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Tweet about the Annual Meeting
#STS2016

The information in this Program Guide is accurate as of December 9, 2015.
ACCREDITATION STATEMENTS

The Society of Thoracic Surgeons is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

STS 52nd Annual Meeting
The Society of Thoracic Surgeons designates this live activity for a maximum of 34.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The American Board of Cardiovascular Perfusion designates this activity for 41.9 Category I CEUs.

STS 52nd Annual Meeting Online
The Society of Thoracic Surgeons designates this enduring material for a maximum of 107.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

2016 MOBILE APP

Access the STS 52nd Annual Meeting Mobile App by searching for “STS 2016” in the Apple App Store or Google Play. You also can scan the QR code below with your smartphone.

ANNALS MANUSCRIPT SUBMISSION

Each abstract that is presented orally or as a poster during the STS 52nd Annual Meeting must be submitted before or at the time of the meeting to The Annals of Thoracic Surgery for publication consideration. Manuscripts must be submitted via The Annals online manuscript tracking system (www.atseditorialoffice.org) by Wednesday, January 27, 2016, 11:59 PM, Mountain Standard Time. If you need assistance, Annals editorial staff will be available in Room 121C on Sunday, January 24, from 1:00 PM to 4:00 PM, Monday, January 25, from 8:00 AM to 5:00 PM, Tuesday, January 26, from 9:00 AM to 5:00 PM, and Wednesday, January 27, from 8:00 AM to 12:00 PM. For more information, see page 10 of the STS 52nd Annual Meeting Abstract Book.

Annals editorial staff also will be holding tutorials in the Exhibit Hall at Booth #938:

Sunday, January 24
4:30 PM – 6:30 PM
Figure Clinic, Journal CME, New Submissions

Monday, January 25
10:50 AM – 11:30 AM
Figure Clinic
12:30 PM – 1:15 PM
Journal CME
3:30 PM – 4:15 PM
New Submissions

Tuesday, January 26
10:00 AM – 10:45 AM
Figure Clinic
12:00 PM – 1:00 PM
Journal CME
3:00 PM – 3:30 PM
New Submissions

ANNUAL MEETING ONLINE

New this year, access to the STS 52nd Annual Meeting Online is included free with your Annual Meeting registration. With such a full meeting schedule, it’s impossible to attend every presentation of interest. This web-based video presentation will let you earn CME credit for sessions you were unable to attend—or review sessions of special interest—in the comfort of your home or office. This activity also provides self-assessment credits toward Part 2 of the American Board of Surgery Maintenance of Certification Program. The Online product will be available approximately 1 month after the conclusion of the Annual Meeting and will be accessible for up to a year.
BUSINESS CENTER

A UPS Store is located in the West Building of the Convention Center, directly across 3rd Street. The UPS Store provides packing and shipping services, copying, faxing, binding, and office supplies. It will be open:

Saturday, January 23 8:00 AM – 2:00 PM
Sunday, January 24 Closed
Monday, January 25 7:00 AM – 6:00 PM
Tuesday, January 26 7:00 AM – 6:00 PM
Wednesday, January 27 7:00 AM – 6:00 PM

CAREER FAIR

Make 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:

Sunday, January 24 4:30 PM – 6:30 PM
Monday, January 25 9:00 AM – 4:30 PM
Tuesday, January 26 9:00 AM – 3:30 PM

COAT & LUGGAGE CHECK

Complimentary coat and luggage check will be provided in the Lower Level Foyer near Registration:

Saturday, January 23 6:45 AM – 7:00 PM
Sunday, January 24 6:30 AM – 7:00 PM
Monday, January 25 6:30 AM – 7:00 PM
Tuesday, January 26 6:30 AM – 6:00 PM
Wednesday, January 27 6:30 AM – 12:00 PM

COMPUTER STATIONS

Visit the Computer Stations on the Lower Level of the Convention Center to access the internet, check e-mail, and review STS University lectures.

CONTINUING MEDICAL EDUCATION CREDIT

The STS 52nd 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 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 2016.

Attendees can complete the overall meeting evaluations and all individual session evaluations onsite at CME Stations located near Room 120D, Room 121A, and Registration on the Lower Level. Certificate printing is available.

Attendees also can access evaluations and CME/Perfusion CEU credit by visiting the online evaluation site through personal computers or handheld devices at www.sts.org/2016evaluation. You also can access the site through the STS Annual Meeting Mobile App. In order to make this process more convenient for attendees, the meeting evaluations will be available online through Thursday, February 11, 2016.

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

• Username: 6-digit member ID number located at the lower left-hand side of the meeting badge
• Password: First initial and last name

DINING OPTIONS

Two $5 coupons, good for purchasing food and beverage items from the concession stands located in the Exhibit Hall, were provided with your badge. One coupon can be used on Monday, January 25, and the other can be used on Tuesday, January 26. The concession stands will be open:

Monday, January 25 11:30 AM – 2:00 PM
Tuesday, January 26 11:30 AM – 2:00 PM

Complimentary coffee will be available in the Exhibit Hall at all scheduled breaks on Monday and Tuesday. See the Program at a Glance on page 14 for details on break times.

A retail coffee bar is available in the Metro Marche, located immediately inside the main entrance of the Convention Center, and will be open daily at 6:30 AM. Additional retail dining options also can be found in the Metro Marche.

Starbucks is located in the West Building of the Convention Center, directly across 3rd Street, and will open at 6:30 AM daily.
EXHIBIT HALL HOURS

This year, the STS Exhibit Hall plays host to more than 100 companies showcasing the latest in cardiothoracic surgery products and technology. Don’t miss the Exhibit Hall Opening Reception on Sunday, January 24, at 4:30 PM. Certain exhibitors will be offering refreshments and treats during the reception. The STS Exhibit Hall will be open:

- **Sunday, January 24**: 4:30 PM – 6:30 PM
- **Monday, January 25**: 9:00 AM – 4:30 PM
- **Tuesday, January 26**: 9:00 AM – 3:30 PM

FIRST AID

First aid services are available near Registration on the Lower Level of the Convention Center:

- **Friday, January 22**: 2:00 PM – 6:00 PM
- **Saturday, January 23**: 6:30 AM – 6:30 PM
- **Sunday, January 24**: 6:30 AM – 6:30 PM
- **Monday, January 25**: 6:30 AM – 6:30 PM
- **Tuesday, January 26**: 6:30 AM – 5:30 PM
- **Wednesday, January 27**: 6:30 AM – 11:30 AM

LEARNING LABS

Exhibiting companies and others will present talks and demonstrations in the new Learning Labs in the Exhibit Hall. The Large Theater is located to the far left of the 100 Aisle and the Small Theater is located toward the back of the 900 Aisle.

- **Sunday, January 24**
  - Joint Council on Thoracic Surgery Education, Inc
  - Jeopardy Championship – Round 1
  - 5:10 PM – 5:40 PM
  - Large Theater

- **Monday, January 25**
  - MAQUET
  - Preventing POAF by Reducing Retained Blood
  - 10:50 AM – 11:20 AM
  - Small Theater

  - Cook Medical
  - Hands-On & Didactics of the New Low-Profile Zenith Alpha Thoracic Device
  - 12:30 PM – 1:00 PM
  - Small Theater

  - Joint Council on Thoracic Surgery Education, Inc
  - Jeopardy Championship – Round 2
  - 3:30 PM – 4:00 PM
  - Large Theater

LOOKING TO THE FUTURE

The STS Looking to the Future Scholarship Program was developed to identify and encourage general surgery residents who are considering, but not yet committed to, a career in cardiothoracic surgery. This year, 30 medical students and 30 general surgery residents were awarded scholarships to attend the STS 52nd Annual Meeting. A number of events for the scholarship winners are being held during the Annual Meeting, including:

- **Medical Student Reception**
  - Saturday, January 23, 5:00 PM – 7:00 PM

- **Medical Student Overview of CT Surgery**
  - Sunday, January 24, 8:00 AM – 1:00 PM

- **Looking to the Future/Women in Thoracic Surgery Reception**
  - Sunday, January 24, 5:30 PM – 6:30 PM

- **Resident Program**
  - Monday, January 25, 11:00 AM – 12:20 PM

LOST & FOUND

Lost items may be claimed at the Information Booth near Registration on the Lower Level of the Convention Center. After the meeting, all unclaimed items will be discarded.

PHOTOGRAPHY AND RECORDING POLICY

Photography and recording of STS/AATS Tech-Con 2016 sessions are strictly prohibited, except by authorized personnel. Recording of STS 52nd Annual Meeting sessions is strictly prohibited, except by authorized personnel.

REGISTRATION

Attendee and exhibitor registration is located on the Lower Level of the Convention Center:

- **Friday, January 22**: 3:00 PM – 6:00 PM
- **Saturday, January 23**: 7:00 AM – 6:00 PM
- **Sunday, January 24**: 7:00 AM – 6:30 PM
- **Monday, January 25**: 6:30 AM – 5:00 PM
- **Tuesday, January 26**: 6:30 AM – 4:30 PM
- **Wednesday, January 27**: 6:30 AM – 9:30 AM

*Exhibitor registration ends at 3:00 PM on Tuesday.

Badges must be worn at all times and are required for admission to scientific sessions and the STS Exhibit Hall. Annual Meeting registration provides access to the Opening Reception on Sunday, January 24, and all educational sessions on Monday, January 25, and Tuesday, January 26, with the exception of the International Symposium (Monday) and Ethics Debate (Tuesday), which require separate purchases. STS University (Wednesday, January 27) also is priced separately.

Tech-Con registration provides access to all STS/AATS Tech-Con 2016 educational sessions on Saturday, January 23, and Sunday, January 24.

The new Weekend Pass provides access to all educational sessions on Saturday, January 23, and Sunday, January 24, other than Tech-Con. (You must register for the Annual Meeting in order to register for a Weekend Pass.)
SATELLITE ACTIVITIES
Satellite activities are programs offered by industry and held in conjunction with the STS 52nd Annual Meeting. They are not developed or sponsored by STS.

Saturday, January 23
Abbott Vascular
The New Mitral Valve Surgeon
7:00 PM – 8:30 PM
Phoenix Ballroom A, Sheraton Grand Phoenix
340 N Third Street

CMEology/Baxter Healthcare Corporation
Advanced Strategies for Preventing Bleeding-Related Complications: Patient-Centered Approaches
7:00 PM – 9:15 PM
Valley of the Sun Ballroom D, Sheraton Grand Phoenix
340 N Third Street

Sunday, January 24
Atricure & MediaSphere Medical, LLC
Why the LAA Matters: The Role of LAA Occlusion for Stroke Management
7:00 PM – 9:00 PM
Regency Ballroom A, Hyatt Regency Phoenix
122 N Second Street

Baxter Healthcare Corporation
Guideline Based Approach to Blood Management
7:00 PM – 10:00 PM
Curtis B, Hyatt Regency Phoenix
122 N Second Street

CorMatrix Cardiovascular
CorMatrix Conversation & Comedy
7:00 PM – 10:00 PM
Copper Blues, 50 W Jefferson Street #200

Tuesday, January 26
Medtronic
ENB + Ablation: The Future of Thoracic Oncology
6:00 PM – 8:00 PM
Paradise Valley, Sheraton Grand Phoenix
340 N Third Street

Medtronic
Complex Endovascular Aortic Repair: The Role of the CT Surgeon Today and Tomorrow
6:00 PM – 9:00 PM
North Mountain, Sheraton Grand Phoenix
340 N Third Street

SCIENTIFIC POSTERS
Scientific posters are located in the foyer outside Room 120 and will be available from 2:00 PM on Sunday, January 24, through 5:00 PM on Tuesday, January 26.

Also, join your colleagues at the Scientific Posters and Wine event, 5:00 PM to 6:30 PM on Monday, January 25, in the foyer outside Room 120D for a moderated review of select scientific posters.

SOCIAL EVENT
Join your colleagues for an evening of mariachi music, delicious food, and ice-cold margaritas at Corona Ranch, nestled in the shadows of nearby mountains. You can compete against fellow attendees in “cowboy games” and get a front-row seat for an exciting rodeo that will incorporate bronco and bull riding, high-speed horse maneuvers, and trick roping. Don’t miss this opportunity to relax and have fun in an Old Mexico environment. (Please note that this is an outdoor event and the desert can get chilly at night, so please dress accordingly.)

The 2016 STS Social Event will be held on Monday, January 25, from 7:00 PM to 10:30 PM. Join your colleagues at this exclusive event by purchasing a ticket at Registration on the Lower Level of the Convention Center.

SOCIAL MEDIA
Like the STS Facebook page at www.facebook.com/societyofthoracicsurgeons and follow STS on Twitter at @STS_CTSurgery for more information about Phoenix and the Annual Meeting. Be sure to use the hashtag #STS2016 if you tweet about the STS 52nd Annual Meeting.

After the Annual Meeting is over, the STS Facebook and Twitter pages will continue to deliver news on future STS events and CME credit opportunities.

SPEAKER READY ROOM
The Speaker Ready Room is located in Room 121AB. All presenters must report to the Speaker Ready Room at least 24 hours prior to their scheduled presentation time to download their PowerPoint into the presentation system.

STS 52ND ANNUAL MEETING ABSTRACT BOOK
Don’t forget to check out the STS 52nd Annual Meeting Abstract Book, which was handed to you at registration. This publication contains the full abstracts for all oral and poster presentations from the Annual Meeting, as well as commercial relationships and regulatory disclosures for all presentations.

STS-PAC RECEPTION
Join us on Monday, January 25, for a special reception in support of STS-PAC, the only political action committee representing the interests of cardiothoracic surgery. The reception will be held from 6:30 PM to 7:30 PM in Camelback B at the Sheraton Grand Phoenix. Come learn about how STS-PAC is helping to support STS advocacy in Washington, DC. This event is open to US members of STS who contribute to STS-PAC in 2016. Contributions will be accepted at the door.

STS BOOTH
The STS booth (#523) in the Exhibit Hall offers a one-stop shop for all things STS. Attendees can learn about advocacy efforts, membership benefits, STS National Database initiatives, upcoming educational programs, and more.
**STS UNIVERSITY LECTURES**

STS University courses feature only hands-on learning. No didactic lectures will be given during the activity, so attendees are encouraged to access the lectures online prior to Wednesday morning. You can access the lectures at the Computer Stations located near the entrance to the Exhibit Hall and near Registration on the Lower Level of the Convention Center. You also can access them from your own computer or handheld device by visiting www.sts.org/annualmeeting or using the STS Annual Meeting Mobile App.

**TECH BAR**

Get free technical assistance from the Tech Bar, located in the Exhibit Hall at Booth #639. The Tech Bar is similar to Apple’s Genius Bar and will provide assistance from subject matter experts, live demos on technology topics of interest, and a charging station. You can get help with your tablets, mobile devices, apps, e-mail, and more—throughout the entire exhibition.

**WIRELESS INTERNET**

Complimentary wireless internet is available in the Metro Marche, located immediately inside the main entrance of the Convention Center. To connect to the wireless internet, select “PCCWifi” from the available networks. Launch a web browser, and follow the prompts to connect.
FRIDAY, JANUARY 22, 2016
3:00 PM – 6:00 PM
Registration: STS/AATS Tech-Con and STS Annual Meeting

SATURDAY, JANUARY 23, 2016
7:00 AM – 6:00 PM
Registration: STS/AATS Tech-Con and STS Annual Meeting

8:00 AM – 12:30 PM
STS/SCA: Integrating Perioperative Echocardiography Into Cardiac Surgical Clinical Decision Making

8:00 AM – 3:00 PM
STS/CHEST: Primer on Advanced and Therapeutic Bronchoscopy—Theory and Hands-On Session

12:00 PM – 6:30 PM
STS/AATS Tech-Con Exhibits

1:00 PM – 2:30 PM
Cardiopulmonary Bypass Simulation Course

1:00 PM – 5:00 PM
STS/AATS Tech-Con

5:00 PM – 6:30 PM
STS/AATS Tech-Con Reception

SUNDAY, JANUARY 24, 2016
7:00 AM – 6:30 PM
Registration: STS/AATS Tech-Con and STS Annual Meeting

7:00 AM – 1:15 PM
STS/AATS Tech-Con Exhibits

7:45 AM – 12:00 PM

STS/AATS Tech-Con

7:50 AM – 12:00 PM
Acquired and Congenital Heart Surgery Symposium: Challenges in Adult Congenital Heart Disease
Practice Management Summit
STS/AATS Critical Care Symposium: Quality and Value in the CT ICU

1:00 PM – 4:00 PM
Residents Symposium: Transitioning From Residency to a Successful Practice

1:15 PM – 4:30 PM
ACC @ STS

How To: Technical Tricks and Pitfalls to Simplify Cardiac Surgery Procedures
Parallel Surgical Symposium: Congenital

Parallel Surgical Symposium: General Thoracic

Resuscitation of Patients Who Arrest After Cardiac Surgery

2:00 PM – 6:30 PM
Scientific Posters

2:30 PM – 4:30 PM
CT Surgery Interprofessional Education Symposium: Multidisciplinary Team Approach to Patient Safety, Quality, Outcomes, and Reimbursement

4:30 PM – 6:30 PM
Opening Reception in STS Exhibit Hall

MONDAY, JANUARY 25, 2016
6:30 AM – 5:00 PM
Registration: STS Annual Meeting

9:00 AM – 4:30 PM
Exhibit Hall
Scientific Posters

7:00 AM – 7:15 AM
Opening Remarks

7:15 AM – 8:15 AM
J. Maxwell Chamberlain Memorial Papers

8:15 AM – 9:00 AM
Richard E. Clark Memorial Papers

9:40 AM – 9:50 AM
Introduction of the President: Joseph E. Bavaria

9:50 AM – 10:50 AM
Presidential Address: Mark S. Allen

10:50 AM – 11:30 AM

BREAK—Visit Exhibits and Scientific Posters
Complimentary coffee available in the Exhibit Hall

9:40 AM – 9:50 AM
Introduction of the President: Joseph E. Bavaria

9:50 AM – 10:50 AM
Presidential Address: Mark S. Allen

10:50 AM – 11:30 AM

BREAK—Visit Exhibits and Scientific Posters
Complimentary coffee available in the Exhibit Hall
11:30 AM – 12:30 PM  
(8 parallel sessions)
- **Adult Cardiac Session: Arrhythmia**
- **Quality Improvement Initiatives in Thoracic Surgery**
- **Basic Science Research: Adult Cardiac**
- **Basic Science Research: General Thoracic**
- **Congenital Session: Adult Congenital**
- **Critical Care**
- **General Thoracic Session: New Technology**
- **STS/CATS/CSCS: Adding New Dimensions to Your Surgical Practice—Optimizing Your Internet Presence and Understanding the Emerging Role of 3-Dimensional Printing in Cardiothoracic Surgery**

12:30 PM – 1:30 PM  
**BREAK—Visit Exhibits and Scientific Posters**  
Complimentary coffee available in the Exhibit Hall

1:15 PM – 5:15 PM  
**Redefining Practice Through Quality and Evidence: What’s New?**  
(7 parallel sessions)
- **Adult Cardiac Session: Aorta I**
- **Adult Cardiac Session: Ischemic**
- **Congenital Session: Pediatric Congenital I**
- **General Thoracic Session: Lung Cancer I**
- **General Thoracic Session: Lung Transplantation**
- **SVS @ STS: Sharing Common Ground for Cardiovascular Problems**
- **30th Anniversary Celebration of Women in Thoracic Surgery: Innovations and Contributions of WTS and STS Members**

3:30 PM – 4:15 PM  
**BREAK—Visit Exhibits and Scientific Posters**  
Complimentary coffee available in the Exhibit Hall

5:30 PM – 6:25 PM  
**Business Meeting (STS Members Only)**

6:30 PM – 7:30 PM  
**STS-PAC Reception**

7:00 PM – 10:30 PM  
**STS Social Event: Corona Ranch**

TUESDAY, JANUARY 26, 2016

6:30 AM – 4:30 PM  
**Registration: STS Annual Meeting**

9:00 AM – 3:30 PM  
**Exhibit Hall**

9:00 AM – 5:00 PM  
**Scientific Posters**

7:30 AM – 8:30 AM  
**Early Riser Sessions**
- **Early Riser Health Policy Forum: MIPS: The New Medicare Fee-for-Service and What It Means to You**

9:00 AM – 10:00 AM  
**Thomas B. Ferguson Lecture: Scott Parazynski**

10:00 AM – 10:45 AM  
**BREAK—Visit Exhibits and Scientific Posters**  
Complimentary coffee available in the Exhibit Hall

10:45 AM – 11:00 AM  
**Award Presentations**

11:00 AM – 12:00 PM  
**C. Walton Lillehei Lecture: Gary Taubes**

12:00 PM – 1:00 PM  
**BREAK—Visit Exhibits and Scientific Posters**  
Complimentary coffee available in the Exhibit Hall

**Ethics Debate: An Advance Directive Limits Postoperative Care—Should Surgeons Accept Limits on Care?**

**Residents Luncheon**
New Non-CME Session

1:00 pm – 3:00 pm
(7 parallel sessions)

Adult Cardiac Session: General
Adult Cardiac Session: Mitral Valve
Congenital Session: Pediatric Congenital II
General Thoracic Session: Esophageal
General Thoracic Session: Lung Cancer II
Patient Safety Symposium: When Bad Things Happen to Good CT Surgeons—Human Error and the Impact on You, the “Second Victim”
EACTS @ STS: Aortic Valve Repair and Aortic Root Reconstruction for Insufficient Tricuspid and Bicuspid Pathology

1:00 pm – 3:30 pm

JCTSE: Accountable Surgical Education—How Can Cardiothoracic Surgery Move Forward?

