AATS Centennial 1917-2017

Reflecting on the Past.

Building our Future.

Always Learning.



AMERICAN ASSOCIATION FOR THORACIC SURGERY A Century of Modeling Excellence



In Collaboration With



AMERICAN SOCIETY OF EXTRACORPOREAL TECHNOLOGY Lead - Collaborate - Educate - Care

55th International Conference

www.aats.org www.amsect.org



"We practice together
as a team - we should
learn together as a team.
Join us for an
innovative approach to
learning together."

THORALF M. SUNDT, III

AATS President



"We believe better teams
will lead to better outcomes.
By learning as a team
through this integrated
program developed by AmSECT
and AATS, we are
eliminating silos of care and
facilitating interdisciplinary
communication and
education which will ultimately
result in better patient care."

KENNY SHANN AmSECT President Dear Colleagues,

PRESIDE

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essage From TH

On behalf of the AATS Council as well as the Abstract and Didactic Committees, I'd like to welcome you to our Centennial year! We invite you to join us in celebrating our 100th birthday this **April 29 – May 3** in Boston, Massachusetts. It is an enormous privilege and honor to have been selected to serve as the AATS President for the year leading up to this important milestone and I look forward to celebrating the history of our Association – and more importantly our specialty. We aim to create a once in a lifetime event for every member of the surgical team.

As we reflect on the last 100 years and enter our second century as an Association for Thoracic Surgery, the 2017 meeting will provide again, as it always does, an extraordinary variety of educational opportunities across all areas of our specialty. Whether via the formal program of didactic and abstract presentations or through the rich discussions encouraged inside and outside of the sessions, we are confident that you will come away with new insights applicable to your practice to the benefit of patients. Consistent with the mission of the organization to promote leadership, scholarship, mentoring, excellence in patient care, integrity and professionalism, the official theme of the meeting is "Always Learning." We know that you attend the meeting because of your drive to life-long learning and commit to making your time well-spent.

There are some new twists to the meeting this year as well. The Association has long recognized the essential nature of a multidisciplinary approach to care of the cardiothoracic surgical patient as reflected in the original membership roster, as well as the more recent addition of a postgraduate symposium for the Interprofessional Cardiothoracic Team. As before we look forward to participation from nurses, perfusionists, anesthesiologists, and others within the program and as faculty. This year we have taken another step forward by holding our meeting in conjunction with the American Society of ExtraCorporeal Technology (AmSECT) 55th International Conference. In addition to the programs with which you have become familiar, we'll also be conducting collaborative parallel sessions during the didactic portion of the program with AmSECT which are sure to be of interest to all members of the team.

Although I am certainly biased, celebrating such a historic milestone for the Association seems particularly appropriate in so historic a city as Boston. More than that, though, we will embrace the city's rich culture of higher education – Colleges, Universities, Schools of Music and Performing Arts – throughout our program including the AATS Centennial Gala to take place at the famed Wang Theatre.

So please join us in Boston to celebrate and to learn together.

I hope you'll make it a point to join us this April in Boston to learn about the specialty, take advantage of interactions with the collection of international leaders in attendance and we'll learn together about how to improve outcomes for our patients.

Thoralf M. Sundt, III

President, AATS

Massachusetts General Hospital

Celebrates its Centennial.

Attendees will come together
at this historic meeting to enjoy activities,
events, view historical artifacts
and memorabilia to commemorate the
specialty of cardiothoracic surgery and
the first 100 years of the AATS.

ANNUAL MEETING CO-CHAIRS



Annual Meeting Co-Chair
*Robert D. Jaquiss
UT Southwestern, Dallas, TX



Annual Meeting Co-Chair
*Bryan F. Meyers
Washington University, St. Louis, MO

STATEMENT OF NEED

Cardiovascular disease and cancer are the leading causes of mortality and morbidity around the globe. Major advances in these conditions continue to be made at a rapid pace. Improvements in diagnostic techniques as well as interventional approaches to treatment, both surgical and percutaneous, challenge the clinical practitioner to remain current. Increasingly sophisticated technology to accomplish these aims is being developed and introduced into clinical practice. Exciting advances in basic and clinical science offer opportunities for participation in scientific studies and clinical trials. All of these elements create a significant educational need for the practicing cardiothoracic surgeon. The AATS Annual Meeting fills this need through a combination of lectures, original scientific presentations and discussion forums.

