**MONDAY | JAN. 29, 2018**

**STS MEETING BULLETIN**

**THE SOCIETY OF THORACIC SURGEONS**

**54th ANNUAL MEETING**

**FORT LAUDERDALE, FL | sts.org**

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**Diversity in Cardiothoracic Surgery Workforce Benefits Patients, Professionals**

An important new session offered this morning will address the role of diversity and inclusion in the cardiothoracic surgery workforce and explore why physicians who are underrepresented in medicine are important for the optimal delivery of cardiothoracic surgical care.

The session was developed by the Society’s Special Ad Hoc Task Force on Diversity and Inclusion, which was created last year with a mission of fostering inclusion and diversity within STS, as well as the cardiothoracic surgery specialty.

“IT is the vision of our President, Dr. Richard Prager, to see a workforce equipped to care for diverse populations both nationally and internationally by cultivating an open environment,” said Task Force Chair and session moderator David T. Cooke, MD.

During the session, David A. Acosta, MD, Chief Diversity and Inclusion Officer at the Association of American Medical Colleges, will share his expertise on the value proposition of diversity and inclusion.

“Studies have demonstrated that diversity provides a more robust learning environment. Students who interacted with students from racial/ethnic-diverse backgrounds demonstrated the greatest engagement in active thinking, growth in intellectual discourse, engagement and motivation, and growth in intellectual and academic skills,” he said.

A diverse physician workforce also benefits patients, Dr. Acosta added. “Studies have also demonstrated that racial/ethnic concordance and language concordance between patients and their doctors are associated with improved outcomes.”

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**Share Your Thoughts on Diversity**

If you haven’t done so already, please take 10 minutes to fill out the STS Diversity and Inclusion Survey at sts.org/diversitysurvey. Results will be used by the Society to develop and implement programming and other resources. Individual responses will remain anonymous, and aggregate survey results will be reported after analysis for peer review and/or general dissemination.

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**‘Shark Tank’ Pitches Address Unmet Needs**

The growing prevalence of cardiovascular disease and advances in technology have led to exponential growth in the cardiothoracic device market. Three physician-innovators are hoping to be part of that burgeoning market and pitched their cutting-edge products and novel devices during yesterday afternoon’s STS/AATS Tech-Con Joint Session: Robotic Cardiothoracic Innovations and “Shark Tank”—Rapid-Fire Pitches of Revolutionary Technology.

Jeffrey L. Port, MD, of Weill Cornell Medical Center in New York, led off the pitch session by discussing a device designed to address the clinical challenge of identifying small nodules, especially during minimal invasive surgery. He said that his novel microshell marker offers many benefits over other tools, such as hookwires and dyes, including lack of migration or dispersion, intraoperative ultrasound visibility, long-term (30 days or more) duration, elimination of the need for a localization procedure, and biodegradability.

Steven F. Bolling, MD, of the University of Michigan in Ann Arbor, William E. Cohn, MD, Vice President for Johnson & Johnson Medical Device Companies, and Arjun (J.J.) Desai, MD, Vice President, Innovation, Johnson & Johnson, served as the “sharks” to evaluate the pitches and offer advice.

Dr. Bolling and Cohn commended Dr. Port and his team for the device but noted that the presentation fell short of a pitch; because of this, they opted not to invest. Dr. Desai agreed but said he would be “in as an advisor.”

In the second pitch, James H. Mehaffey, MD, of the University of Virginia in Charlottesville, discussed the important role of ventricular assist devices (VADs), while noting that suction events due to low-flow states and malposition of the inflow cannula result in significant morbidity. In addition, leftward shift results in distorted right ventricular geometry, leading to late right ventricular dysfunction as a sequela of adverse remodeling. Dr. Mehaffey describes his idea on how to improve ventricular assist devices.

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**Don’t Miss Today’s Presidential Address**

**Eye of the Beholder: The Reinvention of Seeing**

Richard L. Prager, MD

9:50 a.m. – 10:50 a.m., Grand Ballroom
WE GET YOU.

Commitment
The changing cardiac surgery landscape is challenging. We understand that and with our breadth and depth of products and people, we can provide solutions for the complex healthcare environment.

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**CG Future™ Annuloplasty System**

**Simulus™ Semi-rigid Annuloplasty System**

**Indications:** This device is indicated for the reconstruction and/or remodeling of pathological mitral valves. Valvular insufficiency and/or stenosis may be corrected by appropriate repair and/or remodeling. Contraindications: Heavily calcified valves, valvular retraction with severely reduced mobility, active bacterial endocarditis, Warnings/Precautions/Adverse Events: Only physicians who have received proper training in valve repair should use this device. Adverse events can include: thromboembolic events, dehiscence, hemolysis, stenosis, residual incompetence, heart block, endocarditis, systolic anterior motion, left ventricular outflow tract obstruction, anticoagulant-related bleeding or hemorrhage. Caution: Federal law restricts these devices to sale by or on the order of a physician. For a listing of indications, contraindications, precautions, warnings, and potential adverse events, please refer to the Instructions for Use. For countries that use eIFUs, consult instructions for use at this website www.medtronic.com/manuals. Note: Manuals can be viewed using a current version of any major internet browser.

**Simulus™ Semi-rigid Annuloplasty Ring and Band**

Indications: The Simulus semi-rigid annuloplasty ring and band are for use in patients undergoing surgery for diseased or damaged mitral valves. The Simulus semi-rigid annuloplasty ring and band provide support for and限制 expansion of the annulus. Contraindications: Severe, generalized or localized bacterial endocarditis, heavily calcified valves, greatly dilated annulus (not reducible by standard techniques), severe valvular dysfunction (not correctable by standard techniques), congenital deformations with loss of native tissue, Warnings/Precautions/Adverse Events: Only physicians who have received proper training in valve repair should use this device. Adverse events can include: thromboembolic events, dehiscence, hemolysis, stenosis, residual incompetence, heart block, endocarditis, systolic anterior motion, left ventricular outflow tract obstruction, anticoagulant-related bleeding or hemorrhage. Caution: Federal law restricts these devices to sale by or on the order of a physician. For a listing of indications, contraindications, precautions, warnings, and potential adverse events, please refer to the Instructions for Use. For countries that use eIFUs, consult instructions for use at this website www.medtronic.com/manuals. Note: Manuals can be viewed using a current version of any major internet browser.
Chamberlain Papers Represent the Best in New Research

ERAS Pathway Decreases Perioperative Morbidity Following Thoracotomy for Primary Lung Cancer

Enhanced recovery after surgery (ERAS) programs are safe, feasible, and effective for reducing postoperative morbidity in patients undergoing thoracotomy for primary lung cancer. Thoracic surgeons should move forward with confidence in implementing ERAS, according to Robert M. Van Haren, MD, of MD Anderson Cancer Center in Houston, who will present the Chamberlain Paper for General Thoracic Surgery.

