality."

Felix G. Fernandez, MD is serving as Chair of the PUF Task Force, which will review applications by focusing on various key criteria, including the scientific merit of the proposed research, the feasibility of the research, overlap with ongoing approved STS research, and the analytic resources available to the investigative team.

"The goal of the PUF Program is to make it easier and quicker for programs to access data, while maintaining the high quality of all publications that use STS data," said David M. Shahian, MD, Chair of the STS Council on Quality, Research, and Patient Safety.

For some researchers, the PUF Program may be an alternative to the STS Access & Publications program. There are some key differences between the programs, however.

"Since the PUF data are de-identified, you can't link them to long-term data, such as Medicare data," Dr. Shahian explained. "Also, the data received through the PUF Program are analyzed by the requesting institution, rather than the Duke Clinical Research Institute, which is why we require that submissions include a qualified biostatistician on the investigational team."

The Task Force began accepting applications for data in the Adult Cardiac Surgery component of the Database last fall. Data from the General Thoracic Surgery Database and Congenital Heart Surgery Database will become available in early 2017.

More information about the PUF Program can be found at **www.sts.org/PUF**.

Eligibility for participation in the PUF Research Program is limited to STS National Database surgeon participants and research scientists affiliated with STS National Database hospital participants in good standing. ■

If you have questions about the PUF Program, contact STS Research Director Robert Habib at rhabib@sts.org.

# STS National Database Launches General Thoracic Public Reporting

With the launch of public reporting for the General Thoracic Surgery Database (GTSD), the STS National Database is giving general thoracic surgeons the same opportunity to display their commitment to transparency and quality improvement as their adult cardiac and congenital heart surgery colleagues have had.

Adult Cardiac Surgery Database (ACSD) participants have been able to publicly report their outcomes since 2010, growing from 226 consenting programs for the first data release to 607 for this month's release. Public reporting for Congenital Heart Surgery Database (CHSD) participants started in 2015.

> "STS has done a tremendous job of establishing a transparent and sound methodology for public reporting in the ACSD and CHSD, and general thoracic surgery is very excited to join this effort."
> *–Benjamin D. Kozower, MD*

This year, GTSD participants will be able to join the effort and publicly report their lobectomy outcomes.

"Public reporting of surgical outcomes is becoming a routine expectation for patients, payers, and other stakeholders. STS has done a tremendous job of establishing a transparent and sound methodology for public reporting in the ACSD and CHSD, and general thoracic surgery is very excited to join this effort," said Benjamin D. Kozower, MD, Chair of the GTSD Task Force.

For the first stage of GTSD public reporting, a listing of all active participating institutions in the GTSD as of October 31, 2016, will be published on the STS website; individual participant surgeons at each institution also will be named. Additionally, STS will publish the discharge mortality and median postoperative length of stay for lobectomy for all GTSD participants as a group and compare those numbers to corresponding figures from the National Inpatient Sample, which is the largest, all-payer inpatient database available in the United States.

Plans also are under way to publicly report participant-level outcomes for lobectomy compared to STS and national outcomes later this summer. Discharge mortality, median postoperative length of stay, and a two-domain lobectomy composite measure (including risk-adjusted mortality and major complications) will be reported for consenting programs.

"The GTSD is different from the other two component databases in two important ways. First, we have much lower penetrance, meaning that we only capture or represent about 50% of the lung and esophageal cancer resections being performed in the country," Dr. Kozower said. "Second, our outcomes are better than national benchmarks. Therefore, we want to continue the push for transparent reporting, while not disadvantaging an STS participant that may be a two-star program—expected performance in the Database—but still performs above national benchmarks."