EDUCATIONAL OBJECTIVES

At the conclusion of the AATS Annual Meeting, through comprehensive lectures and discussions, participants will be able to:

- Identify the latest techniques and current research specifically related to Adult Cardiac Surgery, Congenital Heart Disease, General Thoracic Surgery and Perioperative Care.
- Select appropriate surgical procedures and other interventions for their own patients based upon results presented.
- Incorporate the basic science developments and emerging technologies and techniques across the spectrum of cardiothoracic surgery.
- Communicate current practice management necessary for the effective and safe delivery of patient care
- Translate expanded knowledge into practice for the improvement of patient outcomes and satisfaction.

WHO SHOULD ATTEND

The AATS Annual Meeting is specifically designed to meet the educational needs of:

- Cardiothoracic Surgeons
- Physicians in related specialties including Cardiothoracic Anesthesia, Critical Care, Cardiology, Pulmonology, Radiology, Gastroenterology, Thoracic Oncology and Vascular Surgery
- Fellows and Residents in Cardiothoracic and General Surgical training programs
- Health Care Professionals involved in the care of cardiothoracic surgical patients including Physician Assistants, Nurse Practitioners, Nurses, Surgical Assistants and Perfusionists
- Medical students with an interest in cardiothoracic surgery

AATS ANNUAL MEETING ACCREDITATION

ACCME Accreditation Statement

The American Association for Thoracic Surgery is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

This live activity has been approved for 31.5 AMA PRA Category 1 Credit(s) ***.

**Credit hours subject to change.

Disclosure Statement

It is the policy of the American Association for Thoracic Surgery (AATS) that any individual who is in a position to control or influence the content of an educational activity to disclose all relevant financial relationships or affiliations. All identified conflicts of interest must be resolved and the educational content thoroughly vetted by AATS for fair balance, scientific objectivity, and appropriateness of patient care recommendations. In addition, faculty members are asked to disclose when any discussion of unapproved use of pharmaceuticals or medical devices occur.

For further information on the Accreditation Council for Continuing Medical Education (ACCME) Standards of Commercial Support, please visit www.accme.org.

Physician Assistant This program will be submitted to the Physician Assistant Review Panel for continuing education credit.



SCHEDULE AT A **GLANCE**

EXHIBIT HALL **HIGHLIGHTS**

Sunday, April 30 | 5:00 pm - 7:00 pm **Welcome Reception**

Monday, May 1 | 9:00 pm - 6:00 pm

I AATS Learning Center featuring cutting edge Case Videos of novel procedures and surgical techniques. View Learning Center program online at www.aats.org/ Centennial

I AATS Mini-Theaters including Deep Dive presentations which take a closer look at the top papers presented at the AATS, AATS Guideline Presentations along with presentations from our industry partners.

I AATS Training Centers to hone your surgical skills with our industry partners and stop by these Centers for some Hands-On experience demonstrating new products and devices.

SCHEDULE **NOTES**

I Complimentary morning and afternoon refreshment break will be provided.

I Lunch will be available for purchase in the Exhibit Hall on Monday and Tuesday.

I All scientific sessions and exhibits will take place at the Boston Hynes Convention Center.

I Times, topics, and speakers are subject to change.

♦ In collaboration with AmSECT





6:30 am - 6:00 pm **REGISTRATION OPEN**

8:00 am - 3:30 pm **COURSES**

In Collaboration with AmSECT ◆

Adult Cardiac Skills ◆

Congenital Skills ◆

General Thoracic Skills

Cardiothoracic Transplant and Mechanical Circulatory Support of Heart and Lung Failure ◆

Surgical Ethics Forum ◆

12:00 pm-1:00 pm COMBINED LUNCHEON SPEAKER *W. Gerald Austen

SURVIVAL GUIDE: YOUR FIRST NIGHT ON CALL 11:45 pm - 4:00 pm

Available to Residents / Fellows Only

HANDS-ON SESSIONS AT THE SHERATON HOTEL 4:00 pm - 6:00 pm

Separate registration required

AATS/STS Postgraduate Symposia Sunday April 30

REGISTRATION OPEN 6:30 am - 6:00 pm

POSTGRADUATE SYMPOSIA 8:00 am - 5:00 pm In Collaboration with AmSECT ◆

Adult Cardiac Surgery +

Congenital Heart Disease ◆

General Thoracic Surgery

Interprofessional Cardiothoracic Team Symposium +

LEGENDS LUNCHEONS 12:00 pm - 1:00 pm

*Willam I. Norwood, *Valerie W. Rusch, *Sir Magdi Yacoub

AATS CENTENNIAL WELCOME RECEPTION 5:00 pm - 7:00 pm



OPEN EVENING

Various Satellite Post-Activity Symposia**

For additional details regarding the presentations, abstracts, and authors, please visit www.aats.org/centennial