Dr. Van Haren and colleagues compared outcomes for all patients undergoing pulmonary resection for primary lung cancer at MD Anderson between 2006 and 2016. Patients were evaluated at the pre-ERAS stage, during a transitional period with elements of ERAS, and after full implementation of an ERAS pathway.

ERAS components included limited pre-anesthetic fasting, preemptive analgesia, intraoperative regional analgesia with liposomal bupivacaine intercostal blocks, drain minimization, postoperative opioid-sparing multimodal analgesia, early ambulation, and oral intake.

The pathway’s benefits included reducing complications, such as atrial fibrillation and pneumonia, and opioid-sparing drug treatment. Opioid-sparing benefits are particularly valuable at a time of a global opioid epidemic, Dr. Van Haren said.

“ERAS hasn’t been looked at in thoracic surgery until now,” he said. “Our goal with ERAS is to give patients better pain control and shorten their stay. We’re seeing a reduction in hospital stays from 5 days to 4, with no increase in readmissions. It’s clear from our analysis that ERAS is effective, but it needs buy-in and collaboration from the entire team—from the thoracic surgeons and anesthesiologists to nursing and pharmacy.”

Patients Will Travel Long Distances for Better Care

Regionalization of care has been hypothesized to be an ideal model for the delivery of congenital heart surgery (CHS); however, it has not been investigated in the United States. The Chamberlain Paper for Congenital Heart Surgery details the current network of hospitals at which patients undergo CHS as the basis for designing a regionalized system.

Tara B. Karamlou, MD, of Phoenix Children’s Hospital, was among a team of researchers who examined congenital heart surgery referral patterns throughout the United States. Some states, such as California, Florida, New York, and Texas, had many CHS centers, while other states had none. California, for example, had 25 centers, many of which were located in close proximity to one another.

“We have to be good stewards of our patients’ care,” Dr. Karamlou said. “It’s important for centers to collaborate and discuss partnerships with other centers. Our data would suggest that providers and stakeholders should look critically at models in their states and, if possible, collaborate with local or regional centers of excellence.”

In addition to describing the distribution of CHS centers in the United States and demonstrating national referral patterns, the researchers sought to characterize the demographic currently traveling for CHS and the incurred travel burden. The results showed that patients often travel long distances to high-volume centers perceived as high quality, regardless of patient age or case complexity. Patients without insurance traveled the least for care.

“One of the major unanticipated findings of this initial study was that many patients are already traveling a fair distance to perceived centers of excellence for surgery. Our study shows that 84% of patients already bypass the nearest center, which suggests that regionalization of care already exists to a certain extent,” Dr. Karamlou said.

While higher case complexity was primarily concentrated in larger volume hospitals, very low-volume hospitals still performed important numbers of complex cases. Researchers accounted for case complexity using the RACHS-1 system and hospital volume.

According to Dr. Karamlou, if more hospitals were consolidated, such that only those centers with an annual case volume greater than 150 performed surgeries, travel distance would increase by a median of about 100 miles.

Significant Long-Term Survival Benefits Are Associated With SAFA

Surgical atrial fibrillation ablation (SAFA) was previously proven to be highly effective in reducing atrial fibrillation. Now, it appears to have a more lasting influence, affecting long-term survival.

Alexander Iribarne, MD, of Dartmouth-Hitchcock Medical Center in Lebanon, NH, and colleagues performed an extended look at SAFA, which can be performed without additional risk of operative mortality or major morbidity and is recommended at the time of concomitant mitral operations, as well as aortic valve and coronary bypass surgery, to restore sinus rhythm.

“The takeaway is that we not only have new guidelines based on the efficacy of SAFA in achieving freedom from atrial fibrillation, but we now also have additional data showing that SAFA has a real impact on how long patients live,” Dr. Iribarne said. “We hope this information will encourage more surgeons to incorporate SAFA in their practice.”

The Chamberlain Papers honor the scientific contributions of Dr. Chamberlain, a renowned cardiothoracic surgeon who chaired the steering committee tasked with creating The Society of Thoracic Surgeons.
For my POEM patients, I’m more aware of the risk of silent reflux and esophagitis and will need to tailor my follow-up because of that.

JACOB MOREMEN, MD
Jackson, MS

I learned more about the different tracks involved in becoming a CT surgeon: 4 + 3 and I-6. I also learned about new innovations, including sutureless valves. It’s very exciting to see so much change going on and to have such great potential mentors to look up to.

JACK MIZELLE, BA
1st-year medical student
Boston University Medical School

I’ve learned about aortic valve repair techniques. Traditionally, I’ve replaced aortic valves, but I’ve learned some things that will allow me to repair some of them.

GEOFFREY COUSINS, MD
Huntington, WV

I learned so much about the next wave of innovations to make patients safer in a presentation by Kathleen Sutcliffe. She talked about high-reliability organizations and creating a climate and culture of respect.

SARAH SCHETTLE, PA-C
Rochester, MN

Symposium Highlights Techniques to Manage Heart Infections

Infectious heart disease, especially as a result of the current opioid epidemic, is on the rise among young adults. At the International Symposium, surgeons from around the world will explain their approaches to dealing with these infections, the central challenges they face, and the ethical disease management dilemmas related to infectious heart disease in young adults.

Speakers will discuss the treatment of infected mitral valves, repairing the bicuspid aortic valve, endocarditis and neurological complications, transcatheter interventions for failing repairs, valve thrombosis, and infection of aortic prostheses. “Many surgeons in developing countries don’t have the resources they need to treat these patients,” said session moderator Juan P. Umaña, MD, of Fundacion Cardoinfantil-Institute of Cardiology in Bogotá, Colombia. “Imaging techniques are not readily available, so discussing a simple algorithm in how to approach these patients will be a major focus.”