1:00 pm – 5:30 pm

Advanced Therapies for End-Stage Heart Disease

3:00 pm – 3:30 pm

BREAK—Visit Exhibits and Scientific Posters
Complimentary coffee available in the Exhibit Hall

3:30 pm – 5:30 pm
(7 parallel sessions)

Adult Cardiac Session: Aorta II
Adult Cardiac Session: Aortic Valve
Cardiothoracic Surgical Education
Congenital Session: Pediatric Congenital III
General Thoracic Session: Mediastinal/Pulmonary
ESTS @ STS: Controversial Issues in General Thoracic Surgery—Perspectives From Europe and North America
SCA @ STS: Perioperative Evaluation and Management of Circulatory Shock

WEDNESDAY, JANUARY 27, 2016

6:30 am – 9:30 am

Registration: STS University

7:00 am – 9:00 am

STS University

9:30 am – 11:30 am

STS University (courses repeated)
Please note that Tech-Con registration is separate from Annual Meeting registration. Continuing Medical Education credit will not be offered for STS/AATS Tech-Con 2016 programming. Photography and recording of Tech-Con sessions are strictly prohibited, except by authorized personnel.

**FRIDAY, JANUARY 22, 2016**

3:00 PM – 6:00 PM  
**Lower Level Foyer**

Registration: STS/AATS Tech-Con and STS Annual Meeting

**SATURDAY, JANUARY 23, 2016**

7:00 AM – 6:00 PM  
**Lower Level Foyer**

Registration: STS/AATS Tech-Con and STS Annual Meeting

12:00 PM – 6:30 PM  
**Lower Level Foyer**

STS/AATS Tech-Con Exhibits

1:00 PM – 3:00 PM  
**Exhibit Halls 2-3**

**Adult Cardiac Track I: Mitral Valve Technology**  
**Moderators:** Richard Lee, St Louis, MO, and Rakesh Suri, Cleveland, OH

1:00 PM  
**Welcome and Introduction**  
Gorav Ailawadi, Charlottesville, VA

**Transcatheter/Novel Repair Approaches**

1:05 PM  
**Update on MitraClip**  
Gorav Ailawadi, Charlottesville, VA

1:12 PM  
**NeoChord**  
Gino Gerosa, Padova, Italy

1:19 PM  
**Valtech**  
Francesco Maisano, Milan, Italy

1:26 PM  
**Millipede**  
Steven F. Bolling, Ann Arbor, MI

1:33 PM  
**Mitral Bridge**  
Valavanur A. Subramanian, New York, NY

1:40 PM  
**Basal Annuloplasty of the Cardia Externally**  
Jai S. Raman, Chicago, IL

1:47 PM  
**Cardiosolutions Mitra-Spacer**  
Lars G. Svensson, Cleveland, OH

1:50 PM  
**Panel Discussion**

**Transcatheter Mitral Valve Replacement**

2:10 PM  
**Fortis Valve**  
Vinod H. Thourani, Atlanta, GA

2:17 PM  
**CardiAQ Valve**  
Wilson Y. Szeto, Philadelphia, PA

2:24 PM  
**Neovasc Tiara Valve**  
Anson Cheung, Vancouver, Canada

2:31 PM  
**Tendyne**  
Robert S. Farvian, Minneapolis, MN

2:38 PM  
**Direct Flow**  
Robert Bauernschmitt, Munich, Germany
Panel Discussion
Gilbert H. Tang, New York, NY

1:00 PM – 3:00 PM  Room 120D

**General Thoracic Track I: Lung Surgery of the Future**
*Moderators: Julian Guitron, Loveland, OH, and Michael F. Reed, Hershey, PA*

1:00 PM  Introduction
Sunil Singhal, Philadelphia, PA

1:05 PM  Nodule Localization
Sunil Singhal, Philadelphia, PA

1:20 PM  Energy for Pulmonary Artery Vessel Ligation
Moishe A. Liberman, Montreal, Canada

1:35 PM  Lung Cryoablation
Matthew R. Callstrom, Rochester, MN

1:50 PM  Veran Thoracic Navigation System
Jennifer W. Toth, Hershey, PA

2:05 PM  Microlobectomy: A Novel Form of Video-Assisted Thoracoscopic Lobectomy
Joel Dunning, Middlesbrough, United Kingdom

2:20 PM  Minimally Invasive Lung Ablation Using Electromagnetic Navigation Bronchoscopy and Cone Beam Computed Tomography Imaging
Douglas J. Minnich, Birmingham, AL, and William Dickhans, Boulder, CO

2:35 PM  Panel Discussion

3:00 PM – 3:30 PM  Lower Level Foyer

**General Thoracic Track II: Advances in Robotic Tools and Technology**
*Moderators: Mark F. Berry, Stanford, CA, and Jeremiah T. Martin, Lexington, KY*

3:30 PM  DaVinci XI Firefly and Staplers
Bernard J. Park, New York, NY

3:45 PM  Spy/Pinpoint
Min P. Kim, Houston, TX

4:00 PM  Robotic Technology in Development
Mark R. Dylewski, Palmetto Bay, FL

4:15 PM  Emerging Robotic Tools
David R. Holmes, Rochester, MN

4:30 PM  New Robotic Platforms
Robert J. Cerfolio, Birmingham, AL

4:45 PM  New Haptic Technology for Robotic Surgery
Mark W. Onaitis, Durham, NC

5:00 PM – 6:30 PM  Lower Level Foyer

**STS/AATS Tech-Con Reception**

SUNDAY, JANUARY 24, 2016

7:00 AM – 6:30 PM  Lower Level Foyer

**Registration: STS/AATS Tech-Con and STS Annual Meeting**

7:00 AM – 1:15 PM  Lower Level Foyer

**STS/AATS Tech-Con Exhibits**

7:45 AM – 9:30 AM  Exhibit Halls 2-3

**Adult Cardiac Track II: Heart Failure Technology**
*Moderators: Mark S. Slaughter, Louisville, KY, and Leora T. Yarboro, Charlottesville, VA*

3:30 PM  Update on Novel Left Ventricular Assist Device (LVAD) Trials
Nicholas G. Smedira, Cleveland, OH

3:45 PM  Total Artificial Heart: Ready for Primetime at All LVAD Centers?
Francisco A. Arabia, Los Angeles, CA

4:00 PM  CircuLite Synergy
Pavan Atluri, Philadelphia, PA

4:07 PM  ReliantHeart HeartAssist
Richard Tien Ha, Stanford, CA

4:14 PM  NuPulse Implantable Counterpulsation
Valthovan Jeevanandam, Chicago, IL

4:21 PM  Self-Regulating, Single-Piece, Pulsatile, Continuous-Flow Total Artificial Heart
Nader Moazami, Cleveland, OH

4:28 PM  Panel Discussion

4:45 PM  Sternal Closure Devices: What’s the Skinny on All These Technologies?
Kendra J. Grubb, Louisville, KY

3:30 PM – 5:00 PM  Room 120D

**General Thoracic Track II: Advances in Robotic Tools and Technology**
*Moderators: Mark F. Berry, Stanford, CA, and Jeremiah T. Martin, Lexington, KY*

3:30 PM  DaVinci XI Firefly and Staplers
Bernard J. Park, New York, NY

3:45 PM  Spy/Pinpoint
Min P. Kim, Houston, TX

4:00 PM  Robotic Technology in Development
Mark R. Dylewski, Palmetto Bay, FL

4:15 PM  Emerging Robotic Tools
David R. Holmes, Rochester, MN

4:30 PM  New Robotic Platforms
Robert J. Cerfolio, Birmingham, AL

4:45 PM  New Haptic Technology for Robotic Surgery
Mark W. Onaitis, Durham, NC

5:00 PM – 6:30 PM  Lower Level Foyer

**STS/AATS Tech-Con Reception**

SUNDAY, JANUARY 24, 2016

7:00 AM – 6:30 PM  Lower Level Foyer

**Registration: STS/AATS Tech-Con and STS Annual Meeting**

7:00 AM – 1:15 PM  Lower Level Foyer

**STS/AATS Tech-Con Exhibits**

7:45 AM – 9:30 AM  Exhibit Halls 2-3

**Adult Cardiac Track III: Aortic Valve and Aortic Disease**
*Moderators: S. Chris Malaisrie, Chicago, IL, and Himanshu J. Patel, Ann Arbor, MI*

7:45 AM  Update on Transcatheter Aortic Valve Replacement (TAVR) Device Trials in the US and Europe
David R. Holmes, Rochester, MN

8:00 AM  Update on Novel Apical Closure Devices
Thomas Walther, Bad Nauheim, Germany

8:10 AM  Novel Suprasternal Aortic Access Device for TAVR
Andy C. Kiser, Chapel Hill, NC
8:20 AM Debate: What the Surgeon’s Role in TAVR Really Will Be 5 Years From Now
Let’s Get Real, Cardiologists Will Own It
Hersh S. Maniar, St Louis, MO
I Can Do TAVR With My Eyes Closed. I Will Be Doing TAVR
Vinod H. Thourani, Atlanta, GA

8:40 AM Panel Discussion

8:50 AM Results of Ascending Aortic Stent Grafting Using the First FDA-Approved Investigational Device Exemption (IDE)
Ali Khoynezhad, Los Angeles, CA

9:00 AM Branch Stent Grafting of Arch: IDE Results
Nimesh Desai, Philadelphia, PA

9:10 AM A Novel Device to Promote Active Remodeling and Cure of Aortic Dissections
Ali Shahriari, Indianapolis, IN

7:45 AM – 9:30 AM Room 120D

General Thoracic Track III: OR of the Future
Moderators: Reza J. Mehran, Houston, TX, and Allan Pickens, Atlanta, GA

7:45 AM Introduction

7:50 AM Sony Head-Mounted Display
Eric L. Grogan, Nashville, TN

8:05 AM Apps in Practice
Edward M. Bender, Cape Girardeau, MO

8:20 AM Google Glass
TBD

8:35 AM Apps for Education
Shari L. Meyerson, Chicago, IL

8:50 AM Thoracic Hybrid Room of the Future
Kazuhiro Yasufuku, Toronto, Canada

9:05 AM Holographic Projection
Todd L. Demmy, New Brunswick, NJ

9:20 AM Panel Discussion

9:30 AM – 10:15 AM Lower Level Foyer
BRAKE—Visit Tech-Con Exhibits

10:15 AM – 12:00 PM Exhibit Halls 2-3

Joint Session: “Shark Tank”—Rapid-Fire Elevator Pitches of Revolutionary Technology
Moderators: Gorav Ailawadi, Charlottesville, VA, and Shanda H. Blackmon, Rochester, MN

10:15 AM Introduction

10:30 AM Central Venous Cannulation With a New, Self-Expandable, Polymeric Venous Cannula
Enrico Ferrari, Lugano, Switzerland

10:40 AM New Prototype of an Expandable, Catheter-Implantable, Polyurethane Stent Valve for Pediatric Patients
Miguel A. Maluf, São Paulo, Brazil
The information provided here is an outline of the program. Only presenting authors are listed. Please consult the Abstract Book for full abstract text, complete author lists, and disclosures. You must have a Weekend Pass to attend courses on Saturday and Sunday, except for Tech-Con, which requires separate registration.

SATURDAY, JANUARY 23, 2016

7:00 am – 6:00 pm 
Lower Level Foyer
Registration: STS/AATS Tech-Con and STS Annual Meeting

8:00 am – 12:30 pm 
Room 122ABC
STS/SCA: Integrating Perioperative Echocardiography Into Cardiac Surgical Clinical Decision Making

Moderators: Vinay Badhwar, Pittsburgh, PA, John V. Conte, Baltimore, MD, Daniel H. Drake, Traverse City, MI, Gerald M. Lawrie, Houston, TX, and Stanton K. Shernan, Boston, MA

Session 1
8:00 am 
Transesophageal Echo Simulation
Vinay Badhwar, Pittsburgh, PA, John V. Conte, Baltimore, MD, Daniel H. Drake, Traverse City, MI, Gerald M. Lawrie, Houston, TX, G. Burkhard Mackensen, Seattle, WA, Stanton K. Shernan, Boston, MA, Douglas Shook, Newton Highlands, MA, and Joshua Zimmerman, Salt Lake City, UT

8:25 am 
Left Ventricle and Mitral Valve Analysis
Stanton K. Shernan, Boston, MA

8:50 am 
Right Ventricle and Dynamic Mitral Valve Analysis
G. Burkhard Mackensen, Seattle, WA

9:15 am 
Case 1: Patient Prosthetic Mismatch
Joshua Zimmerman, Salt Lake City, UT

10:00 am 
Break

Session 2
10:30 am 
Case 2: Perivalvular Leak After Mitral Valve Replacement
Douglas Shook, Newton Highlands, MA

11:10 am 
Case 3: Tricuspid Regurgitation in Mitral Valve Surgery
Stanton K. Shernan, Boston, MA

11:50 am 
Case 4: Complex Mitral Valve Repair
G. Burkhard Mackensen, Seattle, WA

8:00 am – 3:00 pm 
Room 129A
STS/CHEST: Primer on Advanced and Therapeutic Bronchoscopy—Theory and Hands-On Session

Moderators: Momen M. Wabidi, Durham, NC, and Richard I. Whyte, Boston, MA

8:00 am 
Introduction

8:10 am 
EBUS Mediastinal Anatomy
Kazuhiko Yasufuku, Toronto, Canada

8:30 am 
EBUS-Transbronchial Needle Aspiration (TBNA)
Momen M. Wabidi, Durham, NC
8:50 AM  Navigational Bronchoscopy and Radial EBUS
Alexander C. Chen, St Louis, MO

9:10 AM  Panel Discussion

9:30 AM  Break

9:50 AM  Rigid Bronchoscopy
Stephen R. Hazelrigg, Springfield, IL

10:10 AM  Therapeutic Endoscopy: Laser, Cryotherapy, Electrocauter-y, and Argon Plasma Coagulation (APC)
Moishe A. Liberman, Montreal, Canada

10:30 AM  Airway Stents
Aaron M. Cheng, Seattle, WA

10:50 AM  Foreign Body Removal
Lonny Yarmus, Baltimore, MD

11:10 AM  Endobronchial Valves for Air Leak
Christine C. Argento, Chicago, IL

11:30 AM  Panel Discussion

11:50 AM  Lunch and Case Discussion

12:30 PM  Hands-On Breakout Sessions

Station 1: EBUS-TBNA on Airway Models
Kazuhiro Yasufuku, Toronto, Canada, and Robert E. Merritt, Columbus, OH

Station 2: Navigational Bronchoscopy
Lonny Yarmus, Baltimore, MD

Station 3: EBUS Simulator/Endobronchial Valves
Christine C. Argento, Chicago, IL

Station 4: Rigid Bronchoscopy and Airway Stents
Aaron M. Cheng, Seattle, WA, and Momen M. Wabidi, Durham, NC

Station 5: Electrocautery, APC, and Cryotherapy
Alexander C. Chen, St Louis, MO, and Moishe A. Liberman, Montreal, Canada

1:00 PM – 2:30 PM  Cardiopulmonary Bypass Simulation Course

Course Director: Thomas E. MacGillivray, Boston, MA

Faculty: Uriah Dudgeon, Boston, MA, and Christian DioDato, Boston, MA

SATURDAY, JANUARY 23, 2016

7:00 AM – 6:30 PM  Lower Level Foyer

Registration: STS/AATS Tech-Con and STS Annual Meeting

7:50 AM – 12:00 PM  Room 122ABC

Acquired and Congenital Heart Surgery Symposium: Challenges in Adult Congenital Heart Disease

Moderators: Emile A. Bacha, New York, NY, Christopher A. Caldarone, Toronto, Canada, Stephanie M. Fuller, Philadelphia, PA, and Jennifer S. Nelson, Chapel Hill, NC

7:50 AM  Welcome and Introduction

The Hazardous Resternotomy—Pearls and Pitfalls (Personal Technique With Special Attention To …)

8:00 AM  Imaging
Brian E. Kogon, Atlanta, GA

8:15 AM  Pediatrics
Charles D. Fraser, Houston, TX

8:30 AM  Right-Sided Structures
Joseph A. Dearani, Rochester, MN

8:45 AM  Patent Coronary Artery Bypass Grafts
John D. Puskas, Atlanta, GA

9:00 AM  Aorta
Duke E. Cameron, Baltimore, MD

9:15 AM  Conventional Surgery Options
Frank L. Hanley, Stanford, CA

10:00 AM  Differences and Similarities in Pediatric Pulmonary Hypertension vs ACHD
Nancy S. Ghanayem, Milwaukee, WI

10:15 AM  Postop Care Through the Eyes of a CT Surgeon/Intensivist
Nevin M. Katz, Baltimore, MD

10:30 AM  Intraop/Postop Extracorporeal Membrane Oxygenation vs Right Ventricular Assist Devices—Which, When, and Why
Francis D. Pagani, Ann Arbor, MI

11:00 AM  “Valve-in-Valve” Therapy—The Changing Game
Doff McElhinney, New York, NY

11:15 AM  Getting the Severely Pulmonary Hypertensive to Be Transplantable
Richard C. Daly, Rochester, MN