^{*} AATS Member

^{*} AmSECT Member **Industry-sponsored satellite programs are not part of the AATS Centennial

DAY ONE

Monday May 1

6:00 am - 5:00 pm **REGISTRATION OPEN** 7:20 am - 7:30 am **BUSINESS SESSION FOR AATS MEMBERS ONLY** PLENARY SCIENTIFIC SESSION Award Presentations, New Member Induction 7:30 am - 11:25 am Basic Science Lecture: Rhona Flin, University of Aberdeen, Scotland 11:25 am - 12:15 pm **PRESIDENTIAL ADDRESS** *Thoralf M. Sundt, III, Massachusetts General Hospital, Boston, MA 12:15 pm - 2:00 pm **LUNCH IN THE EXHIBIT HALL** 12:45 pm - 2:00 pm ETHICS FORUM LUNCHEON Separate registration required 12:45 pm - 2:00 pm 20TH ANNUAL C. WALTON LILLEHI RESIDENT FORUM 2:00 pm - 5:00 pm SIMULTANEOUS SESSIONS Coronary Bypass Adult Cardiac Surgery Congenital Heart Disease General Thoracic Surgery Perioperative Care Surgery **OPEN EVENING** Various Satellite Post-Activity Symposia** 5:00 pm - 6:30 pm AATS Centennial Gala, AT THE WANG THEATER 7:00 pm - 10:00pm Ticketed Event: \$250.00 USD per person. \$350.00 USD for non-members. All attendees, guests, & exhibitors are encouraged to attend. wesday May 2 DAY TWO 6:00 am - 5:00 pm **REGISTRATION OPEN** 7:00 am - 8:25 am PREPARING YOURSELF FOR AN ACADEMIC CAREER BREAKFAST AT THE SHERATON HOTEL For Residents, Fellows & Medical Students Only, Pre-registration required 7:00 am - 8:25 am SIMULTANEOUS SESSIONS Cardiac Surgery Forum Adult Cardiac Emerging Technology and Techniques/Video Session General Thoracic Surgery Forum Congenital Emerging Technology and Techniques/Video Session General Thoracic Emerging Technology and Techniques/Video Session 8:45 am - 12:30 pm PLENARY SCIENTIFIC SESSION Award Presentations Honored Guest Lecture: General Stanley A. McChrystal, McChrystal Group, Alexandria, VA 12:30 pm - 2:00 pm **LUNCH IN THE EXHIBIT HALL** 12:45 pm - 2:00 pm MODERATED POSTER COMPETITIONS SIMULTANEOUS SESSIONS 3:55 pm - 5:35 pm Transcatheter Mitral Valve Therapies Adult Cardiac Surgery: Valve Repair 2:00 pm - 3:20 pm **ELSO at AATS** MCS / Transplant 2:00 pm - 5:35 pm Congenital Heart Disease General Thoracic Surgery Aortic/Endovascular Surgery EXECUTIVE SESSION FOR AATS MEMBERS ONLY 5:35 pm - 6:15 pm Wednesday May 3 DAY THREE

10:20 am - 11:45 am MASTERS OF SURGERY VIDEO SESSIONS

REGISTRATION OPEN

SIMULTANEOUS SESSIONS

Adult Cardiac Surgery

6:00 am - 12:00 pm

7:30 am - 9:35 am

Adult Cardiac Surgery Congenital Heart Disease General Thoracic Surgery

Congenital Heart Disease

General Thoracic Surgery

Saturday, April 29, 2017 8:00 am - 3:30 pm

+ADULT CARDIAC SKILLS

100 Years of Training - More Skills Still Needed!

Course Chair: *Kenton J. Zehr, Johns Hopkins Hospital
Course Co-Chair: *Volkmar Falk, Deutsches Herzzentrum Berlin
Course Co-Chair: *David Fitzgerald, Medical Center of South Carolina

+ CONGENITAL SKILLS

Mastery of Common and Uncommon Challenges

Course Chair: *David Bichell, Vanderbilt University/Children's Hospital Course Chair: *Bohdan Maruszewski, Children's Memorial Health Institute Course Chair: *Ron Angona, University of Rochester