Stay connected

En route to @STS_Ctsurgery annual meeting, where one of my mentors - Dr. Richard Prager @umichCVC @UMichSurgery - will give Prez address Monday AM. Grateful for the opportunity to connect with Mentors, Friends & trainees. #STS2018

@TomVarghesrJr

Amazing to see this on my first run to the Beach! Exciting! #STS2018

@sarsch79

Packed room today at the CHEST/STS combined symposium on advanced Bronchoscopy and airway surgery organized by Dr. Whyte and I at STS annual meeting in Fort Lauderdale. Great to see the interest and wonderful multidisciplinary discussion.@accpchest @STS_Ctsurgery #STS2018

@Int_Pulmonology

Dr. Prager describes the Phase of Care Mortality Analysis (POCMA) - ~25% due to factors in the #CVICU. 1/3 likely preventable! Real opportunity for improvement in quality and patient safety! #STS2018 #TSSMN @STS_Ctsurgery

@TheRakeshArora

Hartwig touches on ECMO for complex airway reconstruction. Interesting use of EC support in general thoracic surgery. #STS2018

@archerm2

30 fantastic “Looking to the Future” scholarship winners @STS_Ctsurgery listen to @DavidDOdell give advice on becoming a CT surgeon. Key Tip: A mentor is not just for times of crisis! Be proactive and develop a relationship when things are going well. #STS2018

@BrianMitzman

Terrific talk from Richard Bell of @MarylandSurgery on implementing @STS_Ctsurgery post cardiac surgery resuscitation guidelines. “About 10 hours after our first training we needed to use this for the first time.” #STS2018

@brianmtill
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Clark Papers Spotlight Three STS National Database Studies

The STS National Database has contributed to scores of research studies that advance patient care and patient safety in cardiothoracic surgery. Three such studies—considered as the best submitted for the 2018 Annual Meeting—have been designated as this year’s Richard E. Clark Memorial Papers.

Instead of the Clark Papers being presented en mass, the adult cardiac paper will be presented during today’s general session, and the congenital and general thoracic papers will be featured during specialty-specific parallel sessions.

TAR Remains Gold Standard for Surgical Management of Aortic Arch Pathologies

A comparative analysis of two surgical approaches for management of aortic arch pathologies has yielded interesting and provocative results.

Total arch replacement (TAR) has been the gold standard for treatment of arch pathologies such as aneurysm, dissection, intramural hematoma, and penetrating aortic ulcer. But as endovascular technology continues to be adopted for management of thoracic aortic pathologies, hybrid arch procedures increasingly are being investigated.

For hybrid arch procedures, arch vessels are debranched, and an endograft exclusion of the aortic arch is then performed.

In the Clark Paper for Adult Cardiac Surgery that will be presented today, researchers analyzed data from the STS Adult Cardiac Surgery Database to gain a national perspective on the effectiveness of TAR versus hybrid arch procedures.

“TAR is the traditional operation for arch pathologies involving the head vessels, while the hybrid arch approaches represent the newer alternative,” said Prashanth Vallabhajosyula, MD, MS, of the University of Pennsylvania. “Although several single-institution retrospective studies have demonstrated satisfactory—and sometimes superior—outcomes of hybrid arch procedures over TAR, a multicenter, large-scale comparison of the two procedures has never been done. In this investigation, we assessed the outcomes of TAR versus hybrid arch procedures performed at over 270 centers nationwide in the elective setting.”

Comparing results from the two procedures, researchers studied in-hospital/30-day mortality, stroke, paralysis, reoperation, and STS morbidity (a composite of renal failure, deep sternal infection, prolonged ventilation, reoperation for bleeding, and stroke). Patients undergoing hybrid arch procedures had a higher comorbid burden, as well as significantly higher rates of mortality, stroke, and paraplegia. Even after risk adjustment, hybrid arch procedures were associated with a significantly higher risk of stroke and mortality.

“This study emphasizes the importance of careful and meticulous investigation of hybrid arch procedures before adopting them into our routine surgical practice,” Dr. Vallabhajosyula said. “Maybe it is time that we come together as a cardiac surgical community and conduct a prospective, randomized, multicenter trial to understand the optimal surgical management of aortic arch pathologies. This issue is even more important today, as single- and dual-branch TEVAR grafts are already being investigated for treatment of arch pathologies.”

Higher-Stage Lung Cancer and Central Tumor Patients Not Receiving Proper Mediastinal Staging

Identifying key predictors of invasive mediastinal staging in stage 3 lung cancers may bridge the gap and reduce uncertainty in the quality of lung cancer care. Researchers reached the conclusion after assessing the volume and uniformity of mediastinal staging within the STS General Thoracic Surgery Database (GTSDB) against previously reported rates.

According to Seth B. Krantz, MD, of NorthShore University Health System in Chicago, these predictors can help determine the best course of treatment for patients and potentially avoid unnecessary surgery.

“The guidelines for mediastinal staging are pretty clear. However, the problem is that people are not actually following the guidelines and doing it with consistency,” Dr. Krantz said. “We’ve found that for higher stage lung cancer and central tumors, people are doing the procedure at a much lower rate than expected, and patients aren’t getting more invasive staging.”

In the Clark Paper for General Thoracic Surgery that will be presented tomorrow, researchers retrospectively looked at lung cancer patients staged by computed tomography and positron emission tomography and treated with an anatomic resection without induction therapy.

Researchers measured invasive staging procedures that occurred within 180 days of resection and evaluated variability in invasive mediastinal staging rates across the GTSDB.

Given the significant variability they encountered, researchers questioned whether surgeons fail to follow the guidelines or whether those guidelines are flawed.

“This requires further insight. The guidelines are based on experts,” Dr. Krantz said. “We need to improve the quality gap or reevaluate the guidelines. Also, we need professionals to be systematic and consistent with the procedure.”

Dr. Krantz suggested that surgeons evaluate whether they have variability in their own practices, assess their own strict adherence to

Visit STS in the Exhibit Hall

Make sure to stop by the STS booth (#B07) to hear the latest that STS has to offer. You can learn more about member benefits, advocacy efforts (including STS-INC), opportunities to participate in the STS National Database and publicly report outcomes, and cutting-edge research being conducted via the STS Research Center. You also can donate to The Thoracic Surgery Foundation, the Society’s charitable arm, and get advice from The Annals of Thoracic Surgery staff on submitting your manuscript and accessing Annals CME activities.

Additionally, STS members can update their contact information and pay membership dues. Non-members can fill out an application to begin taking advantage of the many benefits of STS membership.
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A&E Medical  625, 925  Farmingdale, NJ  A&E Medical’s products include MYO/Wire™ temporary lead, SutureWire™, SutureWire® II sternum wires, MYO/Punch rotating surgical punch, MYO/Lead disposable patient cable, and DoubleWire high-yield sternal closure system.