11:30 AM  Panel Discussion

11:55 AM  Closing Comments

7:50 AM – 12:00 PM  Room 126ABC

Practice Management Summit

Moderators: Greg A. Bowyer, Pueblo, CO, Robert W. Emery, Minneapolis, MN, Frank L. Fazzalari, Rochester, MI, and V. Seenu Reddy, Nashville, TN

7:50 AM  Introduction
8:00 AM  Data Knows Best—and It Will Bring You to Tiers  
Nathan Kaufman, San Diego, CA

8:20 AM  Effective Use of Survey Data in Negotiations  
Michael N. Heaton, Indianapolis, IN

8:40 AM  Work Relative Value Unit Employment Models: A Bad Choice for Cardiothoracic Surgeons  
Michael G. Moront, Toledo, OH

9:00 AM  Cardiothoracic Surgeon Entrepreneurs and the Device Development Pathway  
Brian W. Duncan, Arvada, CO

9:20 AM  Retirement Planning  
Roy Smalley, Minneapolis, MN

9:40 AM  Panel Discussion

10:10 AM  Break

10:20 AM  Aligning Incentives Through Co-Management  
Suzette Jaskie, Neptune Beach, FL

10:40 AM  Partnering for Excellence in Today’s Health Care Environment: Hospital Corporation of America’s Cardiovascular Service Line  
Steven V. Manoukian, Nashville, TN

11:00 AM  Is the Cardiovascular Service Line Really the Best Way to Manage Cardiac Surgery Programs?  
Michael J. Mack, Dallas, TX

11:20 AM  Update From the STS/AATS Workforce on Health Policy, Reform, and Advocacy  
Alan M. Speir, Falls Church, VA

11:40 AM  Panel Discussion

7:50 AM – 12:00 PM  Room 128AB

STS/AATS Critical Care Symposium: Quality and Value in the CT ICU
Moderators: Rakesh C. Arora, Winnipeg, Canada, Kevin W. Lobdell, Charlotte, NC, and Vassyl A. Lonchyna, Chicago, IL

7:50 AM  Introduction

7:55 AM  Introduction to Quality and Value in the ICU  
Kevin W. Lobdell, Charlotte, NC

8:00 AM  Importance of Quality and Value in the ICU  
Kevin W. Lobdell, Charlotte, NC

8:15 AM  Tele-ICU: Transforming Critical Care Quality and Value  
Scott Lindblom, Charlotte, NC

8:30 AM  Discussion

Hospital-Acquired Infections (HAIs)

8:45 AM  HAIs: Impact on Quality and Value  
Kevin W. Lobdell, Charlotte, NC

8:50 AM  Everything You Need to Know About Infection Prevention, HAIs, and Antibiotic Stewardship  
Emily Landon, Chicago, IL

9:20 AM  Discussion

9:30 AM  Break and Poster Viewing

CSU-ALS in the US: The Role and Impact of Physician Assistants

9:45 AM  CSU-ALS Overview  
Joel Dunning, Middlesbrough, United Kingdom

10:00 AM  The ACP/RN Educational Module  
Jill Ley, San Francisco, CA

10:15 AM  The Association of Physician Assistants in Cardiovascular Surgery Perspective  
David E. Lizotte, Harrisonburg, VA

10:30 AM  Implementation for Your CT ICU Team  
Yoan Lamarthe, Montreal, Canada

10:45 AM  Discussion

Prolonged Ventilation

11:00 AM  What Is the Ventilator Bundle ABCDE and What Data Support It?  
John P. Kress, Chicago, IL

11:10 AM  Tactics to Prevent Prolonged Ventilation and Deal With It When It Happens  
John P. Kress, Chicago, IL

11:30 AM  Tracheostomy: Early or Wait?  
Vassyl A. Lonchyna, Chicago, IL

11:40 AM  When on Extracorporeal Membrane Oxygenation: Awaken, Extubate, and Mobilize  
Darryl C. Abrams, New York, NY

11:50 AM  Discussion

1:00 PM – 4:00 PM  Room 231ABC

Residents Symposium: Transitioning From Residency to a Successful Practice
Moderators: Sidharta P. Gangadharan, Boston, MA, Sandra L. Starnes, Cincinnati, OH, and Ara A. Vaporiyan, Houston, TX

1:00 PM  Introduction

1:05 PM  How to Find Your First Job  
Ryan A. Macke, Madison, WI

1:20 PM  Question-and-Answer Session

1:25 PM  Keys to a Successful Interview  
Ravi K. Ghanta, Houston, TX

1:40 PM  Question-and-Answer Session

1:45 PM  What You Need to Know About Contracts  
Sandra L. Starnes, Cincinnati, OH

2:00 PM  Question-and-Answer Session

2:05 PM  Breakout Sessions

2:35 PM  Group Discussion / Evaluation Completion

2:45 PM  Building a Successful Clinical Practice  
Edward P. Chen, Atlanta, GA

3:00 PM  Question-and-Answer Session

3:05 PM  Early Career Development  
Elizabeth A. David, Sacramento, CA

3:20 PM  Question-and-Answer Session

3:25 PM  Breakout Sessions

3:50 PM  Group Discussion / Evaluation Completion
1:15 PM – 4:30 PM  

Room 120D

**ACC @ STS**

*Moderators:* David R. Holmes, Rochester, MN, Susheel Kodali, New York, NY, Patrick T. O’Gara, Boston, MA, and Vinod H. Thourani, Atlanta, GA

1:15 PM  
Lessons Learned From the STS/ACC TVT Registry™  
Frederick L. Grover, Aurora, CO

1:25 PM  
Ninety Percent of All Transcatheter Aortic Valve Replacements (TAVR) Will Be Done Transfemorally: How Can You Stay in the Game?  
Vinod H. Thourani, Atlanta, GA

1:32 PM  
Debate: TAVR for Low-Risk Patients—The Writing Is on the Wall, But How Will We Evaluate Outcomes?  
There Is No Floor  
Michael J. Mack, Dallas, TX  
Hold Your Horses  
David R. Holmes, Rochester, MN

1:46 PM  
Discussion

1:56 PM  
So Many TAVR Choices: How to Choose the Right Device for the Right Patient  
Susheel Kodali, New York, NY

2:06 PM  
My Worst Case That I Sent for TAVR: Why Did I Not Send This Patient to Surgery?  
Patrick T. O’Gara, Boston, MA

2:14 PM  
Discussion

2:24 PM  
Break

2:38 PM  
Case Presentation and Rationale for When to Use Percutaneous Coronary Intervention in Left Main Coronary Artery Disease (CAD)  
TBD

2:46 PM  
Technical Video and Current Rationale for Hybrid Revascularization: Why You Need to Learn This Procedure to Stay Relevant in the Management of CAD  
Michael E. Halkos, Atlanta, GA

2:54 PM  
Seriously, Why Are You Not Doing More Multi-Arterial Grafting? My Technique Will Make It Easy for You  
Joseph F. Sabik III, Cleveland, OH

3:02 PM  
My Worst Case: Why Did I Ever Take This ST Elevation Myocardial Infarction to Surgery?  
Robert A. Guyton, Atlanta, GA

3:10 PM  
Discussion

3:20 PM  
What Surgeons Should Know About the ACC/AHA Valve Guidelines  
Patrick T. O’Gara, Boston, MA

3:30 PM  
Why and How I Decide to Repair vs Replace the Ischemic Mitral Valve  
TBD

3:40 PM  
Follow-Up Report From the National Institutes of Health Cardiothoracic Surgical Trials Network Moderate and Severe Ischemic Mitral Regurgitation Trials  
Michael A. Acker, Philadelphia, PA

1:15 PM – 4:30 PM  

Room 131ABC

**How To: Technical Tricks and Pitfalls to Simplify Cardiac Surgery Procedures**

*Moderators:* Gorav Ailawadi, Charlottesville, VA, and Wilson Y. Szeto, Philadelphia, PA

**Coronary Artery Bypass Grafting (CABG)**

1:15 PM  
Skeletonized Internal Mammary Artery Harvest  
Richard Lee, St Louis, MO

1:23 PM  
Total Arterial CABG  
Michael E. Halkos, Atlanta, GA

1:31 PM  
Minimally Invasive CABG  
Marc Ruel, Ottawa, Canada

**Mitral Valve Surgery**

1:40 PM  
Mitral Exposure in Challenging Patients (Obese, Small Left Atrium, Previous Aortic Valve Replacement [AVR])  
Vinay Badhwar, Pittsburgh, PA

1:48 PM  
Anterior Leaflet Techniques, Artificial Cord (Measuring Cord Length)  
Michael A. Borger, New York, NY

1:56 PM  
Bileaflet Prolapse Repair Approaches  
Y. Joseph Woo, Stanford, CA

2:04 PM  
Sizing Rings Appropriately: Avoiding Systolic Anterior Motion/Optimizing Coaptation  
Robert L. Smith, Plano, TX

2:12 PM  
Total Chordal-Sparing Mitral Valve Replacement  
Michael A. Acker, Philadelphia, PA

2:20 PM  
Septal Myomectomy  
Nicholas G. Smedira, Cleveland, OH

2:28 PM  
Tricuspid Valve Repair: Optimizing Coaptation/Avoiding Ring Dehiscence  
James S. Gammie, Baltimore, MD

2:35 PM  
Break

**Aortic Valve Surgery**

2:55 PM  
Right Thoacotomy Mini-AVR  
John R. Mehall, Colorado Springs, CO

3:03 PM  
Aortic Root Enlargement Simplified  
Derek R. Brinster, New York, NY
### New Non-CME Session

#### Audience Poll

**Ticketed Event**  
52nd Annual Meeting Program Guide

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<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
<th>Speaker(s)</th>
<th>Location</th>
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<tbody>
<tr>
<td>3:11 pm</td>
<td><strong>Bicuspid Aortic Valve Repair</strong></td>
<td>Prashanth Vallabhajosyula, Philadelphia, PA</td>
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<tr>
<td>3:19 pm</td>
<td><strong>Sutureless AVR</strong></td>
<td>David A. Heimansohn, Indianapolis, IN</td>
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<td>3:27 pm</td>
<td><strong>Stentless AVR/Freedom Solo</strong></td>
<td>Eric E. Roselli, Cleveland, OH</td>
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<td>3:35 pm</td>
<td><strong>Transapical Transcatheter AVR (TAVR)</strong></td>
<td>Todd M. Dewey, Dallas, TX</td>
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<td>3:43 pm</td>
<td><strong>Subclavian TAVR</strong></td>
<td>Michael J. Reardon, Houston, TX</td>
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#### Aortic Surgery

**Time**  
3:51 pm

**Type A Dissection Repair**  
Michael P. Fischbein, Stanford, CA

**Time**  
3:59 pm

**Valve-Sparing Root Replacement**  
Wilson Y. Szeto, Philadelphia, PA

**Time**  
4:07 pm

**Bentall With Stented Bioprosthesis Valve**  
Anthony L. Estrera, Houston, TX

**Time**  
4:15 pm

**Total Arch Replacement/Elephant Trunk**  
Edward P. Chen, Atlanta, GA

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<tr>
<th>Time</th>
<th>Event Description</th>
<th>Speaker(s)</th>
<th>Location</th>
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<tbody>
<tr>
<td>3:30 pm</td>
<td><strong>Hypoplastic Left Heart Syndrome</strong></td>
<td>William M. Decampli, Orlando, FL</td>
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<tr>
<td>3:41 pm</td>
<td><strong>Discussant for Hypoplastic Left Heart Syndrome</strong></td>
<td>Anne Dipchand, Toronto, Canada</td>
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### Parallel Surgical Symposium: General Thoracic

**Time**  
1:15 pm – 4:30 pm

**Room 122ABC**

#### Minimally Invasive Approaches to Thymectomy With and Without Thymoma

**Moderators:** Leah M. Backus, Stanford, CA, Traves D. Crabtree, St Louis, MO, and Joseph B. Shrager, Stanford, CA

**Time**  
1:15 pm

**Clinical Vignette/Audience Poll 1**

**Time**  
1:20 pm

**VATS Thymectomy**  
Joshua R. Sonett, New York, NY

**Time**  
1:32 pm

**Robotic Thymectomy**  
Richard K. Freeman, Indianapolis, IN

**Time**  
1:44 pm

**Transcervical Thymectomy**  
Marcelo Cypel, Toronto, Canada

**Time**  
1:56 pm

**Panel Discussion**

---

#### Advanced Techniques in Lung Resection

**Time**  
2:11 pm

**Clinical Vignette/Audience Poll 2**

**Time**  
2:16 pm

**Bronchoplastic Techniques in Lung Resection**  
Joseph B. Shrager, Stanford, CA

**Time**  
2:28 pm

**Localization of Sub-Solid Lung Nodules**  
David R. Jones, New York, NY

**Time**  
2:40 pm

**Complex VATS Resections**  
Todd L. Demmy, Buffalo, NY

**Time**  
2:52 pm

**Panel Discussion**

**Time**  
3:07 pm

**Break**

**Time**  
3:22 pm

**Incorporating Quality Improvement Initiatives Into Thoracic Surgery Practice**

**Time**  
3:27 pm

**ProvenCare and the Lung Cancer Clinical Pathway**  
Douglas E. Wood, Seattle, WA

**Time**  
3:39 pm

**Using LEAN Principles to Improve System-Level Outcomes Following Esophageal Resection**  
Farhood Farjah, Seattle, WA

**Time**  
3:51 pm

**American Board of Thoracic Surgery Maintenance of Certification Part IV and Quality Improvement**  
Bryan F. Meyers, St Louis, MO

**Time**  
4:03 pm

**Benefits and Barriers to Participation in the STS General Thoracic Surgery Database**  
Benjamin D. Kozower, Charlottesville, VA

**Time**  
4:15 pm

**Panel Discussion**
1:15 pm – 4:30 pm  
**Resuscitation of Patients Who Arrest After Cardiac Surgery**

**Moderator:** Joel Dunning, Middlesbrough, United Kingdom

**Faculty:** Rakesh C. Arora, Winnipeg, Canada, Richard S. Bell, Baltimore, MD, Adrian Levine, Staffordshire, United Kingdom, Jill Ley, San Francisco, CA, and Aaron Morton, Louisville, KY

1:15 pm  
**Introduction**  
Joel Dunning, Middlesbrough, United Kingdom

1:20 pm  
**Arrest Practical 1: Group Simulation of Cardiac Arrest After Cardiac Surgery**

1:45 pm  
**The Protocol for the Resuscitation of Patients Who Arrest After Cardiac Surgery**  
Joel Dunning, Middlesbrough, United Kingdom

2:30 pm  
**Arrest Practical 2: Manikin Simulation of the Arrest Protocol**

3:15 pm  
**Cardiac Arrest Skills Stations**

- **Station 1: Internal Massage**
- **Station 2: Gowning and Gloving**
- **Station 3: Pacing**

4:00 pm  
**How to Implement Resuscitation Protocols for Arrest After Cardiac Surgery in Your Own Hospital and How to Become a Trainer**  
Joel Dunning, Middlesbrough, United Kingdom

2:00 pm – 6:30 pm  
**Scientific Posters**

CT Surgery Interprofessional Education Symposium: Multidisciplinary Team Approach to Patient Safety, Quality, Outcomes, and Reimbursement

**Moderators:** Stefano Schena, St Louis, MO, and Brandon H. Tieu, Portland, OR

2:30 pm  
**How to Develop a Multidisciplinary Program to Ensure Patient Safety and Good Outcomes: Experience with Transcatheter Aortic Valve Replacement Multidisciplinary Team Development**  
Elizabeth Perpetua, Seattle, WA

2:45 pm  
**Preoperative Planning Prevents Poor Performance**  
Baron L. Hamman, Dallas, TX

3:00 pm  
**Question-and-Answer Session**  
Brandon H. Tieu, Portland, OR

3:10 pm  
**Planning and Prevention of Perfusion Accidents: What to Do When the Pump Goes Rogue**  
Michael Colligan, Houston, TX

3:25 pm  
**Safety in the ICU: Complexity and Normal Accidents—Creating High Reliability in the Perioperative Domain**  
Laureen L. Hill, Atlanta, GA

3:40 pm  
**Question-and-Answer Session**  
Stefano Schena, St Louis, MO

3:50 pm  
**Heart Team Care Designed for Quality, Value, and Safety**  
Kevin W. Lobdell, Charlotte, NC

4:05 pm  
**Foundations of Teamwork: Organizing Principles and Care Routines for Safety, Communications, and STS Outcomes**  
Paul N. Uhlig, Wichita, KS

4:20 pm  
**Question-and-Answer Session**

4:30 pm – 6:30 pm  
**Opening Reception in STS Exhibit Hall**

**MONDAY, JANUARY 25, 2016**

6:30 am – 5:00 pm  
**Registration: STS Annual Meeting**

9:00 am – 4:30 pm  
**Scientific Posters**

**Room 128AB**

CT Surgery Interprofessional Education Symposium: Multidisciplinary Team Approach to Patient Safety, Quality, Outcomes, and Reimbursement

**Moderators:** Mark S. Allen, Rochester, MN, and Keith S. Naunheim, St Louis, MO

7:00 am  
**Opening Remarks**

7:15 am  
P. P. Samson  
Washington University School of Medicine, St Louis, MO  
**Discussant:** Felix G. Fernandez, Atlanta, GA

7:35 am  
**J. Maxwell Chamberlain Memorial Paper for Adult Cardiac Surgery: Optimal Timing Between Myocardial Infarction and Coronary Artery Bypass Grafting: Impact on In-Hospital Mortality**  
E. L. Nichols  
The Dartmouth Institute, Lebanon, NH  
**Discussant:** Robert A. Guyton, Atlanta, GA

7:55 am  
**J. Maxwell Chamberlain Memorial Paper for Congenital Heart Surgery: Clinical Experience With the Bifurcated Y-Graft Fontan Procedure**  
K. R. Kanter  
Emory University, Atlanta, GA  
**Discussant:** Marshall L. Jacobs, Newtown Square, PA
T. Williams
The University of Chicago, IL
Discussant: Benjamin D. Kozower, Charlottesville, VA

8:30 AM  Richard E. Clark Memorial Paper for Adult Cardiac Surgery: Development of a Risk Prediction Model and Clinical Risk Score for Isolated Tricuspid Valve Surgery: Analysis of the STS Adult Cardiac Surgery Database
D. LaPar
University of Virginia, Charlottesville
Discussant: Michael A. Acker, Philadelphia, PA

8:45 AM  Richard E. Clark Memorial Paper for Congenital Heart Surgery: Prevalence of Noncardiac and Genetic Abnormalities in Neonates Undergoing Surgery for Congenital Heart Disease: Analysis of the STS Congenital Heart Surgery Database
A. Patel
Ann & Robert H. Lurie Children’s Hospital of Chicago, IL
Discussant: Peter J. Gruber, Iowa City, IA

9:00 AM  BREAK—Visit Exhibits and Scientific Posters
Complimentary coffee available in the Exhibit Hall

9:40 AM  Introduction of the President
Joseph E. Bavaria, Philadelphia, PA

9:50 AM  Presidential Address: Innovation for Life
Mark S. Allen, Rochester, MN

10:50 AM – 11:30 AM  BREAK—Visit Exhibits and Scientific Posters
Complimentary coffee available in the Exhibit Hall