GENERAL THORACIC SKILLS

Management of Thoracic Tumors in 2017

Course Chair: *Virginia R. Litle, Boston University
Course Co-Chair: *Kazuhiro Yasufuku, University of Toronto

♦ CARDIOTHORACIC TRANSPLANTAND MECHANICAL CIRCULATORY SUPPORT OF HEART AND LUNG FAILURE

Mastery of the Management of End Stage Heart and Lung Disease

Course Co-Chairs:

- *Matthew Bacchetta, Columbia University
- *Carmelo A. Milano, Duke University
- *Rich Walczak, Duke University



Interdisciplinary Approaches to Ethical Problems in CT Surgery

Course Co-Chairs:

- *William J. DeBois, New York Presbyterian Hospital
- *Martin F. McKneally, University of Toronto
- *Robert M. Sade, Medical University of South Carolina



COMBINED LUNCHEON SPEAKER

12:00 - 1:00 pm *W. Gerald Austen Massachusetts General Hospital

Saturday, April 29, 2017 4:00 pm - 6:00 pm

HANDS-ON SESSIONS AT THE SHERATON HOTEL

Separate registration required

Sunday, April 30, 2017 8:00 am - 5:00 pm

+AATS/STS ADULT CARDIAC SURGERY SYMPOSIUM

Excellence Through Knowledge

Course Chair: *Vinod H. Thourani, Emory University Course Co-Chair: *Hitoshi Ogino, Tokyo Medical University

Course Co-Chair: *David Fitzgerald, Medical Center of South Carolina

+AATS/STS CONGENITAL HEART DISEASE SYMPOSIUM

Innovations and Controversies in the Surgical Management of Congenital Heart Disease

course Chair: *Michael E. Mitchell, Children's Hospital of Wisconsin

Course Co-Chair: *Giovanni Stellin, University of Padova Course Co-Chair: *Ron Angona, University of Rochester

AATS/STS GENERAL THORACIC SURGERY SYMPOSIUM

Thoracic Surgery 2107 - State of the Art

Course Chair: *Seth D. Force, Emory University Course Co-Chair:

*Moishe Liberman, Centre Hospitalier de l'Université de Montréal

♦INTERPROFESSIONAL CARDIOTHORACIC TEAM SYMPOSIUM

Improving Systems of Care, Quality and Safety

Course Co-Chairs:

Katherine J. Hoercher, Clevland Clinic Foundation Steven Gottesfeld, Sharp Memorial Hospital *Bruce Searles, SUNY Upstate Medical Center *Glenn J. Whitman, Johns Hopkins Hospital



In collaboration with the Association of Physician Assistants in Cardiovascular Surgery (APACVS).

LEGENDS LUNCHEON SPEAKERS

12:00 - 1:00 pm



*William I. Norwood Alfred I. Du Pont Hospital for Children



*Valerie W. Rusch Memorial Sloan-Kettering Cancer Center



*Sir Magdi Yacoub The Magdi Yacoub

*AATS Member *AmSECT Member

♦ In collaboration with AmSECT



AMERICAN SOCIETY OF EXTRACORPOREAL TECHNOLOGY Lead - Collaborate - Educate - Care 55th International Conference





PLENARY SCIENTIFIC SESSION

MONDAY, MAY 1, 2017 7:30 am - 12:30 pm

BUSINESS SESSION AATS Members Only 7:20 - 7:30 am

1. Comparative Effectiveness of CABG versus PCI in a Real World STICH Population

Alexander Iribarne, Dartmouth-Hitchcock Medical Center, Lebanon, NH

2. A Comparison of the Belsey Mark IV and Laparoscopic Nissen Fundoplication in Patients with Large Paraesopahgeal Hernia Danuel Laan, Mayo Clinic, Rochester, MN

3. Outcomes of Surgical Intervention for Anomalous Aortic Origin of a Coronary Artery: A Large Contemporary Prospective Cohort Study Carlos M. Mery, Texas Children's Hospital, Houston, TX

IN THE WORDS OF THE PRESIDENTS: A VIDEO CELEBRATION OF THE AATS CENTENNIAL

AWARD PRESENTATIONS



BASIC SCIENCE LECTURE

Enhancing Surgical Performance: Optimizing Intra-Operative Surgical Leadership and Decision-Making