**Abbott**  1325  Santa Clara, CA  Abbott is committed to helping people live their best life through the power of health.

ACUTE Innovations  1625  Hillsboro, OR  Focusing further as a leader in the thoracic industry, ACUTE Innovations™ introduces a new addition to its portfolio, RibLoc® U Plus 90 Instrumentation. The U Plus 90 Instrumentation system works in conjunction with the RibLoc® U Plus Chest Wall Plating system, which features a unique U-shape design to aid in placement on the rib.

Admedus  701  Minneapolis, MN  Admedus, a global health care group, is working with renowned medical leaders to bring new medical technologies to market. CardioCo®r, a cardiovascular scaffold, is the first of the company’s ADAPT™-tissue-engineered bioprosthetics and is being used by surgeons to repair simple and complex cardiac defects.

Aesculap AG  1236  Tuttingen, Germany  Aesculap AG is a leading provider of surgical, endoscopic and diagnostic equipment to physicians throughout the world.

American Association for Thoracic Surgery  825  Beverly, MA  Founded in 1917, the American Association for Thoracic Surgery is dedicated to excellence in research, education, and innovation in cardiothoracic surgery and has become an international professional organization.

AngioDynamics  1624  Latham, NY  A leading innovator of minimally invasive medical devices used by professional health care providers for vascular access, surgery, peripheral vascular disease, and oncology. AngioDynamics’ diverse product lines include market-leading fluid management systems, angiographic products, thrombolytic products, and venous products. More information is available at www.AngioDynamics.com.

Asthute Medical, Inc  730  San Diego, CA  Asthute Medical, manufacturer of the NephroCheck Test®, is dedicated to improving the diagnosis of high-risk medical conditions and diseases through the identification and validation of protein biomarkers to serve as the basis for novel diagnostic tests. The company’s focus is captured hospital-acquired acute conditions that require rapid diagnosis/risk assessment, such as acute kidney injury and sepsis.

Atlas Medical USA  1730  Scottsdale, AZ  Atlas Medical is pleased to introduce the latest in cardiovascular insulation technology. The Nitr-X Guardian has the capability to effectively de-air the cardiac cavity using significantly less carbon dioxide.

**AtriCure Inc**  1407  Mason, OH  AtriCure Inc. is a medical device company that provides innovative solutions designed to decrease the global atrial fibrillation (Afib) epidemic. AtriCure’s Synergy™ Ablation System is the first and only surgical device approved for the treatment of persistent and longstanding persistent forms of Afib in patients undergoing certain open concomitant procedures.

Auris Surgical Robotics  118, 124  San Carlos, CA  Auris Surgical Robotics specializes in creating simple, intuitive, and direct surgical procedures. The company’s proprietary technology is being used by surgeons to repair simple and complex cardiac defects.

Bard Davol  800  Warwick, RI  Bard is the market leader in comprehensive soft tissue reconstruction. In addition to this extensive suite of products, the company’s BioSurgery franchise is delivering a growing line of enhanced sealants and hemostatic products to complement surgical techniques across thoracic, cardiac, vascular, and other surgical specialties.


Baylis Medical  1527  Mississauga, Canada  Baylis Medical develops and markets high-technology medical devices used in the fields of interventional cardiology and interventional radiology. The company’s vision is to develop and market innovative medical therapies while improving the lives of people around the world. Baylis has offices in Montreal, Toronto, Boston, and London.

BD  1316, 1221  Franklin Lakes, NJ  BD is a global medical technology company advancing health by improving discovery, diagnostics, and care delivery. The company’s innovative product portfolio, leadership, and partnerships help make a difference for global health care.

**Berlin Heart Inc**  1103  The Woodlands, TX  Berlin Heart is the only company worldwide that develops, manufactures, and distributes ventricular assist devices for patients of every age and body size. EXCOR Pediatric provides children and infants the potential for long-term heart recovery; EXCOR Pediatric is approved for use in the United States under Humanitarian Device Exemption regulations by the Food and Drug Administration.

BFW Inc  1005  Louisville, KY  BFW Inc provides technologically leading surgeon in surgical illumination and headlight video imaging. Experience the foremost innovations in bright, portable, QR capable LED lighting, the new

Bost Menkel / Terumo  1730  Southfield, MI  Boston Scientific specializes in innovative technologies in the areas of structural heart disease, vascular and endovascular solutions, and the delivery of cardiology and cardiovascular products.

Bosworth Medical  1001  Minneapolis, MN  Bosworth Medical is the first of the company’s ADAPT™-tissue-engineered bioprosthetics and is being used by surgeons to repair simple and complex cardiac defects.

Buhler  1071  Hinwil, Switzerland  Buhler is a leading provider of innovative technologies and services for the food processing, medical, and aerospace industries.

BioStable Science & Engineering  214  Austin, TX  BioStable Science & Engineering is developing and marketing proprietary valve repair technologies that provide alternative to valve replacement for aortic valve disease. The company’s HAART™ Aortic Anulopaty Devices are designed to simplify and standardize aortic valve repair for patients undergoing surgery for aortic insufficiency or not aneurysm.

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Bullion, IN  1101  Bloomington, IN  Since 1963, Cook Medical has worked closely with physicians to develop technologies that eliminate the need for open surgery. A leader in the advancement of diagnostic and therapeutic products for vascular disease, Cook continues a tradition of innovation with comprehensive device offerings in EVAR, leg therapies, PE prevention, and embolization.


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**CorMatrix Cardiovascular**  631  Redmond, WA  CorMatrix® Cardiac Cavosorb™ is the only product approved by the US Food and Drug Administration for use as a homologous, fully cartilage-free heart tissue scaffold that provides a natural origin of cardiac tissues for use in need of repair, serving as a superior alternative to synthetic or cross-linked materials.

CryoLife  1017  Kennesaw, GA  CryoLife, Inc. is one of the world’s leading contemporary medical device companies, providing preserved human cardiac and vascular tissues, surgical adhesives and sealants, prosthetic heart valves, cardiac lasers, and other medical devices and solutions. Since the company’s inception in 1984, it is estimated that its products and tissues have helped more than 1 million patient worldwide.

CT Assist  209  Philips, WV  CT Assist is a managed service provider of cost-effective cardiovascular surgery advanced practitioners who deliver quality care. CT Assist provides workforce management solutions from long-term and recruiting to locum tenens and vacation coverage. It is a physician assistant-owned nationwide employer of talented and experienced cardiovascular PAs and nurse practitioners.