11:30 AM – 12:30 PM  Room 120D
Adult Cardiac Session: Arrhythmia
Moderators: Richard Lee, St Louis, MO, and Jonathan M. Philpott, Norfolk, VA

11:30 AM  Left-Sided Surgical Ablation for Patients With Atrial Fibrillation Undergoing Concomitant Cardiac Surgery
N. Ad
Inova Heart and Vascular Institute, Falls Church, VA

11:45 AM  Biatrial or Left Atrial Lesion Set for Ablation During Mitral Surgery: Risks and Benefits
A. Churyla
Northwestern Memorial Hospital, Chicago, IL

12:00 PM  Atrial Fibrillation Ablation Does Not Increase Operative Risk When Added to Coronary Artery Bypass Grafting and Aortic Valve Replacement
T. Al-Atassi
University of Ottawa Heart Institute, Canada

12:15 PM  Panel Discussion: Optimal Lesion Set for Atrial Fibrillation
A. Marc Gillinov, Cleveland, OH

11:30 AM – 12:30 PM  Room 127ABC
Quality Improvement Initiatives in Thoracic Surgery
Moderators: K. Robert Shen, Rochester, MN, and Sudish C. Murthy, Cleveland, OH

11:30 AM  Longitudinal Follow-Up for Lung Cancer Resections in The Society of Thoracic Surgeons General Thoracic Surgery Database
F. G. Fernandez
Emory University, Atlanta, GA
Discussant: Benjamin D. Kozower, Charlottesville, VA

11:50 AM  Spectrum of Congenital Heart Surgery Case Mix Across US Centers and Impact on Performance Assessment
S. K. Pasquali
University of Michigan, Ann Arbor
Discussant: Joseph A. Dearani, Rochester, MN

12:10 PM  Simulation-Based Training in Cardiac Surgery for Improved Patient Safety
R. H. Feins
University of North Carolina, Durham
Discussant: Stephen C. Yang, Baltimore, MD

11:30 AM – 12:30 PM  Room 126ABC
Basic Science Research: Adult Cardiac
Moderators: T. Brett Reece, Aurora, CO, and Y. Joseph Woo, Stanford, CA

11:30 AM  Biodegradable Cardiac Patch Seeded With Human-Induced Pluripotent Stem Cell-Derived Cardiomyocytes Promoted the Regeneration of Host Cardiomyocytes
T. Sugiura
Nationwide Children's Hospital, Columbus, OH

11:40 AM  The Impact of Mechanical Properties on Wall Stress in Failed Pulmonary Autografts
E. E. Tseng
University of California, San Francisco Medical Center and San Francisco VA Medical Center

11:50 AM  Modeling Aortic Valve Insufficiency and Aortic Valve Repair: Applications From Bench to the Operating Room
H. D. Toeg
University of Ottawa Heart Institute, Canada

12:00 PM  Accelerated In Situ Constructive Myocardial Remodeling Process of an Extracellular Matrix Cardiac Patch With Sustained Direct Delivery of a Growth Factor
T. Ota
The University of Chicago, IL

12:15 PM  Alternative Therapeutic Strategy for Aortic Aneurysm Using Mesenchymal Stem Cell-Derived Exosomes
M. Kozakai
Nagoya University Graduate School of Medicine, Japan

12:20 PM  Novel Tissue-Engineered Vascular Graft With Highly Porous Sponge-Type Scaffold as a Small-Diameter Arterial Graft
T. Sugiura
Nationwide Children's Hospital, Columbus, OH
11:30 AM – 12:30 PM

**Basic Science Research: General Thoracic**

*Moderators*: Jules Lin, Ann Arbor, MI, and Sunil Singhal, Philadelphia, PA

11:30 AM  
**Bioengineering a Partial Tracheal Graft Using 3D-Printed Polymer, Extracellular Matrix, and Mesenchymal Stem Cells**  
S. Rehmani  
Mount Sinai St Luke’s Hospital, New York, NY

11:45 AM  
**Asbestos Mediates Epigenetic Repression of RASSF1A in Normal Human Mesothelial Cells**  
D. Straughan  
National Cancer Institute, Bethesda, MD

12:00 PM  
**Role of Stress Proteins in the Carcinogenesis and Maintenance of Esophageal Adenocarcinoma**  
K. D. Hazel  
University of Colorado School of Medicine, Aurora

12:15 PM  
**Near-Infrared Intraoperative Molecular Imaging Localizes Metastases to the Lung**  
J. J. Keating  
University of Pennsylvania, Philadelphia

11:30 AM – 12:30 PM

**Congenital Session: Adult Congenital**

*Moderators*: James Jaggers, Aurora, CO, and Kirk R. Kanter, Atlanta, GA

11:30 AM  
**Contemporary Management of Aortic Coarctation in Adults: Mid-Term Results**  
P. Noly  
Montreal Heart Institute, Canada

11:45 AM  
**One Hundred Percent Freedom From Reintervention at 10 Years With a Porcine Valved Conduit for Right Ventricular Outflow Tract Reconstruction**  
H. Schuhmeier  
University of Rochester, NY

12:00 PM  
**Adult Scimitar Syndrome Repair: Long-Term Results Using an Extracardiac Conduit**  
N. Carvalho Guerra  
Hopital Cardiologique Haut-Leveque, Bordeaux, France

12:15 PM  
**Long-Term Outcome of Arterial Switch Operation Conversion After Failed Senning/Mustard Procedure**  
T. Maeda  
Tokyo Women’s Medical University, Japan

11:30 AM – 12:30 PM

**Critical Care**

*Moderators*: Rakesh C. Arora, Winnipeg, Canada, and James M. Isbell, Charlottesville, VA

11:30 AM  
**Clinical Significance of Spontaneous Echo Contrast on Extracorporeal Membrane Oxygenation**  
S. Unai  
Thomas Jefferson University Hospital, Philadelphia, PA

11:45 AM  
**Restricted Albumin Utilization Is Safe and Cost Effective in a Cardiac Surgery Intensive Care Unit**  
J. Rabin  
University of Maryland Medical Center, Baltimore

12:00 PM  
**Acute Stress Hyperglycemia, Even in Non-Diabetics, Increases the Rate of Atrial Fibrillation in Patients Undergoing Cardiac Surgery**  
H. A. Jensen  
Emory University, Atlanta, GA

12:15 PM  
**The Relationship Between Blood Transfusions and Infections Following Cardiac Surgery: Is This Just the Blood?**  
R. Ohkuma  
The Johns Hopkins Hospital, Baltimore, MD

11:30 AM – 12:30 PM

**STS/CATS/CSCS: Adding New Dimensions to Your Surgical Practice—Optimizing Your Internet Presence and Understanding the Emerging Role of 3-Dimensional Printing in Cardiothoracic Surgery**

*Moderators*: Sean C. Grondin, Calgary, Canada, and Colin Schieman, Hamilton, Canada

11:30 AM  
**How to Improve Your Internet Profile: Building a Winning Website for You and Your Team**  
Christopher W. Seder, River Forest, IL

11:40 AM  
**Social Media in Cardiothoracic Surgery and the Thoracic Surgery Social Media Network: Understanding How Social Media Can Benefit You and Your Patients**  
Mara B. Antonoff, Houston, TX

11:50 AM  
**Panel Discussion**
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>12:00 PM</td>
<td>3-Dimensional Printing Applications in Cardiovascular Surgery</td>
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<tr>
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<td>Mackenzie Quantz, London, Canada</td>
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<td>12:10 PM</td>
<td>3-Dimensional Printing in General Thoracic Surgery</td>
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<td>Stephen D. Cassivi, Rochester, MN</td>
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<td>12:20 PM</td>
<td>Panel Discussion</td>
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<td>12:30 PM – 1:30 PM</td>
<td>BREAK—Visit Exhibits and Scientific Posters</td>
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<td>Complimentary coffee available in the Exhibit Hall</td>
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<tr>
<td>1:15 PM – 5:15 PM</td>
<td>Room 127ABC</td>
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<td>Redefining Practice Through Quality and Evidence: What’s New?</td>
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<td><strong>Moderators:</strong> Vinay Badhwar, Pittsburgh, PA, and Jeffrey P. Jacobs, St Petersburg, FL</td>
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<tr>
<td>1:15 PM</td>
<td>Introduction</td>
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<td>1:20 PM</td>
<td>STS Clinical Practice Guidelines: What’s New?</td>
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<td>John D. Mitchell, Aurora, CO</td>
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<td>1:50 PM</td>
<td>Question-and-Answer Session</td>
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<td>2:05 PM</td>
<td>Local and Regional Quality Collaboratives: What’s New?</td>
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<td>John V. Conte, Baltimore, MD, Donald S. Likosky, Ann Arbor, MI, and Alan M. Speir, Falls Church, VA</td>
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<td>2:35 PM</td>
<td>Question-and-Answer Session</td>
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<td>2:50 PM</td>
<td>Development and Validation of a Reliable Score to Predict the Risk of Readmission Following Adult Cardiac Surgery</td>
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<td>The Johns Hopkins University, Baltimore, MD</td>
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<td>3:00 PM</td>
<td>Cost Analysis of a Physician Assistant Home Visit Program to Reduce Readmissions Following Cardiac Surgery</td>
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<td>J. P Nabagiez</td>
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<td>Staten Island University Hospital, North Shore-LIJ Health System, NY</td>
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<td>3:10 PM</td>
<td>Unplanned Readmission Following Lung Resection: Complete Follow-Up in a 1-Year Cohort With Identification of Associated Risk Factors</td>
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<td>K. J. Dickinson</td>
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<td>Mayo Clinic, Rochester, MN</td>
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<td>3:20 PM</td>
<td>Break</td>
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<td>3:35 PM</td>
<td>Adhering to Quality Measures in Esophagectomy Improves Overall Survival in All Stages of Esophageal Cancer</td>
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<td>Washington University School of Medicine, St Louis, MO</td>
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<td>3:45 PM</td>
<td>Perfusion Strategies for Neonatal and Infant Aortic Arch Repair: Review of Contemporary Practice Patterns in the STS Congenital Heart Surgery Database</td>
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<td>Cohen Children's Medical Center, New Hyde Park, NY</td>
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<td>3:55 PM</td>
<td>Quality Measurement: What’s New?</td>
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<td>David M. Shabian, Sudbury, MA</td>
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<td>4:10 PM</td>
<td>Public Reporting: What’s New?</td>
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<td>Vinay Badhwar, Pittsburgh, PA</td>
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<td>Public Reporting With the STS General Thoracic Surgery Database</td>
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<td>Benjamin D. Kezower, Charlottesville, VA</td>
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<td>4:30 PM</td>
<td>STS Congenital Heart Surgery Database Risk Models</td>
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<td>Marshall L. Jacobs, Newtown Square, PA</td>
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<td>Jeffrey P. Jacobs, St Petersburg, FL</td>
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<td>4:55 PM</td>
<td>Physician Reimbursement (CPT and RUC): What’s New?</td>
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<td>Peter K. Smith, Durham, NC</td>
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<td>5:05 PM</td>
<td>Question-and-Answer Session/Discussion</td>
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<td>1:15 PM – 3:30 PM</td>
<td>Room 120D</td>
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<td>Adult Cardiac Session: Aorta I</td>
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<td><strong>Moderators:</strong> Derek R. Brinster, New York, NY, and Wilson Y. Szeto, Philadelphia, PA</td>
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<tr>
<td>1:15 PM</td>
<td>Introduction</td>
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<tr>
<td>1:20 PM</td>
<td>Open Repair of Thoracoabdominal Aortic Aneurysm in Patients ≤50 Years of Age</td>
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<td>J. S. Coselli</td>
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<td>Baylor College of Medicine, Houston, TX</td>
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<td>1:50 PM</td>
<td>Imaging Experience of Type II Hybrid Aortic Arch Repair: Lessons Learned From 6 Years of Zone 0 Landing and Evolution to Zone 2 Arch Repair</td>
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<td>Libin Cardiovascular Institute, University of Calgary, Canada</td>
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<td>2:00 PM</td>
<td>Endovascular Arch Repair in Zone 0 and Zone Z Arch Disease</td>
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<td>Clinical Outcomes of the David V Valve-Sparing Root Replacement Compared to Bioprosthetic Valve Conduits for Aortic Root Aneurysms</td>
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<td>J. Esaki</td>
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<td>Otsu Red Cross Hospital, Japan</td>
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<td>The Concept of Selective Antegrade Cerebral Perfusion During Mild (28°C) Systemic Hypothermia Safely and Reproducibly Can Be Applied to All Aspects of Aortic Arch Surgery: Single-Center Experience Over a 15-Year Period in 587 Consecutive Patients</td>
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<td>A. Zierer</td>
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<td>University Hospital Frankfurt, Germany</td>
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<td>2:45 PM</td>
<td>Morphologic and Functional Markers of Aortopathy in Patients With Bicuspid Aortic Valve Insufficiency vs Stenosis</td>
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<td>E. Girdauskas</td>
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<td>Central Hospital Bad Berka, Germany</td>
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<td>3:00 PM</td>
<td>Bicuspid Aortic Valve Insufficiency With Root Aneurysm: Repair With Root Reimplantation</td>
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<td>Edward P. Chen, Atlanta, GA</td>
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<td>3:15 PM</td>
<td>Redo Thoracoabdominal Aortic Aneurysm Repair: A Single-Center Experience Over 25 Years</td>
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<td>The University of Texas Health Science Center, Houston</td>
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1:30 PM – 3:30 PM  Room 126ABC

**Adult Cardiac Session: Ischemic**

**Moderators:** Frank W. Sellke, Providence, RI, and Brett C. Sheridan, Chapel Hill, NC

**1:30 PM**
Failure-to-Rescue Rates After Coronary Artery Bypass Grafting: An Analysis From the STS Adult Cardiac Surgery Database  
F. H. Edwards  
University of Florida, Jacksonville

**1:45 PM**
Total Arterial Coronary Revascularization: A Superior Strategy for Diabetic Patients Who Require Coronary Surgery  
J. Tatoulis  
Royal Melbourne Hospital, University of Melbourne, Australia

**2:00 PM**
Effects of Blood Transfusion on Late Cardiac and Noncardiac Mortality After Coronary Artery Bypass Grafting  
T. A. Schwann  
University of Toledo Medical Center, OH

**2:15 PM**
The Optimal Composite Graft Strategy for Multiple Sequential Radial Artery Grafting to the Non-Left Anterior Descending Artery Territories in Aortic No-Touch Total Arterial Off-Pump Coronary Artery Bypass Grafting  
Y. Shimahara  
National Cerebral and Cardiovascular Center, Osaka, Japan

**2:30 PM**
Coronary Artery Bypass Surgery With Hypothermic Ventricular Fibrillation Without Aortic Occlusion: A Contemporary Study on Early Results and Long-Term Survival  
P. E. Antunes  
Center of Cardiothoracic Surgery, Coimbra, Portugal

**2:45 PM**
A Comparison of Graft Stenosis and Occlusion Between Radial Artery and Saphenous Veins 5 Years After Coronary Artery Bypass Grafting: A Secondary Analysis of the Radial Artery Patency Study  
M. Yamasaki  
Schulich Heart Centre, Sunnybrook Health Sciences Centre, Toronto, Canada

**3:00 PM**
The Racial Paradox in Multiarterial Conduit Utilization for Coronary Artery Bypass Grafting  
W. B. Keeling  
Emory University, Atlanta, GA

**3:15 PM**
What Are the Barriers to Multiple Arterial Grafting?  
Joseph F. Sabik III, Cleveland, OH

1:30 PM – 3:30 PM  Room 122ABC

**Congenital Session: Pediatric Congenital I**

**Moderators:** Andrew C. Fiore, St Louis, MO, and Mark D. Rodefeld, Indianapolis, IN

**1:30 PM**
Selection Schemes and Technical Diversities of Extra-Anatomic Bypass in Complex and Recurrent Aortic Coarctation and Hypoplastic Arch  
E. B. Delmo Walter  
Trauma Center Berlin, Germany
2:30 pm  A Risk Score to Assist in Selecting Lobectomy vs Sublobar Resection for Early Stage Non–Small-Cell Lung Cancer
B. Gulack
Duke University, Durham, NC

2:45 pm  Induction Chemotherapy for cN1 Non–Small-Cell Lung Cancer Is Not Associated With Improved Survival
P. J. Speicher
Duke University, Durham, NC

3:00 pm  Lung Cancer Breath Detection
Michael Bousamra, Louisville, KY

1:30 pm – 3:30 pm   Room 125AB

General Thoracic Session: Lung Transplantation
Moderators: Pablo Sanchez, Baltimore, MD, and Matthew Thomas, Jacksonville, FL

1:30 pm  Lung Transplant Outcomes in Patients With Coronary Artery Bypass Grafts
T. Songdeshbaknout
University of Pittsburgh Medical Center, PA

1:45 pm  Can Donor Lungs With Prolonged Storage Be Reconditioned by Ex Vivo Lung Perfusion?
T. Okamoto
Cleveland Clinic, OH

2:00 pm  Cold Preservation of Donation-After-Cardiac Death Lungs Following Ex Vivo Lung Perfusion Allows Transport From Lung Rehabilitation Centers to Suitable Recipients
E. J. Charles
University of Virginia Health System, Charlottesville

2:15 pm  Two Decades of Lung Retransplantation: A Single-Center Experience
D. J. Hall
University of Florida College of Medicine, Gainesville

2:30 pm  Antireflux Surgery Is Safe and Effective Following Lung Transplantation
D. D. Odell
University of Pittsburgh Medical Center, PA

2:45 pm  Bridging Strategies to Lung Transplantation Do Not Have an Impact on 1-Year Survival
M. J. Mulligan
University of Maryland School of Medicine, Baltimore

3:00 pm  Debate: Is Lung Retransplantation Justified From an Ethical and Economical Perspective?
PRO: Steven M. Kawut, Philadelphia, PA
CON: Kenneth R. McCurry, Cleveland, OH

1:30 pm – 3:30 pm   Room 128AB

SVS @ STS: Sharing Common Ground for Cardiovascular Problems
Moderators: A. Michael Borkon, Kansas City, MO, and Jason T. Lee, Stanford, CA

1:30 pm  Introduction

1:35 pm  Conservative Management of Acute Type B Dissections: “To Treat Now or Later”
Michael P. Fischbein, Stanford, CA

1:50 pm  Aggressive Stent Grafting
Joseph V. Lombardi, Camden, NJ

2:05 pm  Discussion

2:15 pm  Thoracic Aortic Aneurysm: Why Open Treatment?
Joseph S. Caselli, Houston, TX

2:30 pm  Thoracic Aortic Aneurysm: Why Endovascular Repair?
Gustavo Oderich, Rochester, MN

2:45 pm  Discussion

2:55 pm  Arterial/Venous Thoracic Outlet Syndrome: How I Do It—STS Perspective
John A. Kern, Charlottesville, VA

3:10 pm  Arterial/Venous Thoracic Outlet Syndrome: How I Do It—SVS Perspective
Julie A. Freischlag, Sacramento, CA

3:25 pm  Discussion

1:30 pm – 3:30 pm   Room 123

30th Anniversary Celebration of Women in Thoracic Surgery: Innovations and Contributions of WTS and STS Members
Moderators: Jessica S. Donington, New York, NY, Leslie J. Kohman, Syracuse, NY, and Jennifer S. Lawton, St Louis, MO

1:30 pm  Introduction

1:32 pm  The Untapped Potential of Women as Leaders
Douglas E. Wood, Seattle, WA

1:47 pm  Pioneers and Significant Contributions in Congenital Heart Surgery
Kristine J. Guleserian, Dallas, TX