9:40 - 10:20 am Rhona Flin, University of Aberdeen, Scotland 4. Safety and Feasibility of Lobectomy Following Concurrent Chemotherapy and High Dose Radiation for Stage IIIA NSCLC: Pooled Surgical Results of NRG Oncology RTOG 0229 and 0839 *Jessica S. Donington, New York University, New York, NY

5. 10 Year Clinical Experience of Humanitarian Cardiothoracic Surgery: Building a Platform for Ultimate Sustainability in a Resource-Limited Setting Ralph Morton Bolman, III, University of Vermont, Burlington, VT

NEW MEMBER INDUCTION



PRESIDENTIAL ADDRESS

Ancora Imparo: Always Learning

11:25 am - 12:30 pm

*Thoralf M. Sundt, III, Massachusetts General Hospital, Boston, MA

LUNCH IN THE EXHIBIT HALL 12:30 - 2:00pm

ETHICS FORUM LUNCH 12:30 – 2:00pm Separate Registration Required Final Exit with Medical Help: Should State Law Legitimize Physician-Assisted Suicide?

Moderator: *Robert M. Sade, Medical University of South Carolina, Charleston, SC Pro: Haider J. Warraich, Duke University Medical Center, Durham NC Con: Robert Sewell, Master Center of North Texas, Southlake, TX

20[™] ANNUAL C. WALTON LILLEHEI RESIDENT FORUM

MONDAY, MAY 1, 2017 12:45 - 2:00 pm Not for Credit

L1. Mutations in ROBO4 Lead to the Development of Bicuspid Aortic Valve and Ascending Aortic Aneurysm

Hamza Aziz, Duke University, Durham, NC

L2. Targeted Near-Infrared Intraoperative Molecular Imaging Can Identify Residual Disease During Pulmonary Resection

Jarrod D. Predina, University of Pennsylvania, Philadelphia, PA

L3. Delivery of Endothelial Progenitor Cells with Injectable Shear-Thinning Hydrogels Maintains Ventricular Geometry andNormalizes Dynamic Strain to Stabilize Cardiac Function Following Ischemic Injury
Ann C. Gaffey, University of Pennslyvania, Philadelphia, PA

L4. Targeted Cell Replacement in Human Lung Bioengineering Brandon A. Guenthart, Columbia University, New York, NY

L5. Donor-derived Non-classical Monocytes Mediate Primary Lung Allograft Dysfunction by Recruiting Recipient Neutrophils via Toll Like Receptor-dependent Production of MIP-2

Stephen Chiu, Northwestern University, Chicago, IL

L6. In Vivo Lung Perfusion Rehabilitates Sepsis-Induced Lung Injury J. Hunter Mehaffey, University of Virginia, Charlottesville, VA



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ADULT CARDIAC SURGERY CONTROVERSIES

MONDAY, MAY 1, 2017 2:00 – 5:15 pm

MYOCARDIAL PROTECTION

The Science Behind Cardioplegia

*Frank W. Sellke, Brown Medical School, Providence, RI

6. The Use of del Nido Cardioplegia in Surgery: A Prospective Randomized Trial *David Fitzgerald, Medical University of South Carolina, Charleston, SC

7. A Normokalemic Long Acting Blood Cardioplegia

Amber Malhotra, U. N. Mehta Institute of Cardiology and Research Center, Ahmedabad, India

8. Single Dose Cardioplegia Protects Myocardium as well as Traditional Repetitive Dosing: a Randomized Study

Alessandro Vivacqua, Beaumont Health, Royal Oak, MI

TRICUSPID VALVE REPAIR

9. Tricuspid Annulus Diameter Does Not Predict the Development of Tricuspid Regurgitation after Mitral Valve Repair for Mitral Regurgitation Due to Degenerative Diseases

*Tirone E. David, Toronto General Hospital, Toronto, ON, Canada

10. Outcome of Tricuspid Annuloplasty Following Current Guidelines Filip Dulguerov, Cardiothoracic Center of Monaco, Monte Carlo, Monaco 11. Long Term Effect of Concomitant Tricuspid Repair Sarah Ward, University of Michigan, Ann Arbor, MI

AORTIC VALVE REPLACEMENT

Innovation in Valve Design

*James L. Cox, Washington University, St. Louis, MO

12. Repeat Conventional Biological Valve Replacement over 20 Years: Surgical Benchmarks Should Guide Patient Selection for Transcatheter Valve-in-Valve Therapy