CTNet  1013  Chicago, IL  CTNet (www.ctnet.org) is the leading international source of online resources related to cardiothoracic surgery, as well as the major hub of the international online community of cardiothoracic surgeons and allied health care professionals. CTNet’s mission is to “connect the global cardiothoracic community.”

**Derma Med Tech**  1436  Houston, TX  Just See™ with Designs for Vision’s lightweight, custom-made surgical telescopes, available with Nikon® frames, See It Even Better™ with the L.E.D. Daisy® or Twin Beam®, providing the brightest and safest unfiltered illumination. Introducing the L.E.D. Daisy® Nano Card Designer telescope, see four times more and be four times lighter with the procedure with HD video from your perspective.

DMMD Group  835  Las Vegas, NV  DMMD Group is a multi-specialty, multi-division group practice with locations throughout the United States. DMMD Group specializes in the treatment of vascular conditions through minimally invasive, image-guided procedures.

Eclipse Loupes and Products  1529  Orchard Park, NY  Eclipse offers the highest quality surgical loupes and light at the lowest prices. The company backs its products with an industry-leading lifetime warranty.

Edwards Lifesciences  513  Irvine, CA  Edwards Lifesciences is the global leader in the science of heart valves and hemodynamic monitoring. Driven by a passion to help patients, the company partners with clinicians to develop innovative technologies in the areas of structural heart disease and critical care monitoring, enabling them to save and enhance lives. Additional company information can be found at www.edwards.com.

**EHRC Technologies**  1137  Miami, FL  EHRC Technologies is a leading provider of innovative and efficient solutions that enhance the performance of science, health, and technology professionals. EHRC Technologies empowers better decision making and delivery of better care.

Essential Pharmaceuticals  207  Durham, NC  Essential Pharmaceuticals is a leading developer for cardiovascular, Cardioped® XT offers superior convenience, water-like viscosity, and no need for additives or filters, which makes it a preferred solution for many transplant centers.
European Society of Thoracic Surgeons

Exeter, United Kingdom

ESTS is the largest international thoracic surgical organization with more than 10,000 members from all continents. The society’s mission is to improve quality in the specialty, from clinical and surgical management of patients to education, training, and credentialing of thoracic surgeons worldwide. The 26th European Conference on General Thoracic Surgery will be held on 27-30 May 2018, in Ljubljana, Slovenia. www.estss.org

Fehling Surgical

Acworth, GA

Fehling Surgical Instruments, Inc is the leader in fine crafted surgical instrumentation that has focused on cardiovascular surgery for more than 30 years. The company features minimally invasive valve sets, including NEW retractor designs for unmatched atrial access of the left atrium. The Fehling RAPIDO and Superplant instruments are designed specifically for cardiovascular procedures (needle holders, forceps, clamps, and MICS).

Frymire Associates

Menlo Park, CA

Frymire Associates is a network of experienced medical device market professionals who specialize in conducting exploratory and qualitative research with leading physicians from a variety of specialties. Frymire Associates’ services encompass qualitative methods, such as in-depth interviews and focus groups, studies fielded at major medical meetings, and web-based research.

General Cardiac/Heart Surgery

San Jose, CA

The Heart Surgeon Sternum Support Harness is a patient-supported support harness applied postoperatively to splint surgical wounds. Benefits include improved patient compliance, faster return to preembolized respiratory levels, fewer wound complications, and better postoperative mobility. It is useful for open heart surgery, heart and vascular surgery, fractured ribs, and other chest trauma patients.

General Thoracic Surgical Club

Zumbrota, MN

Founded in 1984, the General Thoracic Surgical Club is a not-for-profit organization representing more than 300 general thoracic surgeons worldwide who are dedicated to ensuring the best possible outcomes for surgical procedures of the lung, mediastinum, esophagus, and chest wall by providing the highest quality patient care through education, research, and clinical experience.

Geneseo Biomedical

Denver, CO

Design Bionics Standard. Geneseo Biomedical, Inc provides unique devices for cardiac surgery, including annuloplasty for mitral and tricuspid repair, sternal/Thoracic valve retractors, instruments for minimally invasive aortic, transcatheter aortic valve implantation, and robotic surgeries, as well as a comprehensive line of future guards, retraction clips, and myocardial needles. www.geneseobiomedical.com

Getinge

Waalwijk, NL

Getinge is a leading global provider of innovative solutions for operating rooms, intensive care units, hospital wards, sterilization departments, and life science companies and institutions. Based on first-hand experience and close partnerships, Getinge offers innovative health care solutions that improve everyday life for people today and tomorrow.

Gore & Associates

Flagstaff, AZ

The Gore Medical Products Division has provided innovative solutions to medical problems for decades. More than 35 million Gore medical devices have been implanted worldwide. Products include heart valve grafts, endovascular stents, interventional devices, surgical materials, and sutures for use in vascular, cardiac, and general surgery. For more information, visit www.goremedical.com.

G.S. Innovations

Las Vegas, NV

G.S. Innovations provides a variety of health care solutions to many different industries. The company develops and identifies the best medical devices to help surgeons and professional groups overcome their challenges.

Hakensack Meridian Health

Wayne, NJ

Hakensack Meridian Health is a leading, not-for-profit health care system in New Jersey offering a complete range of medical services, innovative research, and life-enhancing care aiming to serve as a national model for changing and simplifying health care delivery through partnerships with innovative companies and focusing on quality and safety.

Hayes Locums

Fort Lauderdale, FL

Hayes Locums provides physician search services for temporary and permanent placement—to health care institutions across the United States. Hayes Locums was founded on the need to improve health care consulting services to the physician and health care communities. The company’s mission is to provide these services, the utmost integrity, which physicians and clients have grown to trust.

HCA

Goodwood, TN

HCA owns and operates more than 170 hospitals across the United States, making it one of the nation’s leading providers of health care services. HCA believes that exceptional patient outcomes only come through a dedicated community of care, placing physicians at the forefront.

Heart Hospital Baylor Plano

The Heart Hospital Baylor Plano is a cardiovascular specialty hospital in North Texas that opened in 2007. Over the past 10 years, its quality outcomes and guest satisfaction scores have been the benchmark for recognition, praise, and accolades from international giants in the health care field. Visit TheHeartHospitalBaylor.com to learn more.

Heart Valve Society

Beverly, MA

The Heart Valve Society held its inaugural meeting in May 2015 at the Gimlald Forum in Monte Carlo, Monaco, with more than 430 medical professionals, plus 80 industry partners. Whether you are a cardiologist, surgeon, researcher, or another member of the crucial valve disease treatment team, the HVS welcomes you to become a part of something very unique. Membership is available online.