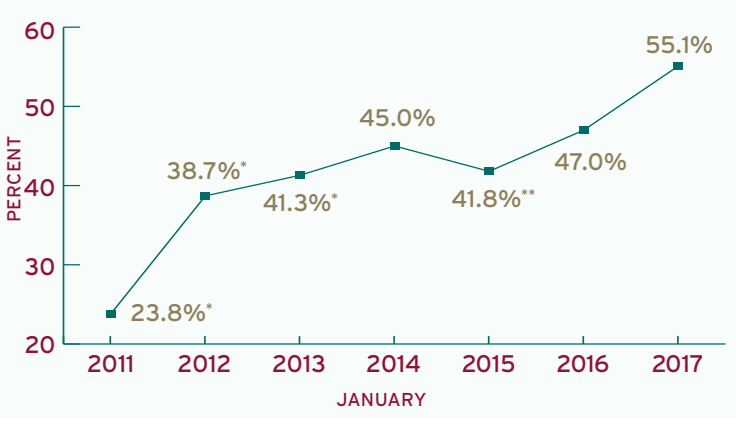
GTSD participants can opt in to publicly report their outcomes by signing a consent form, which is available on the STS website. You also can get more information at the STS booth (#533) in the Exhibit Hall at the Society's Annual Meeting in Houston, January 21-25. Completed consent forms for all three Database components are due from new public reporters by March 13, 2017, for inclusion in the summer data release.

"This is an iterative process," Dr. Kozower added. "As our long-term outcomes, like 5-year survival, mature and we move toward adding patient-reported outcomes, our ability to improve the public reporting effort will grow." ■

If you have questions regarding GTSD public reporting, contact Sydney Clinton, Quality Metrics and Initiatives Coordinator, at sclinton@sts.org. To view a webinar on STS Public Reporting, visit **www.sts.org/webinars.**

## ACSD PARTICIPANTS ENROLLED IN PUBLIC REPORTING

Though public reporting started with only about a quarter of programs that were ACSD participants, more than half have now consented to report their outcomes. Since HCA, which has more than 80 hospitals with adult cardiac surgery programs, endorsed participation in the Society's public reporting initiative last fall, numbers have grown significantly for the January 2017 release.




*Approximate **Numbers dipped this year as participants with outdated consent forms were required to submit new ones

### TOOLKIT AVAILABLE TO PROMOTE PUBLIC REPORTING PARTICIPATION

STS has developed a toolkit for Database participants wishing to promote their ratings to the public. The toolkit contains answers to frequently asked questions about STS, the Database, and the public reporting process, sample press releases, and quotes from STS leaders that may be used in press releases. View the toolkit at **www.sts.org/media**, and contact Jennifer Bagley, Media Relations Manager, at jbagley@sts.org with any questions.

## Don't Wait: Register Today for the Annual Meeting

→ continued from cover

The Chamberlain paper for adult cardiac surgery examines moderate coronary artery stenosis after surgical revascularization. The congenital heart surgery paper takes a look at optimal timing for stage-2 palliation after the Norwood operation. And the general thoracic surgery paper reviews a new risk prediction model for long-term mortality following lung cancer resection in patients older than 65.

The Clark papers highlight research that utilizes data from the STS National Database. The adult cardiac surgery paper looks at how surgical ablation affects mortality in contemporary mitral valve repair or replacement operations. The congenital heart surgery paper evaluates risk factors for in-hospital shunt failure. And the general thoracic surgery paper outlines the development of a composite performance measure for esophagectomy in esophageal cancer.

### HEAR FROM EXPERTS AROUND THE GLOBE

A session to be presented on Monday, January 23, by STS, the Canadian Association of Thoracic Surgeons, and the Canadian Society of Cardiac Surgeons will focus on implementing quality improvement by describing how surgeons and institutions perceive their practice versus true data-based performance. Also on Monday, experts from around the world will examine the quality versus access debate in cardiothoracic surgical care, including regionalization, building sustainable cardiothoracic surgery programs, and humanitarian crises, at the International Symposium.

On Tuesday, January 24, the Society will team with the European Association for Cardio-Thoracic Surgery in a session on the various treatment strategies and techniques for distal thoracic aortic dissection. Later that day, STS will join with the European Society of Thoracic Surgeons to discuss controversial issues in general thoracic surgery, including adjuvant treatment for thymic malignancies, donors for lung transplantation, the role of lung volume reduction surgery for emphysema, and the surgical management of spontaneous esophageal perforations.