*John M. Stulak, Mayo Clinic, Rochester, MN

13. Aortic Root Enlargement Does Not Increase the Operative Risk of Aortic Valve Replacement

*Christopher M. Feindel, University of Toronto, Toronto, ON, Canada

14. Bioprosthetic Aortic Valve Replacement: Revisiting Prosthesis Choice in Patients Younger than 50 Years of Age

Nana Toyoda, Mount Sinai Medical Center and Stony Brook University Hospital, New York, NY

CORONARY BYPASS SURGERY SESSION

MONDAY, MAY 1, 2017 2:00 – 5:15 pm

Controversies in CABG 2017

*John D. Puskas, Mount Sinai Hospital, New York, NY

C1. Priorities in CABG: Is Long-Term Survival More Dependent on Completeness of Revascularization or Multiple Arterial Graft? William B. Keeling, Emory University, Atlanta, GA

Discussion: Priorities in CABG

*Bruce W. Lytle, Cleveland Clinic, Cleveland, OH

CORONARY

C2. Saphenous Vein versus Right Internal Thoracic Artery as a Y-Composite Graft: 5-Year Angiography and Midterm Clinical Follow-Up of the SAVE RITA Trial

Min-Seok Kim, Seoul National University Hospital, Seoul, Republic of Korea

Discussion: Conduits in CABG

*Joseph Sabik, University Hospitals Cleveland Medical Center, Cleveland, OH

C3. Minimally Invasive CABG with Bilateral Internal Thoracic Arteries: Will This Be The Future?

Pradeep Nambiar, Moolchand Hospitals, Gurgaon, India

Discussion: BITA/ART Trial

*David P. Taggart, University of Oxford

C4. Hybrid Coronary Revasculrization vs. Percutaneous Strategies for Left Main Stenosis: A Propensity Match Study

Alberto Repossini, University of Brescia, Brescia, Italy

Discussion: The Role of HCR

*John D. Puskas, Mount Sinai Hospital, New York, NY

C5. Off-pump Coronary Artery Bypass Grafting Provides More Clinical Benefit in Patients with Preoperative Renal Failure

Chikara Ueki, Shizuoka General Hospital, Shizuoka, Japan

Discussion: OPCAB in 2017

*David P. Taggart, University of Oxford

2014 EXC/EACTS CABG Guidelines

Miguel Sousa Uva, Hospital Curz Vermelha

Avoiding Stroke in CABG

*Joseph Sabik, University Hospitals Cleveland Medical Center, Cleveland, OH

Medical Management of the CABG Patient

*David P. Taggart, University of Oxford

C6. Lack of a Heart Team in Stand-alone Interventional Cardiology Units Impacts the Rate of Percutaneous Coronary Intervention in Patients with **Multi-vessel Disease**

Eilon Ram, Sheba Tel Hashomer Medical Center, Ramat Gan, Israel

Discussion with Expert Panel

*Bruce W. Lytle, *Joseph F. Sabik, Miguel Sousa Uva

C7. Programmatic and Surgeon Specialization in Coronary Surgery Improves Morbidity and Mortality Following Isolated Coronary Bypass Grafting

A. Claire Watkins, University of Maryland, Baltimore, MD

Discussion with Expert Panel

*Bruce W. Lytle, *Joseph F. Sabik, Miguel Sousa Uva

CONGENITAL HEART DISEASE Simultaneous Scientific Session

MONDAY, MAY 1, 2017 2:00 – 5:15 pm

15. Valve-sparing Repair with Intraoperative Balloon Dilation in Tetralogy of Fallot: Mid-Term Results and Therapeutic Implications Sophie C. Hofferberth, Boston Children's Hospital, Harvard Medical School,

16. Long term Outcomes of the Expanded Polytetrafluoroethylene Conduit with Bulging Sinuses and a Fan shaped Valve in the Right

Ventricular Outflow Tract Reconstruction
Takako Miyazaki, Masaaki Yamagishi, Yoshinobu Maeda, Satoshi Taniguchi,
Shuhei Fujita, Hisayuki Hongu, Haruka Fu, *Hitoshi Yaku
Kyoto Prefectural University of Medicine, Kyoto, Japan

17. Bicuspid Valved Polytetrafluoroethylene Conduits vs Homograft Conduits for Right Ventricular Outflow Tract Reconstruction in Neonates, Infants and Young Children: An Institutional Experience Christopher W. Mercer, University of Pittsburgh Medical Center, Pittsburgh, PA 18. Transcatheter Pulmonary Valve Replacement for Treatment of Dysfunctional Surgical Bioprostheses: A Multicenter Study