International Society for Minimally Invasive Cardiothoracic Surgery

Beverly, MA


Interpace Diagnostics

 Parsippany, NJ

Interpace Diagnostics is a public molecular diagnostics company providing specialty molecular tests focused primarily on thyroid, esophageal, gastrointestinal, and lung cancer. The company’s most recently launched product is MiPlex for Lung Cancer, which differentiates local recurrence of cancer vs formation of new primary tumors. Interpace also offers ThyGenX, ThyraMiR, PanCaGen, and BaroGen.

Intuitive Surgical

Sunnyvale, CA

Intuitive Surgical, Inc designs, manufactures, and markets robotic surgical systems designed to improve the outcomes of complex surgical procedures while reducing the time, expense, and recovery time associated with these procedures. For more information, visit www.intuitivesurgical.com.

JACE Medical

Genoa, Italy

JACE Medical is a company based in Genoa, Italy, that pioneered the world’s first rigid sternal closure system applied pre sternotomy: the Stabilizer. JACE Medical is a company and culture committed to creating innovative, transformational technologies that facilitate open heart surgery while opening the doors to future wellness. Visit Booth 1715 and see how the company “thinks outside the paradox.” Get more information at JACEMedical.com.

Jinwha Medical

Seoul, Korea

Johnson & Johnson Medical Device Companies

New Brunswick, NJ

Having made significant contributions to surgery for more than a century, the Johnson & Johnson Medical Device Companies are in the business of reaching more patients and restoring more lives. The group represents Ethicon US, LLC, NeurVive Microvate Abilition, and DePuy Synthes.

Just Co, Ltd

Torrance, CA

Currently designed plating company can provide “the strongest diamond plating technology.” The company can designate the plated layer, which anchors the diamond base on purpose. Its technology is unique and popular to those in the medical field in need of microsurgery instrumentation and endoscope tips.

Kapp Surgical

Cleveland, OH

Kapp Surgical is a custom design shop that designs surgical instruments and implants, manufactures them, and sells them, as well as distributes domestically and internationally. Kapp’s exclusive products include the Cosgrove Heart Retractor, Strip T’s surgical organizer, and cardiovascular surgical devices, all FDA approved with several pending approval.

Karl Storz Endoscopy

El Segundo, CA

Karl Storz offers solutions for thoracic surgery, including standard and disposable thoracic endoscopic instruments that offer economic solutions for thoracoscopy. The EDCO ScopeTelescope allows surgeons to adjust viewing directions from 0° to 120° without changing the camera. The IMAGE1 S™ Camera Architecture System provides brilliant, natural color rendition and innovative visualization capabilities.

Kinamed Inc

Camarillo, CA

Kinamed’s booth to a view demonstration of the SuperCable®, Polymer Iso-Elastic™ Sternal Closure system, which solves limitations of metal suture and sternal closure system applied presternotomy: The SuperCable®, Polymer Iso-Elastic™ Sternal Closure system, which solves limitations of metal suture in one piece. The SEE-EASY™ Device is an endo-sternal distractor for an automated suture device that places sutures through the sewing cuff in one squeezee. With 11 years of proven clinical results, COR-KNOT™ is future fastening technology you can trust.

Med Alliance Solutions

Sycamore, IL

ISO 13485-certified medical device distributor providing high-quality specialty devices for cardiovascular surgery worldwide. Exclusive distributor of French instrument manufacturer Deloraxio-Chevalier and an operating partner of Michigan-based Surgiva Cardiovascular for open heart surgical products.

Medica McCloy

Allegany, NY

Medisist

Plymouth, MN

Medisist is the standard of care in the operating room. With the unique combination of transit time flow measurement and high-frequency ultrasound imaging guidance to help reduce and minimize the risk of negative postoperative outcomes. Medisist’s quality assessment technology offers surgeons quantifiable validation and guidance for cardiovascular, vascular, transplantation, and neurosurgery.

MedPartners Locum Tenens

Coral Springs, FL

MedPartners Locum Tenens specializes in placing well-qualified physicians and advanced practice clinicians in locum, to-locum, and direct hire opportunities. MedPartners Inc offers a sophisticated and thorough approach to the placement of healthcare professionals. MedPartners Inc is the leading provider of the Scottdale, AZ, and Lake City, CO locations.

Medtronic

Minneapolis, MN

Medtronic.com

As a global leader in medical technology, services—both temporary and permanent—and economic expertise to address the complex needs of Thoracic Surgeons.

Microwave Ablation

Brentwood, TN

Microwave Ablation, and DePuy Synthes.

JACE Medical

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Minneapolis, MN

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As a global leader in medical technology, services—both temporary and permanent—and economic expertise to address the complex needs of Thoracic Surgeons.
**Meet with Top Employers**

ake sure to stop by the STS/CTSNet Career Fair, which will give you the chance to meet face-to-face with top employers. Recruiters will be available to talk with you about career opportunities. The Career Fair will be held in the Exhibit Hall.

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**We have a strong presence at major events**

- **American Society of Thoracic Surgeons (ATS)**
- **American College of Cardiology (ACC)**
- **Society for Thoracic Surgeons (STS)**
- **World Society for Pediatric and Congenital Heart Surgery (WSPC)**

We are the leading source of quality surgical products and services worldwide for demanding surgical professionals.
You now have a trustworthy resource to share with your patients.

ctsurgerypatients.org
The Patient Guide to Heart, Lung, and Esophageal Surgery
A Website Presented by Cardiothoracic Surgeons Committed to Improving Patient Care

Available in both English and Spanish, this website is easily viewable on computers, tablets, and smartphones.

All information has been reviewed by STS members and is divided into the following sections:

- Adult Heart Disease
- Pediatric and Congenital Heart Disease
- Lung, Esophageal, and Other Chest Diseases
- Heart and Lung Transplantation
- Before, During, and After Surgery

Visit sts.org/patients to download a printable PDF for referring your patients to this website.
said that his device, VADStent, addresses these issues by aligning the inflow cannula with the mitral valve and maintaining the left ventricular cavity.

Dr. Cohn noted that VADStent addressed an unmet need and said he would be interested in investing, but Drs. Desai and Bolling said that they preferred “to watch and wait.” Dr. Bolling applauded the strong intellectual property position, a valuable asset for a start-up company.