2:02 pm  Pioneers and Significant Contributions in Adult Cardiac Surgery
Andrea J. Carpenter, San Antonio, TX

2:17 pm  Pioneers and Significant Contributions in General Thoracic Surgery
Yolonda L. Coleman, Boston, MA

2:32 pm  Changes in the Demographics of American Board of Thoracic Surgery Diplomates Since 1961
William A. Baumgartner, Baltimore, MD

2:47 pm  Mentoring Female and Minority Surgeons
G. Alexander Patterson, St Louis, MO

3:02 pm  Diversity in Cardiothoracic Surgery and the Future: What Will the Face of CT Surgery Be?
Valerie W. Rusch, New York, NY

3:17 pm  Panel Discussion

3:30 pm – 4:15 pm

BREAK—Visit Exhibits and Scientific Posters
Complimentary coffee available in the Exhibit Hall
International Symposium & Reception: The Ethics and Practicality of Using New Technologies to Treat Cardiothoracic Diseases in Different Parts of the World
Moderator: A. Pieter Kappetein, Rotterdam, The Netherlands
3:30 pm  Introduction

Rheumatic Heart Disease
3:35 pm  Rheumatic Heart Disease: Between a Rock and a Heart Place
Taweesak Chotivatanapong, Nonthaburi, Thailand
3:42 pm  Question-and-Answer Session

The Modern Era of Endocarditis Treatment
3:50 pm  Emerging Trends in Infective Endocarditis
Adnan Cobanoglu, Beachwood, OH
3:57 pm  Different Treatment Approaches in Japan
Yuotaka Okita, Kobe, Japan
4:01 pm  Different Treatment Approaches in South Korea
Jae Won Lee, Seoul, South Korea

The Future of Transcatheter Mitral Valve Disease Treatment in Different Parts of the World
4:05 pm  New Technologies Available and On the Horizon
Joseph E. Bavaria, Philadelphia, PA
4:12 pm  Varieties of Mitral Valve Disease: Is the Developing World Ready for New Devices?
Arkalud Sampath Kumar, Delhi, India

The Ethics of Testing New Devices in Developing Countries
4:20 pm  Panel Discussion: Where Are Devices Being Tested? The Ethics of Testing Devices in Countries Where the Technology Likely Will Not Be Dispersed
Joseph E. Bavaria, Philadelphia, PA, Steven F. Bolling, Ann Arbor, MI, William E. Cohn, Houston, TX, A. Pieter Kappetein, Rotterdam, The Netherlands, John C. Laschinger, Silver Spring, MD, Robert M. Sade, Charleston, SC, and Moritz C. Wyler von Ballmoos, Milwaukee, WI

4:15 PM – 5:15 PM  Room 120ABC
Surgical Motion Picture Matinee: Congenital
Moderators: Bahaaldin Alsoufi, Atlanta, GA, and Aditya K. Kaza, Boston, MA
4:15 pm  The Senning/Rastelli Operation for Congenitally Corrected Transposition of the Great Arteries With Pulmonary Stenosis: A Technique to Prevent Pulmonary Vein Stenosis
J. S. Nelson
University of North Carolina, Chapel Hill
4:27 pm  Double Switch Operation With Combined Nikaidoh and Senning Procedures for Congenitally Corrected Transposition of the Great Arteries/Ventricular Septal Defect/Pulmonary Stenosis
R. Aeba
Keio University, Tokyo, Japan
4:39 pm  A Novel Technique for Aortic Arch Reconstruction With Pulmonary Autograft Tube for Right-Sided Interrupted Aortic Arch
N. Kato
Children’s Medical Center, Kyoto Prefectural University of Medicine, Japan
5:03 pm  From Right Arch to Left Arch: Modified Norwood Procedure for a Newborn Infant With Tricuspid Atresia, Transposition of Great Arteries, and Right Arch With Complete Vascular Ring
C. Hsu
National Taiwan University Hospital, Taipei

4:15 PM – 5:15 PM  Room 129AB
International Symposium & Reception: The Ethics and Practicality of Using New Technologies to Treat Cardiothoracic Diseases in Different Parts of the World
Moderator: A. Pieter Kappetein, Rotterdam, The Netherlands
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Rheumatic Heart Disease
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4:15 PM – 5:15 PM  Room 122ABC
Surgical Motion Picture Matinee: Adult Cardiac
Moderators: Edward P. Chen, Atlanta, GA, and Leora T. Yarboro, Charlottesville, VA
4:15 pm  Endovascular Repair of Thoracoabdominal Aortic Aneurysm With Custom-Manufactured, Fenestrated-Branched Stent Grafts
L. E. Greiten
Mayo Clinic, Rochester, MN
4:27 pm  An Overlooked Tool to Address Mitral Regurgitation at the Time of Septal Myectomy for Hypertrophic Obstructive Cardiomyopathy
A. A. Shab
Duke University Medical Center, Durham, NC

4:39 pm  Minimally Invasive Replacement of the Hemi Arch, Ascending Aorta, and Aortic Root With Reimplantation of the Coronary Arteries Utilizing Circulatory Arrest and Retrograde Cerebral Perfusion
J. Lamelas
Mount Sinai Medical Center, Miami Beach, FL
4:51 pm  Minimally Invasive Left Ventricular Assist Device Implantation
Y. Lin
Mayo Clinic, Rochester, MN
5:03 pm  Repair of Bicuspid Aortic Valve Insufficiency and Ascending Aortic Aneurysm Associated With Coronary Anomalies
Y. Choi
University of Cologne, Germany

4:15 – 5:15 pm  Room 120D
Surgical Motion Picture Matinee: Congenital
Moderators: Bahaaldin Alsoufi, Atlanta, GA, and Aditya K. Kaza, Boston, MA
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N. Kato
Children’s Medical Center, Kyoto Prefectural University of Medicine, Japan
5:03 pm  From Right Arch to Left Arch: Modified Norwood Procedure for a Newborn Infant With Tricuspid Atresia, Transposition of Great Arteries, and Right Arch With Complete Vascular Ring
C. Hsu
National Taiwan University Hospital, Taipei
**TUESDAY, JANUARY 26, 2016**

**4:15 PM – 5:15 PM**

**Surgical Motion Picture Matinee: General Thoracic**

*Room 120A*

**Moderators:** K. Robert Shen, Rochester, MN, and Sandra L. Starnes, Cincinnati, OH

- **4:15 PM**
  - **Tracheal Resection and Carinal Reconstruction for Squamous Cell Carcinoma**
  - T. S. Lancaster
  - Washington University School of Medicine, St Louis, MO

- **4:27 PM**
  - **Is Single Anatomical Segmentectomy of the Mediobasal Segment (S7) Possible?**
  - K. Shimizu
  - Gunma University Hospital, Maebashi, Japan

- **4:39 PM**
  - **Minimally Invasive Nerve Root-Sparing Resection of a Thoracic Schwannoma: A Case Report**
  - E. A. Gillaspie
  - Mayo Clinic, Rochester, MN

- **4:51 PM**
  - **Thoracoscope-Assisted Minimally Invasive Multiple-Level Rib Fixation and Lung Repair in Traumatic Chest Wall Injury**
  - K. Han
  - Korea University Guro Hospital, Seoul

- **5:03 PM**
  - **Total Endoscopic First Rib Resection for Thoracic Outlet Syndrome**
  - R. George
  - St James’s University Hospital, Leeds, United Kingdom

**5:00 PM – 6:30 PM**

**Room 120D Foyer**

**Scientific Posters and Wine**

**5:30 PM – 6:25 PM**

**Room 125AB**

**Business Meeting (STS Members Only)**

**6:30 PM – 7:30 PM**

**Camelback B, Sheraton Grand Phoenix**

**STS-PAC Reception**

**7:00 PM – 10:30 PM**

**STS Social Event: Corona Ranch**

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**TUESDAY, JANUARY 26, 2016**

**6:30 AM – 4:30 PM**

**Lower Level Foyer**

**Registration: STS Annual Meeting**

**9:00 AM – 3:30 PM**

**Exhibit Halls 4-5**

**Exhibit Hall**

**9:00 AM – 5:00 PM**

**Room 120 Foyer**

**Scientific Posters**

- **7:30 AM – 8:30 AM**
  - Various locations; see below

**Early Riser Sessions**

- **Early Riser Session 1**
  - **Women in Thoracic Surgery: Patient-Centered Care and Research**
  - Leah M. Backhus, Stanford, CA, Benjamin D. Kozower, Charlottesville, VA, Valerie A. Williams, Cincinnati, OH, and Stephen C. Yang, Baltimore, MD

- **Early Riser Session 2**
  - **Task Force on Military Affairs: Disaster Preparedness and Mass Casualty — The Role of a Cardiothoracic Surgeon**
  - Danny Chu, Pittsburgh, PA, Elizabeth A. Davidson, Davis, CA, Emily A. Farkas, Los Angeles, CA, and Kenneth L. Mattox, Houston, TX

- **Early Riser Session 3**
  - **Transitioning to Retirement**
  - James R. Edgerton, Dallas, TX, Robert W. Emery, Minneapolis, MN, John W. Hammon, Winston-Salem, NC, and Sidney Levitsky, Boston, MA

- **Early Riser Session 4**
  - **How to Acquire and Use Data From the STS National Database for Research**
  - Vinay Badhwar, Pittsburgh, PA, Henning A. Gaissert, Boston, MA, Jane Han, Chicago, IL, Jeffery P. Jacobs, St Petersburg, FL, and Marshall L. Jacobs, Newtown Square, PA

- **Early Riser Session 5**
  - **The Annals Academy**
  - Shanda H. Blackmon, Rochester, MN, Mark K. Ferguson, Chicago, IL, Jennifer C. Hirsch-Romano, Ann Arbor, MI, Jennifer S. Lawton, St Louis, MO, and G. Alexander Patterson, St Louis, MO

- **Early Riser Session 6**
  - **New Technologies and Controversies in Esophageal Disease**
  - Alexander S. Farivar, Seattle, WA, Hiran C. Fernando, Boston, MA, and Brian E. Louis, Seattle, WA

- **Early Riser Session 7**
  - **Lung Cancer Screening: Policy, Program Development, and Patient Management**
  - Ella Kazerooni, Ann Arbor, MI, Brady McKee, Burlington, MA, Gaetano Rocco, Naples, Italy, and Douglas E. Wood, Seattle, WA

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**MONDAY, JANUARY 25, 2016**

**4:15 PM – 5:15 PM**

**Surgical Motion Picture Matinee: General Thoracic**

*Room 120A*

**Moderators:** K. Robert Shen, Rochester, MN, and Sandra L. Starnes, Cincinnati, OH

- **4:15 PM**
  - **Tracheal Resection and Carinal Reconstruction for Squamous Cell Carcinoma**
  - T. S. Lancaster
  - Washington University School of Medicine, St Louis, MO

- **4:27 PM**
  - **Is Single Anatomical Segmentectomy of the Mediobasal Segment (S7) Possible?**
  - K. Shimizu
  - Gunma University Hospital, Maebashi, Japan

- **4:39 PM**
  - **Minimally Invasive Nerve Root-Sparing Resection of a Thoracic Schwannoma: A Case Report**
  - E. A. Gillaspie
  - Mayo Clinic, Rochester, MN

- **4:51 PM**
  - **Thoracoscope-Assisted Minimally Invasive Multiple-Level Rib Fixation and Lung Repair in Traumatic Chest Wall Injury**
  - K. Han
  - Korea University Guro Hospital, Seoul

- **5:03 PM**
  - **Total Endoscopic First Rib Resection for Thoracic Outlet Syndrome**
  - R. George
  - St James’s University Hospital, Leeds, United Kingdom

**5:00 PM – 6:30 PM**

**Room 120D Foyer**

**Scientific Posters and Wine**

**5:30 PM – 6:25 PM**

**Room 125AB**

**Business Meeting (STS Members Only)**

**6:30 PM – 7:30 PM**

**Camelback B, Sheraton Grand Phoenix**

**STS-PAC Reception**

**7:00 PM – 10:30 PM**

**STS Social Event: Corona Ranch**
10:45 AM Award Presentations
11:00 AM C. Walton Lillehei Lecture: Why We Get Fat
Gary Taubes, New York, NY
*For more information on this speaker, please visit www.prhspeakers.com.

12:00 PM – 1:00 PM Break—Visit Exhibits and Scientific Posters
Complimentary coffee available in the Exhibit Hall

12:00 PM – 1:00 PM Room 229AB
Ethics Debate: An Advance Directive Limits Postoperative Care—Should Surgeons Accept Limits on Care?
Facilitator: Robert M. Sade, Charleston, SC
PRO: Constantine D. Mavroudis, Philadelphia, PA
CON: Jeffrey G. Gaca, Durham, NC

12:00 PM – 1:00 PM Room 231ABC
Residents Luncheon

1:00 PM – 3:00 PM Room 131ABC
Adult Cardiac Session: General
Moderators: Kevin L. Greason, Rochester, MN, and Christina M. Vasileva, Springfield, IL

1:00 PM Amiodarone Protocol Reduces Atrial Fibrillation and Decreases Mortality in Cardiac Surgery Patients
W. Elkhalili
St Joseph's Healthcare System, Paterson, NJ

1:15 PM Valve Repair Is Superior to Replacement in Patients With Coexisting Degenerative Mitral Valve and Ischemic Heart Disease
H. Javadikasgari
Cleveland Clinic, OH

1:30 PM Pericardectomy After Previous Coronary Bypass Grafting: Analyzing Risk and Effectiveness in this Rare Clinical Entity
E. A. Gillaspie
Mayo Clinic, Rochester, MN

1:45 PM Improved Outcomes of Total Arterial Myocardial Revascularization in Elderly Patients at Long-Term Follow-Up: A Propensity-Matched Analysis
G. Bideri
University of Brescia Medical School, Italy

2:00 PM Effective Strategies for Reducing Blood Transfusions in Adult Cardiac Surgery
J. W. Haft
University of Michigan, Ann Arbor

2:15 PM The Unintended Consequences of Over Reducing Cardiopulmonary Bypass Circuit Prime Volume
B. C. Sun
Minneapolis Heart Institute, MN

7:30 AM – 8:30 AM Room 226A
Early Riser Health Policy Forum
MIPS: The New Medicare Fee-for-Service and What It Means to You
Alan M. Speir, Falls Church, VA, and Courtney Yehs, Washington, DC

9:00 AM – 12:00 PM Exhibit Halls 2-3
General Session II
Moderators: Mark S. Allen, Rochester, MN, and Keith S. Naunheim, St Louis, MO

9:00 AM Thomas B. Ferguson Lecture: The Requisite Innovator’s Mindset: Open-Mindedness and the Relentless Hunt for Problems in Need of Fixing
Scott Parazynski, Houston, TX

10:00 AM BREAK—Visit Exhibits and Scientific Posters
Complimentary coffee available in the Exhibit Hall
2:30 PM  
**Insights From Longitudinal Echocardiographic Follow-Up After Surgical Correction of Mitral Prolapse: Modes of Mitral Repair Failure**  
V. Chan  
University of Ottawa Heart Institute, Canada

2:45 PM  
**50-Year Follow-Up of Mechanical Aortic Valve Replacement: Patient Survival and Prosthesis Durability**  
A. P. Furnary  
Starr–Wood Cardiac Group of Portland, OR

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1:00 PM – 3:00 PM  
**Room 120D**

**Adult Cardiac Session: Mitral Valve**  
**Moderators:** Juan A. Crestanello, Columbus, OH, and Richard Lee, St Louis, MO

1:00 PM  
**Off-Pump Mitral Valve Repair With NeoChord Implantation: 1-Year Follow-Up**  
A. Colli  
University of Padova, Italy

1:15 PM  
**Ischemic Mitral Regurgitation: In Whom Should Mitral Valve Repair Be Performed?**  
V. Chan  
University of Ottawa Heart Institute, Canada

1:30 PM  
**Evolution of Secondary Tricuspid Regurgitation After Mitral Valve Surgery for Ischemic Mitral Regurgitation**  
J. L. Navia  
Cleveland Clinic, OH

1:45 PM  
**Twenty-Year Experience With Tricuspid Annuloplasty for Functional Tricuspid Regurgitation: Is Ring Annuloplasty Superior to Suture Annuloplasty?**  
H. Hata  
National Cerebral and Cardiovascular Center, Osaka, Japan

2:00 PM  
**Robotic vs Non-Robotic Mitral Valve Surgery for Degenerative Mitral Valve Disease**  
M. E. Halkos  
Emory University, Atlanta, GA

2:15 PM  
**Mechanical vs Bioprosthetic Valve Replacement in Young Women: Does Type of Valve Affect Survival?**  
J. Hughes  
Mayo Clinic, Rochester, MN

2:30 PM  
**Debate: The Future of Mitral Valve Regurgitation Treatment**  
**Open Surgery:** TBD  
**Transcatheter Repair:** Gorav Ailawadi, Charlottesville, VA  
**Transcatheter Replacement:** Michael J. Mack, Dallas, TX

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1:00 PM – 3:00 PM  
**Room 122ABC**

**Congenital Session: Pediatric Congenital II**  
**Moderators:** Richard W. Kim, Los Angeles, CA, and Glen S. Van Arsdell, Toronto, Canada

1:00 PM  
**Aortic Valve Annulus Is the Best Predictor of Left Ventricular Outflow Tract Reintervention Following Biventricular Repair of Interrupted Arch/Ventricular Septal Defect**  
R. Subramanyan  
University of Southern California, Los Angeles

1:15 PM  
**Cardiopulmonary Bypass Management Strategies Have Minimal Impact on Early Neurodevelopmental Outcomes After Cardiac Surgery in Infants**  
J. Gaynor  
The Children's Hospital of Philadelphia, PA

1:30 PM  
**Growth of the Neopulmonic Valve After the Arterial Switch Operation in Patients With Aortic Arch Obstruction**  
J. Trezzi  
Bambino Gesu' Children's Hospital, Rome, Italy

2:00 PM  
**Optimal Timing for Elective Early Primary Repair of Tetralogy of Fallot**  
M. Cunningham  
Children's National Medical Center, Kensington, MD

2:15 PM  
**Limited Transannular vs Subvalvar Patch in Infants With Tetralogy of Fallot**  
B. V. Simon  
University of Rochester, NY

2:30 PM  
**Systemic Pulmonary Shunt Facilitates the Growth of the Pulmonary Valve Annulus in Patients With Tetralogy of Fallot**  
B. Chong  
Asan Medical Center, Seoul, South Korea

2:45 PM  
**Global Tetralogy of Fallot Surgical Practice Patterns**  
S. Hussain  
The Hospital for Sick Children, Toronto, Canada

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1:00 PM – 3:00 PM  
**Room 125AB**

**General Thoracic Session: Esophageal**  
**Moderators:** Ross M. Bremner, Phoenix, AZ, and Christopher R. Morse, Boston, MA

1:00 PM  
**Quality of Lymphadenectomy Is Associated With Improved Overall Survival in Esophageal Cancer Patients**  
P. P. Samson  
Washington University School of Medicine, St Louis, MO

1:15 PM  
**Assessing the Importance of Age on Outcomes Associated With Repair of Giant Paraesophageal Hernias**  
K. Mobiuddin  
Virginia Mason Medical Center, Seattle, WA
1:30 pm  Influence of Specialty Training and Trainee Involvement in the Perioperative Outcomes of Esophagectomy
Z. Khoushal
The Johns Hopkins University, Baltimore, MD