Doff B. McElhinney, Packard Children's Hospital, Stanford University, Palo Alto, CA

19. Modified Repair of Type I and II Truncus Arteriosus Limits Early Right Ventricular Outflow Tract Re-operation

Clauden Louis, University of Rochester, Rochester, NY

20. Impact of Truncal Valve Insufficiency on the Outcomes of Truncus Arteriosus Repair

Phillip Naimo, Royal Children's Hospital, Melbourne, Australia



GENERAL THORACIC SURGERY Simultaneous Scientific Session

MONDAY, MAY 1, 2017 2:00 - 5:15 pm

21. Comparison of Morbidity of Pulmonary Segmentectomy and Lobectomy: Initial Results of a Phase III Randomized Trial of Lobectomy versus Segmentectomy for Small (2 cm or Less) Peripheral Non-small Cell Lung Cancer Kenji Suzuki, Juntendo University Hospital, Tokyo, Japan

22. Variability in Surgical Quality in Patients with Early Stage Non-Small Cell Lung Cancer Undergoing Wedge Resection Impacts Overall Survival When **Compared to Stereotactic Body Radiation Therapy**

Seth B. Krantz, NorthShore University Health System, Evanston, IL

23. Endosonographic Mediastinal Lymph Node Staging in Positron Emission Tomography and Computed Tomography Negative Non-Small Cell Lung Cancer Pravachan Hegde, University of Montreal, Montreal, QC, Canada

24. Declining Use of Surgical Therapy for Early Stage Non-small Cell Lung **Cancer in the United States**

Kathryn E. Engelhardt, Northwestern University, Chicago, IL

25. Predictors of Distant Recurrence Following R0 LObectomy for pN0 Lung

Whitney Brandt, Memorial Sloan Kettering Cancer Center, New York, NY

26. Differential Impact of Operative Complications on Survival Following **Surgery for Primary Lung Cancer**

*Felix G. Fernandez, Emory University, Atlanta, GA

27. Genetic Variants in Cytokine Signaling Pathways Are Associated With Survival in Surgically Resectable Non-Small Cell Lung Cancer Boris Sepesi, MD Anderson Cancer Center, Houston, TX

28. Long-Term Outcomes From A Phase I Near-Infrared Sentinel Lymph Node Mapping Trial in Non-Small Cell Lung Cancer

Christopher S. Digesu, Brigham and Women's Hospital, Boston, MA

PERIOPERATIVE CARE Simultaneous Scientific Session

MONDAY, MAY 1, 2017 2:00 – 5:15 pm

29. Early Predictors of Permanent Pacemaker Implantation after Surgical Aortic Valve Replacement in High Risk Patients Alejandro Suarez-Pierre, Johns Hopkins University, Baltimore, MD

30. Predicting Readmission After Cardiac Surgery: Insights From A State-Level Analysis

J. Trent Magruder, Johns Hopkins University, Baltimore, MD

31. A Novel Risk Score to Predict New Atrial Fibrillation after Isolated **Coronary Artery Bypass Grafting**

Todd C. Crawford, Johns Hopkins University, Baltimore, MD

Matthew C. Henn, Washington University, St Louis, MO

32. Preoperative Left Ventricular Diastolic Dysfunction Predicts Postoperative Atrial Fibrillation after Aortic Valve Replacement for Aortic Valve Stenosis Yoshihisa Morimoro, Awaji Medical Center, Hyogo, Sumoto, Japan

33. Utilizing Observed to Expected 30-Day Mortality as a Benchmark for Transcatheter Aortic Valve Replacement Programs: Outliers and Potential Implications for Reimbursement

34. Propensity and Impact of Autologous Platelet Rich Plasma Utilization in **Acute Type A Dissection**

Shruti N. Dahotre, McGovern Medical School, UT Health at Houston, Houston, TX

35. Partial Thromboplastin Time is More Predictive of Bleeding Than Heparin Levels in Heparinized Pediatric Patients Following Cardiac Surgery Olubunmi Oladunjoye, Boston Children's Hospital, Boston, MA

36. Estimation of Achievable Oxygen Consumption Following Transfusion with Rejuvenated Red Blood Cells

Amudan J. Srinivasan, Duke University, Durham, NC

37. The Impact of Prolonged Intensive Care Stay on Quality of Life, Recovery and Clinical Outcomes: A Prospective Study

Mohammad S. Diab, George's University Hospital, London, United Kingdom 38. Preoperative Beta-Blocker Use Correlates with Worse Outcomes in