In the third pitch, Bryan M. Burt, MD, MBA, of NYU Langone Medical Center in New York, countered that surgeons should consider value rather than cost, adding that in New York, they preferred to “watch and wait.” Dr. Bolling agreed that a dirty scope is irritating and that he, too, was in. Dr. Desai, however, said, “Nobody spends money to save money,” and he urged Dr. Burt to identify his true customer and capture the value of the device to that customer base.

The judges’ perspectives on the three pitches demonstrated the challenges of launching new devices, even when they address an unmet need.

Earlier in the day, the role of robotics in cardiothoracic surgery was debated for both cardiac and general thoracic procedures.

T. Slone Guy, MD, of Weill Cornell Medicine in New York, and David H. Adams, MD, of Mount Sinai Hospital in New York, presented the pros and cons, respectively, of robotic mitral valve repair. Dr. Guy said that a new value equation factors in a positive patient experience and low cost in addition to quality and safety, whereas Dr. Adams pointed to the positive outcomes with sternotomy using his approach of a shorter incision, direct access, and a modified retractor.

In debating the role of robotics in general thoracic surgery, Mark S. Allen, MD, of the Mayo Clinic in Rochester, MN, focused on the cost, operating room space, and learning curve associated with robotics, and Robert J. Cerfolio, MD, MBA, of NYU Langone Medical Center in New York, countered that surgeons should consider value rather than cost, adding that robotics offers the best educational tool and extends surgeons’ careers.

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Novel Strategies Can Help Manage N2 Disease in NSCLC Patients

Immunotherapy using new PD-1 receptors and other markers may help prevent a systemic reoccurrence of N2 disease in patients with non-small cell lung cancer (NSCLC), according to Robert J. Cerfolio, MD, MBA, from NYU Langone’s Perlmutter Cancer Center.

“This represents a paradigm shift for us as surgeons in the very diverse group of patients with N2 disease, which is controversial because we are now seeing patients who are 2 and 3 years out of chemotherapy for stage IIA N2 disease and only have local disease left that can be resected with lobectomy,” said Dr. Cerfolio. “Immunotherapy has changed our landscape a bit in these patients and may make the North American surgeon as aggressive as the European surgeon.”

“The need for improved local therapy may increase, and the role of surgery may be revisited as the direct line of treatment.”

Difficult decisions regarding the treatment of N2 disease will be discussed today during a collaborative, case-based session organized by STS, the Canadian Association of Thoracic Surgeons, and the Canadian Society of Cardiac Surgeons.

“N2 disease must be identified prior to the start of thoracic oncologic therapy or procedures, as we increasingly focus on safe therapeutic treatment strategies,” Dr. Cerfolio said, adding that North American surgeons still prefer that patients with biopsy-proven N2 disease undergo neoadjuvant therapy prior to surgery. In addition to the management of N2 disease in the NSCLC patient, session participants will discuss various approaches to managing airway injuries and fistulae following esophagectomy.

“Immunotherapy has changed our landscape a bit in these patients and may make the North American surgeon as aggressive as the European surgeon.”

— ROBERT J. CERFOLIO, MD, MBA

Claim Continuing Medical Education Credit

The STS 54th Annual Meeting utilizes an entirely electronic evaluation and CME/Perfusion CEU credit claim process. Both physicians and perfusionists can use this system to claim credit, complete evaluations, and print CME/Perfusion CEU certificates. Certificates of Attendance also are available for other attendees and international physicians not wishing to claim CME/Perfusion CEU credit.

Attendees will not be able to evaluate and claim CME/Perfusion CEU credit for ticketed sessions unless they have registered for those sessions. Please note that CME credit is not available for the Residents Symposium, Residents Luncheon, or STS/AATS Tech-Con 2018.

Attendees can complete the overall meeting evaluations and all individual session evaluations onsite at CME Stations located in the Grand Ballroom Foyer and the Floridian Ballroom Foyer. Certificate printing is available.

Attendees also can complete evaluations and claim credit by visiting sts.org/2018evaluation or using the STS Meetings app. In order to make this process more convenient for attendees, the meeting evaluations will be available online through Monday, February 12, 2018.

Attendees can log in to the website with the following information:

Username: 6-digit member ID number
Password: First initial and last name

Review STS University Lecture Material Online

STS University courses feature only hands-on learning. No didactic lectures will be given during the activity, so attendees are encouraged to view the lectures online prior to Wednesday morning. You can access the lectures at the STS University viewing station located in the Floridian Ballroom Foyer. You also can access them through the STS Meetings app or by visiting sts.org/stsuniversity.

DIVERSITY

Continued from page 1

and physicians have major benefits. For example, patients state that they experience better interpersonal care with racial/ethnic concordance, hence, better patient satisfaction.”

Following Dr. Acosta’s talk, Dr. Cooke will lead a panel discussion with STS First Vice President Keith S. Nauheim, MD, STS Public Director Christopher M. Draft, and others representing a variety of backgrounds and career stages.

“The panelists will offer their insights on the importance of a diverse workforce and how it benefits their patients,” Dr. Cooke said. “The goal of the session is to educate attendees about how diversity and inclusion can be valuable to their practices, service lines, training efforts, and relationships in the communities where they practice.”

Moving forward, the Task Force will help STS create programs and resources that will not only further diversify the cardiothoracic surgery workforce, but also lead to a better understanding of health care disparities among cardiothoracic surgery patients and, ultimately, better patient outcomes.

“Diversity and inclusion are important to STS. We know that the more diverse the cardiothoracic surgery workforce is, the better we can serve our communities,” Dr. Cooke said.
Olympus EBUS — the only recommended* solution for lymph node staging and peripheral lesion detection

- Direct visualization of lymph nodes and peripheral lesions
- Real-time accuracy for greater diagnostic yield**
- Proven EBUS-TBNA solution with more than 1,300 clinical studies

* Chest. 2013;143(suppl 5):7S-37S
** Data on file

Visit us at Booth 1307 to experience the Olympus EBUS Solution
For a demonstration, contact an Olympus Surgical Endoscopy Territory Manager or call 800-848-9024
Learn How to Advocate for the Specialty

STS Key Contacts are the lifeblood of the Society’s advocacy efforts. Key Contacts meet with their elected officials in Washington, provide facility tours at home, and do much more to advocate for legislative and regulatory issues that affect cardiothoracic surgeons and their patients. But many surgeons may not know how to get started or may feel unprepared for these meetings. During this afternoon’s STS Key Contacts: Advocates for Cardiothoracic Surgery, attendees will gain the tools to become more involved. STS staff and surgeon leaders will explain how the program works, discuss the current health care debate, and describe how STS-PAC enhances these advocacy efforts. In addition, experienced Key Contacts will role-play a meeting with a member of Congress, the Key Contact of the Year and other awards will be announced, and attendees will be able to socialize and network.