In addition to collaborative sessions with international participants highlighted above, special presentations with the American College of Cardiology, the Society for Vascular Surgery, the Society of Cardiovascular Anesthesiology, and the American Association for Thoracic Surgery also are part of the program. And in light of recent findings tracing *Mycobacterium chimaera* infections to heater-cooler devices used in cardiac surgery, a special symposium has been added to the program to help attendees better understand the cause of these infections and develop measures to lower the risk of occurrence.

And that's just the tip of the iceberg. The Annual Meeting will feature dozens of oral abstract presentations, along with invited talks by renowned speakers, lively debates, and surgical videos. Don't miss this opportunity! ■

Registration and housing is available at **www.sts.org/annualmeeting.** If you have questions about registration, contact the Society's official registration partner, Experient, at (800) 424-5249 (toll free), 00-1-847-996-5829 (for international callers), or sts@experient-inc.com.

## PUT KNOWLEDGE INTO PRACTICE AT STS UNIVERSITY

Cap off your Annual Meeting experience by attending STS University on Wednesday, January 25. These hands-on courses allow attendees to gain experience with a wide variety of cardiothoracic surgical procedures.

**Course 1:** Essentials of TAVR

**Course 2:** TEVAR and Aortic Arch Debranching Procedures

**Course 3:** Mitral Valve Repair

**Course 4:** Valve-Sparing Aortic Root Replacement

**Course 5:** Aortic Root Enlarging Procedures and Aortic Valve Leaflet Reconstruction

**Course 6:** VATS Lobectomy

**Course 7:** Advanced Open Esophageal and Tracheal Procedures

**Course 8:** Chest Wall Resection and Pectus Surgery

**Course 9:** Atrial Fibrillation (Maze Procedure)

**Course 10:** Mechanical Circulatory Support


## THANK YOU

The Society gratefully acknowledges the following companies for providing educational grants for the STS 53rd Annual Meeting.

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*This list is accurate as of December 19, 2016.*

# STS Hosts Fly-In and Legislative Briefing

This past October, 20 STS members traveled to Washington, DC, and met with Congressional staff. During the course of 35 meetings, members urged lawmakers to protect reimbursement for life-saving lung cancer screenings, cautioning that cutting payments for screenings may prohibit access and endanger patient health. They also encouraged careful oversight of Medicare Access and CHIP Reauthorization Act implementation.

In conjunction with the Fly-In, the Society held its first-ever congressional briefing, "Clinical Data Registries and Alternative Payment Models." Congressional staffers, as well as Fly-In attendees, heard from STS Second Vice President and Secretary Keith S. Naunheim, MD, STS Past President Jeffrey B. Rich, MD, and Chair of the STS Council on Quality, Research, and Patient Safety David M. Shahian, MD about how the STS National Database can be utilized in Medicare physician payment reform.

Learn more about how to get involved in advocacy efforts on behalf of the specialty at **www.sts.org/advocacy/get-involved**. ■

1. STS members from Michigan spent time on the Hill advocating for cardiothoracic surgeons and their patients.
2. David M. Shahian, MD discussed the importance of registries for transparency in the health care system.
3. STS members from Massachusetts met with staff from Senator Edward J. Markey's office during last fall's Fly-In.
4. Keith S. Naunheim, MD (standing) and Jeffrey B. Rich, MD (seated) explained the divergent pathways available to physicians under the Merit-Based Incentive Payment System.

View more photos and a video of the briefing—which may be of use to you in interactions with hospital administrators, payers, and others—at **www.sts.org/fly-in.**

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## MARK YOUR CALENDAR

**Upcoming STS Educational Events**

**STS/AATS Tech-Con 2017 & STS 53rd Annual Meeting**
*Houston, Texas*
January 21-25, 2017

**ECMO Management Symposium**
*Tampa, Florida*
March 10-12, 2017

**Symposium on Robotic Mitral Valve Repair**
*Chicago, Illinois*
March 31-April 1, 2017

**Find out more at www.sts.org/education-meetings.**

# Thank You!

The Society of Thoracic Surgeons

The Society of Thoracic Surgeons gratefully acknowledges the following **Platinum Benefactors** for providing educational grants for the STS 53rd Annual Meeting in Houston.

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