1:45 pm  Accelerated Recovery Within Standardized Pathways Following Esophagectomy: A Prospective Cohort Study Assessing Outcomes, Readmissions, Patient Satisfaction, and Costs
M. El Lakis
Virginia Mason Medical Center, Seattle, WA

2:00 pm  Risk Factors for Local Recurrence and Optimal Length of Esophagectomy in Esophageal Cancer
C. Kang
Seoul National University Hospital, South Korea

2:15 pm  Esophagectomy Outcomes in the Endoscopic Mucosal Resection Era
K. J. Dickinson
Mayo Clinic, Rochester, MN

2:30 pm  Impact of Postoperative Infection on Overall Survival and Recurrence After Minimally Invasive Esophagectomy: A Propensity Score-Matched Analysis
V. Tam
University of Pittsburgh Medical Center, PA

2:45 pm  Race Is Associated With Reduced Overall Survival Following Esophagectomy for Esophageal Cancer Only Among Patients From Lower Socioeconomic Backgrounds
L. Erhunmwunsee
Duke University Medical Center, Durham, NC

1:00 pm – 3:00 pm  Room 120A
General Thoracic Session: Lung Cancer II—Treatment
Moderators: David T. Cooke, Sacramento, CA, and Eric L. Grogan, Nashville, TN

1:00 pm  Successful Linkage of the STS General Thoracic Surgery Database and a Hospital Cancer Registry to Obtain Long-Term Survival Data in Patients Undergoing Lobectomy for Lung Cancer
M. J. Magee
HCA North Texas Division, Dallas

1:15 pm  Nationwide Utilization of Robotic Lobectomy and Postoperative Outcomes
R. Rajaram
Northwestern University, Chicago, IL

1:30 pm  Does the Use of Cardiopulmonary Bypass During En Bloc Resection of T4 Non–Small-Cell Lung Cancer Affect Early or Late Outcomes?
N. B. Langer
Marie Lannelongue Hospital, Le Plessis Robinson, France

1:45 pm  Quality Metrics for Minimally Invasive Lobectomy: A Comparison Between Video-Assisted and Robotic Approaches for Clinical Stage I and II Non–Small-Cell Lung Cancer Using the STS National Database
B. E. Louie
Swedish Cancer Institute, Seattle, WA

2:00 pm  Recurrence Patterns After Wedge Resection for Early Stage Lung Cancer: How to Rationally Follow Up to Detect Early Local Failures
A. Bille
Memorial Sloan Kettering Cancer Center, New York, NY

2:15 pm  Is the T3 Designation Valid in Patients With Centrally Located Non–Small-Cell Lung Cancer?
J. Jeon
Center for Lung Cancer, National Cancer Center, Goyang, South Korea

2:30 pm  Debate: Post-Resection Surveillance: Does It Make Sense?
PRO: Douglas E. Wood, Seattle, WA
CON: James Jett, Denver, CO

1:00 pm – 3:00 pm  Room 127ABC
Patient Safety Symposium: When Bad Things Happen to Good CT Surgeons—Human Error and the Impact on You, the “Second Victim”
Moderator: James I. Fann, Stanford, CA

1:00 pm  Welcome and Introduction

1:05 pm  Human Factors and System Error: Impact on the Provider
James Jaggers, Aurora, CO

1:35 pm  When Bad Things Happen: Reactions to Recovery From Adverse Events
Carol-Anne Moulton, Toronto, Canada

2:05 pm  What Is Disclosure and Risk Management?
Timothy McDonald, Chicago, IL

2:35 pm  Panel Discussion
Michal Hubka, Seattle, WA, and Kevin W. Lobdell, Charlotte, NC

1:00 pm – 3:00 pm  Room 126ABC
EACTS @ STS: Aortic Valve Repair and Aortic Root Reconstruction for Insufficient Tricuspid and Bicuspid Pathology
Moderators: Joseph E. Bavaria, Philadelphia, PA, and Ruggero de Paulis, Rome, Italy

1:00 pm  Introduction

1:05 pm  Suture Annuloplasty Significantly Improves the Durability of Bicuspid Aortic Valve Repair
U. Schneider
Saarland University Medical Center, Homburg, Germany

1:20 pm  From Knowledge of Root Geometry to a Step-by-Step Surgical Reimplantation of a 3-Cusp Aortic Valve
Ruggero de Paulis, Rome, Italy

1:35 pm  At the Root of the Repair Debate: Outcomes Following Elective Root Replacements for Ascending Aneurysms and Aortic Insufficiency
F. H. McCarthy
Hospital of the University of Pennsylvania, Philadelphia
1:50 pm  Valve-Sparing Root Replacement in Bicuspid Valves: Managing the Annulus and Cusps
Munir H. Boodhwani, Ottawa, Canada

2:05 pm  Impact of Cusp Repair on Reoperation Risk Following the David Procedure: Subgroup Analysis of Patients With Bicuspid and Tricuspid Aortic Valves
F. Settepani
Humanitas Clinical and Research Center, Rozzano, Italy

2:20 pm  Reimplantation for Type A Dissection: Technique and Result
Himanshu J. Patel, Ann Arbor, MI

2:35 pm  Severity of Preoperative Aortic Regurgitation Does Not Impact Valve Durability of Aortic Valve Repair Following the David V Valve-Sparing Aortic Root Replacement
W. B. Keeling
Emory University, Atlanta, GA

2:50 pm  Panel Discussion

1:00 pm – 3:30 pm  Room 123

JCTSE: Accountable Surgical Education—How Can Cardiothoracic Surgery Move Forward?
Moderator: Edward D. Verrier, Seattle, WA

1:00 pm  Welcome and Introductory Remarks
Craig J. Baker, Los Angeles, CA

1:15 pm  Introducing the New Thoracic Surgical Curriculum
Craig J. Baker, Los Angeles, CA

1:30 pm  Discussion

1:40 pm  Accountability in Surgical Curriculum Development Using an Electronic Platform
Ara A. Vaporciyan, Houston, TX

1:55 pm  Discussion

2:05 pm  Progress in Adopting a Global Curriculum
Rafael Sadaba, Pamplona, Spain

2:20 pm  Discussion

2:30 pm  Gamification of Surgical Education
Nabush A. Mokadam, Seattle, WA

2:45 pm  Discussion

2:55 pm  EACTS Portfolio Tool to Monitor Surgical Training
A. Pieter Kappetein, Rotterdam, The Netherlands

3:10 pm  Panel Discussion

1:00 pm – 5:30 pm  Room 128AB

Advanced Therapies for End-Stage Heart Disease
Moderators: Robert L. Kormos, Pittsburgh, PA, Nabush A. Mokadam, Seattle, WA, Francis D. Pagani, Ann Arbor, MI, and Craig H. Selzman, Salt Lake City, UT

1:00 pm  Has ENDURANCE or ROADMAP Changed the Practice of Ventricular Assist Device (VAD) Therapy in the US?
Michael A. Acker, Philadelphia, PA

1:15 pm  New VAD Trials and Technology: Better or Just New?
Daniel J. Goldstein, Bronx, NY

1:30 pm  Percutaneous Non-Extracorporeal Membrane Oxygenation Mechanical Circulatory Support: Developing a Rational Approach to Treatment of Shock
Carmelo A. Milano, Durham, NC

1:45 pm  If Not a Heart Transplant or VAD, Then What? High-Risk Alternative Strategies in the Era of STS National Database Reporting
Nicholas G. Smedira, Cleveland, OH

2:00 pm  Non-Sternotomy Approaches to VAD Implantation: Is Less Better?
Jay D. Pal, Seattle, WA

2:15 pm  Panel Discussion

2:30 pm  The Safety and Utility of Nurse-Managed Extracorporeal Life Support in an Adult Cardiothoracic Intensive Care Unit
A. E. Hackmann
University of Southern California, Los Angeles

2:45 pm  Posttransplant Outcomes Among Septuagenarians Bridged to Heart Transplantation With Continuous-Flow Left Ventricular Assist Devices
S. Fukuhara
Columbia University Medical Center, Fort Lee, NJ

3:00 pm  Break

3:30 pm  VAD Therapy or Transplant for Adult Congenital Heart Disease: Unique Challenges and Solutions
Gonzalo V. Gonzalez-Starwinski, Dallas, TX

3:45 pm  An Update on the STICH Trial Results: Is There Evidence to Change our Approach to Ischemic Heart Disease?
Eric J. Velazquez, Durham, NC

4:00 pm  Consideration of Percutaneous Options for Structural Heart Disease in the Setting of Severe Left Ventricle Dysfunction
Stephanie L. Mick, Cleveland, OH

4:15 pm  Evolution of Surgical Management of Functional Mitral Insufficiency
Donald D. Glower, Durham, NC

4:30 pm  Panel Discussion

4:45 pm  Duration of Left Ventricular Assist Device Support Does Not Impact Survival Following Heart Transplantation in the US
J. C. Grimm
The Johns Hopkins Hospital, Baltimore, MD

5:00 pm  Correlation of Pre-Explant Lactate Dehydrogenase Levels and Findings During Post-Explant Pump Analysis of the HeartMate II Left Ventricular Assist Device
V. Sood
University of Michigan Health System, Ann Arbor

5:15 pm  Uncorrected Significant Mitral Valve Regurgitation Is Associated With Decreased Survival and Increased Readmissions After Left Ventricular Assist Device Implantation
T. Ota
The University of Chicago, IL
BREAK—Visit Exhibits and Scientific Posters
Complimentary coffee available in the Exhibit Hall

3:00 PM – 3:30 PM

Adult Cardiac Session: Aorta II
Moderators: Thomas E. MacGillivray, Boston, MA, and Eric E. Roselli, Cleveland, OH

3:30 PM
Moderate vs Deep Hypothermic Circulatory Arrest Is Associated With Similar Postoperative Kidney Function in Elective Aortic Hemiarch Reconstruction
G. J. Arnaoutakis
University of Pennsylvania Health System, Philadelphia

3:45 PM
The Differential Impact of Anemia on Outcomes in Transcatheter vs Surgical Aortic Valve Replacement
F. H. McCarthy
Hospital of the University of Pennsylvania, Philadelphia

4:00 PM
Reoperative Surgical Aortic Valve Replacement vs Transcatheter Valve-in-Valve Replacement for Degenerated Bioprosthetic Aortic Valves
J. I. Ejiofor
Brigham and Women's Hospital, Boston, MA

4:15 PM
Open Surgical Repair Remains the Gold Standard for Treating Aortic Arch Pathology
V. Khullar
Mayo Clinic, Rochester, MN

4:30 PM
Surgical Outcomes in the Treatment of Type A Aortic Dissection Are Superior at High-Volume Centers
M. Aftab
Baylor Scott & White Health, Plano, TX

4:45 PM
Open Distal Fenestration of Chronic Dissection Facilitates Endovascular Elephant Trunk Completion: Late Outcomes
M. Aftab
Cleveland Clinic, OH

5:00 PM
Preoperative Renal Dysfunction and Its Impact on Acute Kidney Injury After Conventional and Transcatheter Aortic Valve Replacement: A Statewide, Population-Based Analysis
H. J. Patel
University of Michigan Health System, Ann Arbor

5:15 PM
Twenty-Five-Year Outcome of Composite Graft Aortic Root Replacement: Near “Curative” Impact on Aortic Root Disease
S. Mok
Yale New Haven Hospital, CT

3:30 PM – 5:30 PM

Room 120D

3:30 PM
The Year in Review: What's New in the Management of Aortic Valve Disease?
Thomas G. Gleason, Pittsburgh, PA

3:45 PM
Early and Mid-Term Clinical and Hemodynamic Outcomes of Transcatheter Valve-in-Valve Implantation: Results From a Multicenter Experience
A. D'Onghia
University of Padova, Italy

4:00 PM
Recovery of Left Ventricular Size and Function After Surgical Correction of Aortic Valve Regurgitation: Implications for Timing of Surgical Intervention
T. Murasiti
Mayo Clinic, Rochester, MN

4:15 PM
Aortic Valve Repair Is Not Associated With Greater Valve-Related Morbidity than Replacement in Isolated Valve Insufficiency: A 12-Year Prospective, Controlled Study
G. B. Luciani
University of Verona, Italy

4:30 PM
Impact of Preoperative Chronic Kidney Disease in 2,531 Patients Undergoing Transcatheter Aortic Valve Replacement
H. A. Jensen
Emory University, Atlanta, GA

4:45 PM
Aortic Valve Replacement via Ministernotomy vs Transcatheter Aortic Valve Implantation: Which Approach Is the Gold Standard in a Moderate Risk Group?
N. Furukawa
Heart and Diabetes Center, Bad Oeynhausen, Germany

5:00 PM
Long-Term Durability of Aortic Valve Repair for Aortic Regurgitation
A. Zeeshan
Cleveland Clinic, OH

5:15 PM
Pericardial Stentless Valve for Aortic Valve Replacement: Long-Term Durability and Hemodynamic Performance—a European Multicenter Experience
A. Repossini
University of Brescia Medical School, Italy
3:30 PM – 5:30 PM  
**Room 127ABC**

**Cardiothoracic Surgical Education**

*Moderators: Ara A. Vaporciyan, Houston, TX, and Jennifer D. Walker, Worcester, MA*

3:30 PM  
Outcomes of Trainees Performing Coronary Artery Bypass Grafting: Does Resident Experience Matter?  
K. W. Yount  
University of Virginia, Charlottesville

3:45 PM  
A System for Real-Time Evaluation of Thoracic Resident Operative Autonomy and Formative Feedback  
J. M. Sternbach  
Northwestern University, Chicago, IL

4:00 PM  
Coronary Artery Bypass Grafting Outcomes in a Resident Training Program Using Real-Time Intraoperative Indocyanine Green Imaging: 3,257 Anastomoses  
A. N. Patel  
University of Utah School of Medicine, Salt Lake City

4:15 PM  
Application of a 3-Dimensional Video System in Training Surgical Skills for Uniportal Thoracoscopic Surgery  
K. Han  
Korea University Guro Hospital, Seoul, South Korea

4:30 PM  
Measuring Error Identification and Recovery Skills in Surgical Residents  
J. M. Sternbach  
Northwestern University, Chicago, IL

4:45 PM  
Correlation Between Training Patterns and Lifetime Academic Achievement of US Academic Cardiac Surgeons: Does Investing in Designated Research Time During Training Improve Career Metrics?  
C. Rosati  
Indiana University School of Medicine, Indianapolis

5:00 PM  
Gender and Cardi thoracic Surgery Training: Specialty Interests, Satisfaction, and Career Pathways  
E. H. Stephens  
Columbia University, New York, NY

5:15 PM  
Impact of a Moodle-Based Online Curriculum on Thoracic Surgery In-Training Exam Scores  
M. B. Antonoff  
University of Texas MD Anderson Cancer Center, Houston

3:30 PM – 5:30 PM  
**Room 122ABC**

**Congenital Session: Pediatric Congenital III**

*Moderators: Jeffrey P. Jacobs, St Petersburg, FL, and James D. St. Louis, Minneapolis, MN*

3:30 PM  
Palliation Outcomes of Neonates Born With Single Ventricle Anomalies Associated With Aortic Arch Obstruction  
B. Alsoufi  
Emory University, Atlanta, GA

3:45 PM  
Aortic Arch Reconstruction in Comprehensive Stage II Compared With Norwood Reconstruction in Hypoplastic Left Heart Syndrome and Variants  
C. Haller  
The Hospital for Sick Children, Toronto, Canada

4:00 PM  
Mid-Term Survival Following Resuscitative Bilateral Pulmonary Artery Banding in High-Risk Single Ventricle Neonates and Infants: How Do They Fare?  
K. J. Guleserian  
Children's Medical Center of Dallas/University of Texas Southwestern Medical Center

4:15 PM  
The Impact of Dominant Ventricle Morphology on Palliation Outcomes of Single Ventricle Anomalies  
B. Alsoufi  
Emory University, Atlanta, GA

4:30 PM  
Perventricular Device Closure of Perimembranous Ventricular Septal Defect: Safety and Efficiency With Symmetric and Asymmetric Occluders  
X. Pan  
National Center for Cardiovascular Diseases, Fuwai Hospital, Chinese Academy of Medical Sciences, and Peking Union Medical College, Beijing, China

4:45 PM  
Small-sized Expanded Polytetrafluoroethylene Valved Conduit for Right Ventrilucar Outflow Reconstruction in Patients With Congenital Heart Disease  
E. Yamashita  
Kyoto Prefectural University of Medicine, Japan

5:00 PM  
Postoperative Trajectories of Cerebral and Somatic Near Infrared Spectroscopy Saturations and Outcomes After Stage I Palliation of Hypoplastic Left Heart Syndrome  
G. Hoffman  
Children's Hospital and Medical College of Wisconsin, Milwaukee

5:15 PM  
Report of the 2015 STS Congenital Heart Surgery Practice Survey  
D. L. Morales  
Cincinnati Children's Hospital Medical Center, OH

3:30 PM – 5:30 PM  
**Room 120A**

**General Thoracic Session: Mediastinal/Pulmonary**

*Moderators: Chadrick E. Denlinger, Charleston, SC, and Jessica S. Donington, New York, NY*

3:30 PM  
An Extended-Pleurectomy, Decortication-Based Treatment for Advanced Stage, Large Tumor Volume Epithelial Mesothelioma Yielding a Median Survival of Greater than 3 Years  
J. Friedberg  
University of Maryland, Baltimore

3:45 PM  
Robot-Assisted Thymectomy in Anterior Mediastinal Tumor: Propensity Score-Matching Study With Transternal Thymectomy  
C. Kang  
Seoul National University Hospital, South Korea
4:00 PM  Do Systemic Corticosteroids Have a Role in the Management of Post-Intubation Tracheal Stenosis? A Randomized Clinical Trial  
M. B. Shadmehr  
National Research Institute of Tuberculosis and Lung Disease, Shahid Beheshti University of Medical Sciences, Tehran, Iran

4:15 PM  Optimal Timing of Urinary Catheter Removal After Thoracic Surgery: A Randomized, Controlled Study  
K. Shen  
Mayo Clinic, Rochester, MN

4:30 PM  Surgical Treatment of Benign Tracheoesophageal Fistulas: A 10-Year Experience  
B. J. Bibas  
Heart Institute (InCor), Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, Brazil

4:45 PM  A Multicenter Study of Volumetric Computed Tomography for Staging Malignant Pleural Mesothelioma  
V. W. Rusch  
Memorial Sloan Kettering Cancer Center, New York, NY

5:00 PM  Impact of Pectus Excavatum on Cardiac Function: A Cardiovascular Magnetic Resonance Imaging Study  
B. Hokson  
University Hospital, Bern, Switzerland

5:15 PM  Preoperative Mediastinal Staging With Mediastinoscopy Causes a Significantly Higher Rate of Unsuspected Mediastinal Lymph Node Metastases than Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration  
J. Eckardt  
Odense University Hospital, Denmark

3:30 PM – 5:30 PM  Room 125AB  
ESTS @ STS: Controversial Issues in General Thoracic Surgery — Perspectives From Europe and North America  
Moderators: Sean C. Grondin, Calgary, Canada, and Gaetano Rocco, Naples, Italy