STS Key Contacts: Advocates for Cardiothoracic Surgery
Monday
4:15 p.m. – 5:15 p.m.
Rooms 220-221

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Learning Opportunities Available in the Exhibit Hall
Exhibiting companies and others will present talks and demonstrations in the Learning Lab Theater, located in the Exhibit Hall at Booth 1736.

MONDAY
10:55 a.m. – 11:25 a.m.
Abbott
Transcatheter Access for Transcatheter Mitral Procedures: Surgeons Can Master This Too!

12:45 p.m. – 1:15 p.m.
AngioDynamics
The AngioVac System: When Is it the Device of Choice?

TUESDAY
10:15 a.m. – 10:45 a.m.
Johnson & Johnson Medical Devices Companies
The Science of Tissue Management

Reimbursement Changes Require Better Reporting from Surgeons

Cardiothoracic surgeons spend years learning and honing skills related to surgery, but most spend relatively little time studying the business side of medicine. That may be about to change. New reimbursement rules are forcing changes in the day-to-day activities of surgeons who must now place more emphasis on documentation, coding, and data collection.

“Daily billing needs are emerging as more important, and they will play a role in the future,” said Scott C. Silvestry, MD. “Understanding what a physician has to do in terms of documenting their visits and potentially billing for these visits is emerging as an important skillset.”

Silvestry is the moderator of a session designed to teach surgeons the nuances of documenting all aspects of their work.

Presenters will explain how to note the complexity of the case, the number of patient visits, time spent on a case, and the effort required by the surgeon.

“If you are going to write it once, it should reflect the amount of work that you put in and use the appropriate words so that the coders can record the appropriate credit for your work, as well as the complexity of the illness,” said Dr. Silvestry, a member of the STS Workforce on Coding and Reimbursement. “We will address how that is done in the current environment.”

The session’s speakers will explain reimbursement requirements, the documentation needed for medical necessity, diagnosis, and services rendered.

“This session will provide the start of competency towards a more productive interaction with one’s coders, coding applications, and hospital data personnel,” Dr. Silvestry said. “Attendees will leave with a good idea of the current requirements for documentation.”

“Understanding what a physician has to do in terms of documenting their visits and potentially billing for these visits is emerging as an important skillset.”

— Scott C. Silvestry, MD
Collaborative Approach to Cardiac Care Benefits Complex Patients

The multidisciplinary “heart team” would be best positioned to assess these patients and collectively work together to find the most effective treatment algorithm, according to Vinod H. Thourani, MD, from MedStar Heart and Vascular Institute/Washington Hospital Center in Washington, DC. “When they come together, cardiac surgeons, interventional cardiologists, and echocardiographers are able to provide a multitude of options for these patients, including traditional surgery, minimally invasive surgery, and transcatheter techniques,” Dr. Thourani said.

In this afternoon’s Clinical Scenarios: Cardiologists and Surgeons Working Together, speakers will highlight the critical need for a true, collaborative heart team approach in treating mitral stenosis and regurgitation, tricuspid regurgitation, aortic stenosis and regurgitation, and surgical management of heart failure via case presentations, invited lectures, technical videos, and panel discussions. The discussions will offer insight into how the multidisciplinary approach can improve patient outcomes and foster communication among specialties.

Dr. Thourani hopes attendees will be inspired to consider new interventional treatments and collaborative approaches. “We would like to open the minds of practicing surgeons and help broaden the array of treatments that they can offer their patients,” he said.

“When they come together, cardiac surgeons, interventional cardiologists, and echocardiographers are able to provide a multitude of options for these patients.”

—VINOD H. THOURANI, MD
Learn How to Improve Accuracy in Your Manuscripts

The publication of research using national databases has risen exponentially over the past decade. Unfortunately, methodological mistakes are common when preparing manuscripts and interpreting results. During The Annals Academy, experts will explain the differences between association and causality in observational research, as well as between statistical and clinical significance in large databases. They also will describe common performance metrics for multivariable modeling and discuss options for merging STS National Database data with other longitudinal databases to obtain long-term outcomes.

The Annals Academy: Preparation and Interpretation of National Database Research
Monday 4:15 p.m. – 5:15 p.m.
Room 316

Late-Breaking Abstracts Session Today

Don’t miss a special late-breaking session added to the educational program this afternoon. This Just In: Late-Breaking Research Results and Novel Ideas will be held from 4:15 p.m. to 5:15 p.m. in Room 304 and will feature abstracts on fetal aortic valve development, minimally invasive esophagectomy, surgeon-specific performance monitoring, near-infrared fluorescence guided surgery, and total arterial revascularization. Three additional late-breaking abstracts have been added into scientific sessions today and tomorrow. Access a PDF of the late-breaking abstracts at sts.org/annualmeeting.

Apply for Membership

As an attendee of the STS 54th Annual Meeting, you are participating in the most exciting specialty in medicine. But if you are not yet an STS member, you may not be experiencing the profession to its fullest.

STS membership comes with a wide range of benefits, including subscriptions to The Annals of Thoracic Surgery, STS News, and personalized email communications. Additionally, you’ll receive reduced registration rates at future Annual Meetings and many other educational events throughout the year, as well as the potential for discounted participation fees in the STS National Database.

Several categories of membership are offered to include anyone with an interest in cardiothoracic surgery. If you are not already a member, please stop by the STS booth (#807) in the Exhibit Hall to talk with staff and pick up an application. If you are a member and know someone who has not yet joined, pick up an application for them! By encouraging membership in STS, you’ll help your colleagues, the Society, and the specialty.

2018 Meeting Kickoff

The STS 54th Annual Meeting got off to a great start this weekend. On Saturday, STS/AATS Tech-Con previewed the latest technology in development, including innovations in lung cancer and esophageal disease, minimally invasive surgery, aortic valve and aortic aneurysm management, and more. On Sunday, several symposia covered hypertrophic cardiomyopathy, practice management, critical care, advanced bronchoscopy, and more.
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Caution: Federal law (USA) restricts these devices to sale by or on the order of a physician.
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Names you know that consistently deliver products that help you improve the health and well-being of others. What you may not know is that we’ve unified these proven solutions into one Getinge—adding to the value we offer you through our expertise in acute care therapies and surgical workflows.

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