3:30 PM  Optimal Work-Up and Limits of Surgery  
Alessandro Brunelli, Leeds, United Kingdom

3:40 PM  Stereotactic Body Radiation Therapy vs Surgery  
Gail E. Darling, Toronto, Canada

3:50 PM  Discussion

4:00 PM  Indications for Sublobar Resection  
Raja M. Flores, New York, NY

4:10 PM  Indications for Lobectomy  
Gonzalo Varela, Salamanca, Spain

4:20 PM  Discussion

4:30 PM  Indications for Peroral Endoscopic Myotomy vs Heller Myotomy vs Balloon  
Shanda H. Blackmon, Rochester, MN

4:40 PM  Heller Myotomy With or Without Fundoplication  
Philippe Nafteux, Leuven, Belgium

4:50 PM  Discussion
WEDNESDAY, JANUARY 27, 2016

6:30 AM – 9:30 AM  
Lower Level Foyer

Registration: STS University

7:00 AM – 9:00 AM  
Exhibit Hall 6

and repeated 9:30 AM – 11:30 AM

STS University

Course 1: Essentials of TAVR
Course Directors: Basel Ramlawi, Houston, TX, and Eric L. Sarin, Atlanta, GA

Course 2: TEVAR and Aortic Arch Debranching Procedures
Course Directors: Ali Khoynezhad, Los Angeles, CA, and Ourania A. Preventza, Houston, TX

Course 3: Mitral Valve Repair
Course Directors: Evelio Rodriguez, Nashville, TN, and Robert L. Smith, Plano, TX

Course 4: Valve-Sparing Aortic Root Replacement
Course Directors: Duke E. Cameron, Baltimore, MD, and Edward P. Chen, Atlanta, GA

Course 5: Aortic Root Enlarging Procedures
Course Directors: David A. Fullerton, Aurora, CO, and S. Adil Husain, San Antonio, TX

Course 6: ICU/ECHO
Course Directors: Haney Mallemat, Baltimore, MD, and Glenn J. R. Whitman, Baltimore, MD

Course 7: VATS Lobectomy
Course Directors: Robert J. McKenna, Los Angeles, CA, and Shari L. Meyerson, Chicago, IL

Course 8: Advanced Open Esophageal and Tracheal Procedures
Course Directors: Sidharta P. Gangadharan, Boston, MA, and Thomas K. Varghese Jr, Salt Lake City, UT

Course 9: Chest Wall Resection and Adult Pectus Surgery
Course Directors: James M. Donahue, Baltimore, MD, and Mathew Thomas, Jacksonville, FL

Course 10: Atrial Fibrillation (Maze Procedure)
Course Directors: Matthew A. Romano, Ann Arbor, MI, and Edward G. Soltesz, Cleveland, OH

Course 11: Aortic Valve Leaflet Reconstruction
Course Directors: Gebrine El-Khoury, Brussels, Belgium, and J. Scott Rankin, Nashville, TN

Course 12: Advanced Aerodigestive Endoscopy
Course Director: Daniel L. Miller, Marietta, GA

Course 13: Adult Congenital Pulmonary Valve Replacement
Course Director: Patrick I. McConnell, Columbus, OH

Course 14: TSDA Cardiac Surgery Simulation Curriculum*

Room 122ABC and Exhibit Hall 6

Course Directors: Richard H. Feins, Chapel Hill, NC, and Nahush A. Mokadam, Seattle, WA

*This course runs once, from 7:00 AM to 10:30 AM.
The information listed here is accurate as of December 8, 2015. The information for these products and services was provided by the manufacturers, and inclusion in this publication should not be construed as a product endorsement by STS.

**A&E Medical Corporation**  
Booth: 211  
Durham, NC
A&E Medical's products include MYO/Wire® temporary pacing wires, MYO/Wire II sternum wires, MYO/Punch rotating surgical punch, MYO/Lead disposable patient cable, and DoubleWire high-strength sternal closure system.

**Abbott Vascular**  
Booth: 231  
Santa Clara, CA
Abbott (NYSE: ABT) is a global health care company devoted to improving life through the development of products and technologies that span the breadth of health care. With a portfolio of leading, science-based offerings in diagnostics, medical devices, nutritional, and branded generic pharmaceuticals, Abbott serves people in more than 150 countries and employs approximately 70,000 people.

**ACUTE Innovations**  
Booth: 1023  
Hillsboro, OR
Furthering its reputation as a leader in the thoracic industry, ACUTE Innovations® continues to make advancements in chest wall stabilization technology. Stop by Booth 1023 to learn about ACUTE's cutting-edge products: RibLoc® U Plus Chest Wall Plating System and AcuTie® II Sternum Closure System.

**Admedus**  
Booth: 320  
Minneapolis, MN
Admedus, a global health care group, is working with renowned medical leaders to bring new medical technologies to market. CardioCel®, a cardiovascular scaffold, is the first of its ADAPT® tissue-engineered bioimplants and is being used by surgeons to repair simple and complex cardiac defects.

**Advanced Cardiothoracic Consultants, LLC**  
Booth: 932  
Indianapolis, IN
Utilizing over 40 years of clinical expertise in cardiothoracic, thoracic transplant/organ replacement, and advanced heart failure, ACTC can evaluate financial and clinical aspects for programs to increase efficiencies. Whether a new or well-established program, hospital, or insurer, let ACTC assist in maintaining financial viability and sustaining growth in today's challenging health care market.

**Aesculap**  
Booth: 314  
Center Valley, PA
Aesculap Inc, a member of the B. Braun family of health care companies, is the world's largest manufacturer of surgical instrumentation. For more than 138 years, Aesculap has provided customers with surgical instrumentation for ENT, plastic and reconstructive, thoracic, microvascular, cardiovascular, and laparoscopic surgery.
American Association for Thoracic Surgery  
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 of more than 1,325 of the world’s foremost cardiothoracic surgeons. www.aats.org

AtriCure Inc  
West Chester, OH  
AtriCure is intent on reducing the global Afib epidemic and healing the lives of those affected through clinical science, education, and innovation. The company is a leading Afib solutions partner with the only FDA-approved surgical treatment for Afib and the most widely implanted occlusion device for left atrial appendage management.

Baxter Healthcare  
Deerfield, IL  
As a global, diversified health care company, Baxter International Inc applies a unique combination of expertise in medical devices, pharmaceuticals, and biotechnology to create products that advance patient care worldwide.

Baylis Medical  
Mississauga, Canada

Baylor Scott & White  
Temple, AZ

BD (formerly CareFusion)  
San Diego, CA  
BD is a global corporation helping clinicians and hospitals measurably improve patient care. The PleurX® Catheter System allows patients to manage symptoms associated with recurrent pleural effusions and malignant ascites at home, reducing length of stay and cost of care while improving quality of life. Visit BD at Booth 1035 to learn more.

Berlin Heart Inc  
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 medium- to long-term circulatory support specifically for infants and children awaiting heart transplants. EXCOR Pediatric is approved for use in the United States under Humanitarian Device Exemption regulations by the Food and Drug Administration.

BFW Inc  
Louisville, KY  
BFW is known as a worldwide technological leader in surgical illumination and headlight video imaging. Visit Booth 438 to experience the foremost innovations in portable LED headlights offering intense, clean, bright white light and the new Hatteras™ LED light source—unmatched intense fiberoptic illumination for headlights and instrumentation.

Bolton Medical  
Sunrise, FL  
Bolton Medical is a subsidiary of the WerfenLife Company, a global company that manufactures and distributes medical diagnostic solutions and medical devices worldwide. Bolton's vision is to become the leading provider of endovascular solutions for aortic disease. Bolton develops, manufactures, and distributes innovative, high-quality products solely focused on the aorta.

Bovie Medical Corporation  
Clearwater, FL  
Bovie® Medical will be featuring J-Plasma®—the helium-based gas plasma technology that is transforming the way surgeries are performed. J-Plasma works with precision and versatility across open and laparoscopic procedures. Bovie also will exhibit its complete line of electrosurgical products.

Cancer Treatment Centers of America  
Goodyear, AZ  
Cancer Treatment Centers of America®, Inc (CTCA) is a national network of five hospitals focusing on the treatment of complex and advanced stage cancer. CTCA offers a comprehensive, fully integrative approach to cancer treatment and serves patients from all 50 states at facilities located in Atlanta, Chicago, Philadelphia, Phoenix, and Tulsa.

CardiacAssist, Inc  
Pittsburgh, PA  
CardiacAssist, inventor of the TandemHeart® Extracorporeal Circulatory Support System, offers versatile mechanical circulatory support treatment options. While the company is best known for its left ventricular support platform, it recently launched a line of arterial cannulae and the PROTEK Duo™ veno-venous dual lumen cannula. Stop by the booth to learn more.

Cardica Inc  
Redwood City, CA

Cook Medical  
Bloomington, IN  
Founded in 1963, Cook Medical pioneered many of the medical devices now commonly used to perform minimally invasive medical procedures throughout the body. Today, the company integrates medical devices, drugs, and biologic grafts to enhance patient safety and improve clinical outcomes. Since its inception, Cook has operated as a family-held private corporation.

CorMatrix  
Roswell, GA  
CorMatrix® Cardiovascular markets its ECM® Bioscaffold devices for vascular repair, pericardial repair and reconstruction, cardiac tissue repair, and CanGaroo ECM Envelope and is currently conducting preclinical studies to evaluate future applications in other cardiac and vascular applications.
CryoLife Kennesaw, GA
CryoLife® is a leader in the development and implementation of advanced technologies associated with allograft processing and cryopreservation. CryoLife also pioneers research in the development of implantable biological devices, surgical adhesives, hemostatic agents, and biomaterials for cardiac, vascular, and general surgery.

CT Assist Philippi, WV
CT Assist is a managed service provider of cost-effective cardiothoracic surgery advanced practitioners that deliver quality care. CT Assist provides workforce management solutions from long-term to locum tenens and vacation coverage. The company is a physician assistant-owned nationwide employer of talented and experienced cardiothoracic physician assistants and nurse practitioners.

CTSNet Chicago, IL
CTSNet (www.ctsnet.org), headquartered in Chicago, 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.

Davol Inc, a BARD Company Warwick, RI
BARD is the market leader in comprehensive soft tissue reconstruction. In addition to this extensive suite of products, its BioSurgery franchise is delivering a growing line of enhanced sealants and hemostatic products to complement surgical techniques across thoracic, cardiovascular, and other surgical specialties.

Designs for Vision Ronkonkoma, NY
Just See It™ with Designs for Vision's lightweight custom-made surgical telescopes—now available with Nike® frames. See It Even Better™ with the L.E.D. Daylite® or Twin Beam®, providing the brightest and safest untethered illumination. Introducing the L.E.D. Daylite Nano Cam HD—document the procedure with HD video from your prospective.

DGMR/Global Intercepts Dumont, NJ
Utilizing relationships with health care providers all over the world, DGMR/Global Intercepts provides insights on markets, technologies, and devices. The company is uniquely qualified to evaluate marketing strategies and test product development directions, device concepts, product positioning, messaging, and brand identity. Research studies are initiated before, during, and after any US/international conference.

EBM Tokyo, Japan
EMB, a biomedical spin-out venture company from Japan, provides the original beating heart simulator and quantitative assessment system for off-pump coronary artery bypass grafting and vascular anastomosis worldwide. Skill assessment is based on rapid CFD technology and validated silicone vascular model.

Edwards Lifesciences 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.

Elsevier Philadelphia, PA
Elsevier is the proud publisher of The Annals of Thoracic Surgery and a world-leading provider of information solutions that enhance the performance of science, health, and technology professionals. Elsevier empowers better decision making and the delivery of better care. www.elsevier.com

EndoEvolution, LLC Raynham, MA
EndoEvolution, LLC is the leading innovator in advanced automated suturing device technology. The Endo360 MIS suturing device is the only reusable automated device with wristed articulation, using a curved needle that precisely replicates the traditional method of suturing used by surgeons to place stitches and tie intracorporeal knots.

Enova Illumination St Paul, MN
NEW from Enova Illumination: Cyclops XLT-225 LED surgical headlight system. The world's brightest LED surgical headlight designed for deep cavity surgery HD Camera system with edit-free operation, cloud storage, and instant sharing.

Essential Pharmaceuticals Ewing, NJ
Supporting the preservation and growth of human systems. From the cell to the entire organ, Essential Pharmaceuticals looks to advance medical treatments and the research that creates new medical treatments. Originally developed for cardiac surgery, Custodiol®HTK offers superior convenience, water-like viscosity, and no need for additives or filters, which makes it a preferred solution for many transplant centers.

ETHICON/DePuy Synthes CMF Cincinnati, OH
Ethicon US LLC, a Johnson & Johnson company, commercializes a broad range of innovative surgical products, solutions, and technologies used to treat some of today's most prevalent medical issues, such as colorectal and thoracic conditions, women's health conditions, hernias, cancer, and obesity. Learn more at www.ethicon.com, or follow Ethicon on Twitter @Ethicon.
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**European Association for Cardio-Thoracic Surgery (EACTS)**

**Windsor, United Kingdom**

EACTS is the largest European association devoted to the practice of cardiothoracic surgery. The main objective of the association is to advance education in the field of cardiothoracic surgery and to promote, for the public benefit, research into cardiovascular and thoracic physiology and therapy and to correlate and disseminate the useful results thereof. Visit Booth 830 for more information.

**European Society of Thoracic Surgeons**

**Exeter, United Kingdom**

ESTS is the largest international general thoracic surgery organization with more than 1,500 members from all continents. The society’s mission is to improve quality in our specialty: from clinical and surgical management of patients to education, training, and credentialing of thoracic surgeons worldwide. The 24th European Conference on General Thoracic Surgery will be held on 29 May–1 June 2016, in Istanbul, Turkey.

**Fehling Surgical**

**Acworth, GA**

Fehling Surgical features the CERAMO® instrument line, SUPER-PLAST probes, and new innovative retractor systems for minimally invasive cardiac surgery. The CERAMO surface means high efficiency through enhanced performance, increased endurance, and minimal maintenance.

**General Cardiac Tech/ Heart Hugger**

**San Jose, CA**

The Heart Hugger sternum support harness is a patient-operated support harness applied postoperatively to splint surgical wounds. Benefits include improved patient compliance, faster return to premorbid respiratory levels, fewer wound complications, and better postoperative mobility. It is useful for open heart surgery, thoracotomy, fractured rib, and other chest trauma patients.

**Genesee BioMedical**

**Denver, CO**

Design Beyond Standard. Genesee BioMedical, Inc provides unique devices for cardiothoracic surgery, including a bovine pericardium tissue patch, sternal/thoracic valve retractors, instruments for minimally invasive aortic, transcatheter aortic valve implantation, and robotic surgeries, coronary graft markers, suture guards, retraction clips, and myocardial needles.

**Gore & Associates**

**Flagstaff, AZ**

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

**HeartWare**

**Framingham, MA**

HeartWare is dedicated to delivering safe, high-performing, and transformative therapies that enable patients with heart failure to get back to life. The HVAD® Pump is designed to be implanted in the pericardial space, avoiding the more invasive surgical procedures required with older LVAD technologies. The HVAD Pump is commercially available around the world.

**Heart Hospital Baylor Plano, The**

**Plano, TX**

**Heart Valve Society (HVS)**

**Beverly, MA**

The HVS held its inaugural meeting in May 2015 at the Grimaldi Forum in Monte Carlo, Monaco, with more than 430 medical professionals and 80 industry partners in attendance. 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.

**Hospital Corporation of America**

**Ft Lauderdale, FL**

HCA-affiliated facilities are a part of a quality health care network in East Florida and the Treasure Coast with 14 affiliated hospitals, 12 surgery centers, one integrated regional lab, and one consolidated service center. Together, the network employs more than 12,500 individuals and has close to 6,000 physicians on staff.

**Inion Inc**

**Weston, FL**

**International Biophysics Corp**

**Austin, TX**

SternaSafe is an active, adjustable-stability sternum support brace that gives patients hands-free mobility, enhancing patient recovery after sternotomy, coronary artery bypass graft surgery, thoracotomy, lung operations, and rib fractures. SternaSafe provides sternotomy support while coughing, standing/sitting, and straining by supporting the chest and sternum.

**International Society for Minimally Invasive Cardiothoracic Surgery (ISMICS)**

**Beverly, MA**

ISMICS: Innovation, technologies, and techniques in cardiothoracic and cardiovascular/vascular surgery. 2016 ISMICS Annual Scientific Meeting, 15-18 June 2016, Fairmont The Queen Elizabeth, Montreal, Canada.

**Intuitive Surgical**

**Sunnyvale, CA**

Intuitive Surgical, Inc designs, manufactures, and distributes the da Vinci® Surgical System, technology designed to allow surgeons to perform many complex procedures minimally invasively.
IsoRay Medical
Richland, WA
IsoRay Medical manufactures and distributes radiation therapy sources for direct implantation into cancer or surgical margins following resection of cancer. IsoRay markets cesium-131 based brachytherapy meshes and strands for resection line treatment following surgery for high-risk lung cancers, resulting in highly conformal adjuvant radiation therapy that spares critical thoracic structures.

JACE Medical
Winona Lake, IN
JACE Medical pioneered the world’s first rigid sternal closure system applied pre sternotomy: the Grand Pre®. JACE Medical is a company and culture committed to creating innovative, transformational technologies that facilitate optimal patient treatment, recovery, and future wellness. Visit Booth 121 and see how the company thinks outside the paradox. Get more information at JACEMED.com.

Just Co, Ltd
Torrance, CA
Only a dedicated 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 very unique and popular to those in the medical field in need of microsurgery instruments 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 countless surgical devices, all FDA-approved with several pending approval.

Karl Storz
El Segundo, CA
Karl Storz, a leader in endoscopic equipment and instruments, offers solutions for video-assisted thoracic surgery. Its EndoCAMeleon® Laparoscope enables surgeons to adjust the viewing direction from 0° to 120° throughout procedures. And its Video Mediastinoscope with DCI®-D1 Camera allows video recording while working under direct vision for documentation and teaching.

Kinamed Inc
Camarillo, CA

KLS Martin
Jacksonville, FL
KLS Martin, a responsive company, is focused on the development of innovative products for oral, plastic, and craniomaxillofacial surgery. New product developments in the company’s titanium osteosynthesis plating systems allow these products to be used for rapid sternal fixation and reconstruction.

Koros USA, Inc
Moorpark, CA
For the past 30 years Koros USA, Inc has been designing and distributing state-of-the-art surgical instruments, like the Cervical Black Belt, Lumbar Super Slide, and ALIF Polaris Lateral Retractors, along with the Rotating Osteo Punch, Ejector Punch Rongeurs, and many more fine hand instruments.

LifeNet Health
Virginia Beach, VA
LifeNet Health helps save lives, restore health, and give hope to thousands of patients each year. It is the world’s most trusted provider of transplant solutions, from organ procurement to new innovations in bioimplant technologies and cellular therapies—a leader in the field of regenerative medicine, while always honoring the donors and health care professionals who allow the healing process.

LivaNova (formerly Sorin Group)
Arvada, CO
LivaNova is a world leader in the treatment of cardiovascular disease. Its innovative product portfolio includes aortic and mitral valve replacement and repair, perfusion equipment, cannula, and minimally invasive cardiac surgery instruments. For more information, visit www.livanova.com.

LoupeCam
Scottsdale, AZ
LoupeCam® is the market leader in head-mounted HD surgical cameras and is the ONLY company offering cross platform (Mac, Windows, and soon Android compatibility). The company offers five different magnification lenses to match all surgical points of view, along with a Bluetooth foot pedal that allows for hands-free control of the camera.

LSI Solutions
Victor, NY
COR-KNOT® delivers superior titanium suture fastening technology worldwide. COR-KNOT reduces cardiopulmonary bypass time and cross clamp time, reducing overall OR time. Find out how COR-KNOT can benefit your OR by visiting Booth 101.

MAQUET
Wayne, NJ
MAQUET Medical Systems is a market leader focused on improving patient care and quality of life. The company offers a comprehensive portfolio of innovative products designed to meet the needs of clinical professionals in the areas of advanced hemodynamic monitoring, cardiothoracic and vascular surgery, thoracic drainage, cardiac intervention, perfusion, anesthesia, and ventilation.

Mayo Clinic
Rochester, MN
Mayo Clinic surgeons are on the leading edge of treating cardiovascular and thoracic conditions using the latest innovations and techniques. They are part of an integrated, multidisciplinary team of doctors and health care professionals who provide individualized care for each patient.
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vascular, transplantation, and neurosurgery. Medistim’s quality assessment technology offers surgeons quantifiable validation and guidance during cardiovascular, negative postoperative outcomes. Medistim’s quality assessment technology uses ultrasound imaging guidance to help reduce and minimize the risk of combination of transit time flow measurement and high-frequency ultrasound imaging. Medistim 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, Medistim’s quality assessment technology offers surgeons quantifiable validation and guidance during cardiovascular, vascular, transplantation, and neurosurgery.

Medista Booth: 909
Plymouth, MN
Medista 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, Medista’s quality assessment technology offers surgeons quantifiable validation and guidance during cardiovascular, vascular, transplantation, and neurosurgery.

Medtronic Booth: 713
Minneapolis, MN
As a global leader in medical technology, services, and solutions, Medtronic improves the lives and health of millions of people each year. The company uses its deep clinical, therapeutic, and economic expertise to address the complex challenges faced by health care systems today. Let’s take health care further, together. Learn more at Medtronic.com.

Microsurgery Instruments, Inc Booth: 122
Bellaire, TX
Microsurgery Instruments is one of the leading suppliers of surgical instruments and loupes. The company’s instruments include titanium scissors, needle holders, and DeBakey forceps. Its Super-Cut scissors are the sharpest in the market, and its newly designed surgical loupes offer up to 130 mm field of view and up to 11x magnification.

Myriad Genetic Laboratories, Inc Booth: 239
Salt Lake City, UT
Myriad Genetics is a leading molecular diagnostic company dedicated to making a difference in patients’ lives through the discovery and commercialization of transformative tests to assess a person’s risk of developing disease, guide treatment decisions, and assess risk of disease progression and recurrence.

Nadia International Booth: 614
Austin, TX
Educational/surgical bronze sculptures specifically for the thoracic surgeon. These museum-quality limited editions are created by the world famous sculptor Ronadro. More than 7,500 surgeons in 77 countries collect his fine works of art. His works are on display at the Smithsonian Institute and many medical universities throughout the world. Introducing MIRACLE OF LIFE II at the 2016 meeting.

nContact Booth: 217
Morrisville, NC
nContact is a leader in the development of disease management programs with the goal of opening unmet markets, minimizing rehospitalizations, and improving health care savings. nContact’s mission is to transform the underserved arrhythmia market and benefit the entire cardiovascular service line.

Neu Wave Medical Booth: 446
Madison, WI
Neu Wave Medical Inc has the first and only Intelligent Ablation System for microwave ablation of soft tissue lesions with a total solution for ablating lesions of all shapes and sizes for consistency and control. The computer-controlled platform with Ablation Confirmation software, an integrated in-procedure confirmation, assists physicians with proper probe placement and confirms success of procedures.

Olympus America Inc Booth: 1130
Center Valley, PA
Olympus is a precision technology leader in designing and delivering imaging solutions in health care, life science, and photography. Through its health care solutions, Olympus aims to improve procedural techniques and outcomes and enhance the quality of life for patients.

On-X Life Technologies, Inc Booth: 617
Austin, TX
On-X Life Technologies is proud to announce FDA approval to reduce INR to 1.5–2.0 for On-X® Aortic Heart Valve patients starting 3 months after surgery. Chord-X® ePTFE suture for mitral repair is now available in an innovative Pre-Measured Loops system.

Ornim Booth: 343
Foxboro, MA
Ornim specializes in research, development, and distribution of noninvasive patient monitors specializing in the field of tissue and cerebral blood flow. Its bedside product, c-FLOW™, is based on the patented UTLight™ technology designed to provide physicians with unique monitoring solutions that are imperative to individualized and personalized patient care.

Oxford University Press Booth: 213
New York, NY

Pemco Inc Booth: 839
Cleveland, OH
Pemco has designed and manufactured precision surgical instruments for the cardiovascular field. The company has documented that perfusion cannula, coronary ostial cannula, and cardiac suckers offer cost savings over disposables. Additional products include reusable subclavian and femoral cannula, anesthesia screens, and the Rultract retractor.
Society of Thoracic Surgeons

The Society of Thoracic Surgeons is affiliated with Swedish Health Services, Pacific Medical Centers, and Kadlec. Together, its organizations include more than 5,000 employed providers, 35 medical centers, and more than 600 clinics in Alaska, California, Montana, Oregon, and Washington. The company is currently recruiting providers in nearly all medical specialties throughout the West. providence.org/providerjobs

QED Medical

QED Medical introduces the new XL 10-watt OR-ready Portable LED Headlight System featuring untethered mobility, maximum intensity, and a lightweight design with intensity and spot size controls. Since 1971, QED Medical has developed a comprehensive line of American-made headlight illumination and video headlight systems for applications from examination to surgery.

Quest Medical Inc

Quest Medical Inc is a medical device manufacturer and worldwide distributor specializing in protecting the heart during cardiac surgery with the Quest MPS 2® and Microplegia. Quest also offers a unique variety of aortic punches, safety valves, vascular loops, and an anesthesia line designed for optimum cardiovascular surgery.

Regional Data Managers: STS National Database

The Regional Data Managers booth provides opportunities for surgeons to interact with data managers from around the country who are actively involved with regional STS National Database efforts and collaborative STS groups. Come learn about regional activities and initiatives!

rEVO Biologics

rEVO Biologics, Inc is a commercial-stage biopharmaceutical company focused on the development and commercialization of specialty therapeutics to address unmet medical needs in patients with rare, life-threatening conditions. The company's lead product, ATRyn, is the first and only plasma-free antithrombin concentrate.

Rose Micro Solutions

Rose Micro Solutions sells high-quality optical loupes and LED lights for less! The company's loupes start at $279. Rose Micro Solutions is a family business consisting of four brothers who named the company after their mother Rose. Stop by Booth 930, visit www.rosemicrosolutions.com, or call (716) 608-0009.

RTI Surgical

RTI Surgical™ is a leading global surgical implant company providing surgeons with safe biologic, metal, and synthetic implants. RTI provides surgeons with metal, cable, and plating systems, as well as biologic options for cardiothoracic and trauma surgical procedures. Cardiothoracic implants offer increased stability and flexibility for anterior chest wall fixation for all types of closures.

Scanlan International

Scanlan International is a global leader in surgical implants, infection control, and advanced surgical technology. Scanlan offers a comprehensive product portfolio that includes devices for the eye, ear, nose, throat, ENT, orthopedics, and general surgery. Scanlan's products are designed to improve patient outcomes and reduce the risk of infection. Scanlan International is headquartered in St Paul, MN.

SheerVision

SheerVision designs, develops, and manufactures loupes and headlight systems that enhance vision through exceptional visual acuity and powerful illumination. SheerVision also is the exclusive provider of Under Armour Performance Eyewear. Also on display is the new loupe-mounted, hand-free HD video camera allowing you to "Shoot. Store. Share." with state-of-the-art technology.

The Society of Thoracic Surgeons

The Society of Thoracic Surgeons represents more than 7,200 surgeons, researchers, and allied health care professionals worldwide who are dedicated to ensuring the best possible outcomes for surgeries of the heart, lung, and esophagus, as well as other surgical procedures within the chest. The Society offers a wide variety of member benefits, including reduced participation fees in the renowned STS National Database™, a complimentary subscription to The Annals of Thoracic Surgery, dynamic educational offerings, online patient information resources, and much more. The Society also supports cutting-edge research via the STS Research Center and advocates in Washington, DC, on behalf of cardiothoracic surgery professionals and their patients. Stop by Booth 523 or visit www.sts.org to learn more.

Sontec Instruments

Sontec offers headlights, loupes, and the most comprehensive selection of exceptional handheld surgical instruments available to the discriminating surgeon. There is no substitute for quality, expertise, and individualized service. Sontec's vast array awaits your consideration at Booth 310.

Spiration, Inc

The Spiration® Valve System has a humanitarian device approval in the United States to control specific postoperative air leaks of the lung and has CE mark approval for the treatment of diseased lung in emphysematous patients and for damaged lung resulting in air leaks by limiting air flow to selected areas.
The SynCardia temporary Total Artificial Heart (TAH-t) is the world's only FDA, Health Canada, and CE-approved Total Artificial Heart. It is approved as a bridge to transplant for patients dying from end-stage biventricular failure. Visit the SynCardia booth for updates on the Freedom® portable driver, 50 cc TAH-t, and destination therapy.

SurgiTel/General Scientific Corp
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SurgiTel is the manufacturer of premium loupes and headlights sold around the world. Holding a variety of patents, SurgiTel is always on the forefront of vision and ergonomics.

Virtual Pediatric Systems, LLC
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With more than 100,000 ICU cases, VPS Cardiac bridges the critical care continuum by providing data collection, analysis, and interpretation to improve critical care. Benchmarking takes place among cardiac, pediatric, and mixed units and includes the Pediatric Index of Cardiac Surgical Intensive Care Mortality (PICSIM), a novel risk-adjusted score for the pediatric cardiac surgical population. Please visit VPS at Booth 246 to learn more about the impact the company is making.

Thompson Surgical
Traverse City, MI
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Thoracic Surgery Foundation for Research and Education (TSFRE)
Chicago, IL
TSFRE is the charitable arm of The Society of Thoracic Surgeons. The mission of TSFRE is to foster the development of surgeon scientists in cardiothoracic surgery, increasing knowledge and innovation to benefit patient care. The foundation represents thoracic surgery in the United States, and its research and educational initiatives support the broad spectrum of thoracic surgery.

Thoramate Surgical Products
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Transonic
Ithaca, NY
You've carefully constructed several challenging anastomoses, and they all look good... but are they? Before you close your patient, take a few seconds and get precise blood measurements on each graft. Know if there is a problem now, before the patient lets you know later. Visit Transonic and see how its meters and flowprobes can help improve your outcomes.

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Visit VitaHEAT Medical (Booth 215) to see the next generation in patient warming: an underbody mattress that is safe, effective, easy to use, and cost efficient. It is battery operated for portability with an AC power option. Finally, one versatile system that meets all your patient warming needs.

Vitalcor, Inc/Applied Fiberoptics  
Westmont, IL  
Vitalcor, Inc is a supplier of medical devices used primarily in cardiothoracic surgery. Since 1975, Vitalcor has provided products that take input from teaching and practicing surgeons to make their practice easier. The company prides itself on offering quality products and providing exceptional customer service.

Vitalitec Geister  
Plymouth, MA  
Vitalitec Geister will be displaying all its products, highlighting the Peters CV Suture, Enclose II Anastomosis Assist Device, Cygnet Flexible Clamps, Intrack Atraumatic Temporary Clamps and Inserts, and Geister ValveGate and ValveGate PRO line.

Wexler Surgical, Inc  
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Wexler Surgical designs and manufactures a variety of titanium and stainless steel specialty surgical instruments and products for cardiac, vascular, thoracic, and microsurgery. Come see their VATS/MICS instruments and ask about the Optimus Series. Visit www.wexlersurgical.com for more information about products and services, or email sales@wexlersurgical.com.

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Founded in 1927 and headquartered in Jacksonville, Florida, Zimmer Biomet is a global leader in musculoskeletal health care. The company designs, manufactures, and markets a comprehensive portfolio of innovative thoracic products and treatment solutions for surgeons and patients, including the RibFix™ Blu Thoracic Fixation System and the SternaLock® Blu Primary Closure System.


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2011 – Lyle D. Joyce
2012 – George L. Hicks Jr
2013 – Carolyn E. Reed
2014 – John A. Kern
2015 – Mark D. Iannettoni

HERBERT E. SLOAN LECTURERS
1988 – Joel D. Cooper
1992 – Mark V. Braimbridge
1995 – Robert H. Anderson
1996 – Philippe G. Dartevelle

RALPH D. ALLEY LECTURERS
1991 – Harry Schwartz
1997 – Yasuharu Imai
1998 – Vincent L. Gott
1999 – Miles F. Shore
2000 – Hans G. Borst
2001 – William R. Brody
AWARDS & LECTURES

THOMAS B. FERGUSON LECTURERS

2001 – William H. Frist
2002 – Shukri F. Khuri
2003 – David A. Kessler
2004 – Donald J. Palmisano
2005 – James P. Bagian
2006 – David P. Taggart
2007 – William H. Frist
2008 – Elizabeth O. Tiesberg
2009 – Bruce E. Keogh
2010 – Jeffrey B. Rich
2011 – Atul Gawande
2012 – Jeffrey E. Shuren
2013 – Mark B. McClellan
2014 – Bassem Youssef
2015 – Pedro J. del Nido
2016 – Scott E. Parazynski

C. WALTON LILLEHEI LECTURERS

2009 – Doris A. Taylor
2010 – William A. Neal
2011 – Joseph P. Vacanti
2012 – Friedrich W. Mohr
2013 – Carolyn M. Clancy
2014 – Shaf H. Keshavjee
2015 – Patrick T. O’Gara
2016 – Gary Taubes

TSFRE

Thoracic Surgery Foundation for Research and Education

Your foundation for research and education

TSFRE is a pivotal force for growth and vitality in cardiothoracic surgery, especially for research and academic career development. TSFRE was first established in 1988 as a 501(c)(3) not-for-profit charitable foundation with support from the four major thoracic surgery organizations—the American Association for Thoracic Surgery, The Society of Thoracic Surgeons, the Southern Thoracic Surgical Association, and the Western Thoracic Surgical Association. On October 1, 2014, TSFRE became the charitable arm of STS.

The foundation represents cardiothoracic surgery in the United States, and its research and education initiatives support the entire specialty. The mission of TSFRE is to foster the development of surgeon scientists in cardiothoracic surgery, increasing knowledge and innovation to benefit patient care.

In 2015, TSFRE awarded $270,000 in research grants, $150,000 in surgical outreach mission grants, and $45,250 in educational funding. A detailed list follows.

In order to continue providing this type of support, TSFRE depends on your contributions. Today’s research will become tomorrow’s practice, and today’s young surgeons will help drive tomorrow’s health care policies. Your donations to TSFRE have a direct impact on the future of cardiothoracic surgery and the welfare of our cardiothoracic surgery patients.

If you would like to make a pledge or receive more information about giving opportunities, visit www.tsfre.org or contact Priscilla S. Kennedy, TSFRE Executive Director, at (312) 202-5868 or pkennedy@tsfre.org.

2015 TSFRE RESEARCH AWARD RECIPIENTS

TSFRE Research Grant: Operational support of original research efforts by cardiothoracic surgeons who have completed their formal training and who are seeking initial support and recognition for their research program. Awards of up to $40,000 a year for up to 2 years are made annually to support the work of early career cardiothoracic surgeons (within 5 years of first faculty appointment).

- **Bryan A. Whitson** – The Ohio State University
  *MG53 Mitigation of Ischemia-Reperfusion Injury in Lung Transplantation: Mechanisms of Action in Ex-Vivo Lung Perfusion*

- **Bo Yang** – The University of Michigan
  *Determining the Effect of TGFBR Mutations on Myocardin-Dependent Smooth Muscle Differentiation Using Human iPSCs*

Nina Starr Braunwald Research Fellowship: Support of up to $30,000 per year for up to 2 years for a woman resident working in a cardiac surgical clinic or laboratory research program who has not yet completed cardiothoracic surgical training.

- **Heidi J. Reich** – Cedars-Sinai Medical Center
  *Repeat Dosing of Allogeneic Cardiomyopathy-Derived Cells After Myocardial Infarction in Immunocompetent Rats*

- **Hanghang Wang** – Duke University Medical Center
  *Metabolomic and MicroRNA Signatures in Peripheral Blood of Patients with Thoracic Aortic Aneurysm*
Carolyn E. Reed Traveling Fellowship: Support of $10,000 for a clinically established woman thoracic surgeon to travel to another institution for the purpose of learning a new skill or technology.

Jessica S. Donington – New York University School of Medicine
Robotic Thoracic Surgery at the University of Alabama at Birmingham

Melanie A. Edwards – St Louis University
Robotic Thoracic Surgery at the University of Alabama at Birmingham

TSFRE/Edwards Lifesciences Foundation Every Heartbeat Matters Award: Support of up to $37,500 for programs that educate, screen, and/or treat underserved populations to reduce the global burden of heart valve disease, or to support other programs that advance health care and address underserved populations.

Ralph M. Bolman III – The University of Vermont Medical Center
Increasing Access to Reduce the Burdens of Rheumatic Heart Disease in Rwanda

Emily A. Farkas – CardioStart International
Establishing a Not-For-Profit Cardiac Surgical Program at Kathmandu University Dhulikhel Hospital

Frederick L. Grover – University of Colorado School of Medicine
Enhancing Access to Care and Treatment of Cardiovascular Disease in Nepal

V. Mohan Reddy – Stanford University
Building Capacity for Pediatric Heart Valve Disease in Southeast Asia

J. Nilas Young – University of California Davis Medical Center
Educating Cardiac Surgeons and Cardiologists on: (1) The Prevalence of Valvular Heart Disease, (2) The Consequences for Underserved Populations, and (3) Appropriate Medical, Surgical, and Interventional Treatment Options throughout the Russian Federation

2015 TSFRE EDUCATION AWARD RECIPIENTS

TSFRE Alley-Sheridan/Leadership Program in Health Policy and Management Scholarships: TSFRE offers up to 10 partial scholarships of $2,500 toward the $5,200 cost to attend the Leadership Program in Health Policy and Management at the Heller School of Public Policy and Management at Brandeis University.

B. Zane Atkins – University of California, Davis
Subhasis Chatterjee – Affinity Heart Lung Vascular Institute, St Elizabeth Hospital
John F. Lazar – PinnacleHealth Cardiovascular Institute
Glenn Jeffrey Pelletier – Nemours Cardiac Center, A.I. DuPont Hospital for Children
Jane L. Schwabe – Heartland Cardiothoracic Surgery

TSFRE Alley-Sheridan/Surgeons as Educators Scholarships: TSFRE offers up to three partial scholarships of $4,150 to attend the Surgeons as Educators course hosted by the American College of Surgeons.

Betty C. Tong – Duke University

JCTSE CT Surgery Resident Jeopardy Competitions: TSFRE supported resident education activities by funding the JCTSE Jeopardy competitions at the STSA 62nd Annual Meeting in Lake Buena Vista, Florida, on November 4-7, 2015, and the STS 52nd Annual Meeting in Phoenix, Arizona, on January 23-27, 2016.
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