Patients Undergoing Valve Surgery

Sarah A. Schubert, University of Virginia, Charlottesville, VA

*AATS Member *AmSECT Member

CARDIAC SURGERY FORUM

TUESDAY, MAY 2, 2017 7:00 - 8:25 am

F1. Overexpression of MicroRNA-30a Contributes to the Aortic Dissection via Down-Regulation of Lysyl Oxidase

Tianxiang Gu, The First Hospital of China Medical University, Shenyang, China

F2. Circulating Endothelial Specific Exosome Profiles Enable Noninvasive Diagnosis of Aortic Aneurysm Disease

Prashanth Vallabhajosyula, University of Pennsylvania, Philadelphia, PA

F3. Model Bicuspid Aortic Valve by Knocking Out NOTCH1 Gene in Patient's Induced Pluripotent Stem Cells with CRISPR/Cas9
Bo Yang, University of Michigan, Ann Arbor, MI

F4. Donor Heart Specific Exosome Profiling enables Noninvasive Monitoring for Early Allograft Rejection in a Mouse Heterotopic Heart Transplantation Model Andreas Habertheuer, University of Pennsylvania, Philadelphia, PA

F5. Angiogenesis and Arteriogenesis Precede Cardiomyocyte Migration in the Regeneration of Mammalian Hearts

Andrew B. Goldstone, Stanford University, Stanford, CA

F6. Regeneration of a Neoartery Through a Completely Autologous Acellular Conduit in a Minipig Model.

Xuefeng Qiu, University of California, Los Angeles, CA

F7. Prolonged Treatment with S-Nitroso Human Serum Albumin is More Effective and Prevents Inflammatory and Oxydative Effects Compared to Inhaled Nitric Oxide in Experimental Congenital Pulmonary Arterial Hypertension Alessio Rungatscher, University of Verona, Verona, Italy

GENERAL THORACIC SURGERY FORUM

TUESDAY, MAY 2, 2017 7:00 - 8:25 am

F8. Therapeutic Targeting of Tumor-promoting Macrophages in EGFR Mutant Lung Adenocarcinoma with Trabectedin Hyun-Sung Lee, Baylor College of Medicine, Houston, TX

F9. A Tumor Immune Microenvironment Signature Predicts Response to Immune Checkpoint Blockade in Malignant Pleural Mesothelioma Hyun-Sung Lee, Baylor College of Medicine, Houston, TX

F10. Asbestos Up-regulates EZH2 to Mediate Epigenetic Repression of the INK4a/ARF Gene Locus in Normal Human Mesothelial Cells
*David S. Schrump, National Cancer Institute, Bethesda, MD

F11. Naturally-occurring IgG antibodies for the Treatment of Human Non-Small Cell Lung Cancer

Bryan M. Burt, Baylor College of Medicine, Houston, TX

F12. The Impact of Early Oral Feeding on Proinflammatory Cytokines After McKeown Minimally Invasive Esophagectomy for Cancer Yin Li, The Affiliated Cancer Hospital of Zhengzhou University, Zhengzhou,

F13. In Vivo Development Of Transplant Arteriosclerosis in Humanized Mice Reflects BOS in lung Transplant Recipients and is Controlled by Autologous Regulatory T Cells

Thierry Siemeni, Hannover Medical School, Hannover, Germany

F14. Matrix Metalloproteinase 12 Promotes Tumor Propagation in the Lung Hanna Wald, Hadassah Hebrew University Hospital, Jerusalem, Israel

F15. Meta-analysis Identifies a Novel Anti-apoptotic Gene and Potential Therapeutic Target in Malignant Pleural Mesothelioma Chuong D. Hoang, National Institutes of Health, Bethesda, MD

ADULT CARDIAC EMERGING TECHNOLOGIES AND TECHNIQUES / CASE VIDEO FORUM

TUESDAY, MAY 2, 2017 7:00 - 8:25 am



*Keith B. Allen, St. Luke's Mid American Heart Institute, Kansas City, MO

T2. Surgical Treatment May Enhance Reverse Remodeling of the Ventricle in Patients with Functional Mitral Regurgitation

*Masashi Komeda, Iseikai Hospital, Osaka, Japan

T3. Transcaval Transcatheter Aortic Valve Replacement: No Patient Left Behind! *Talal Al-Atassi, Emory University, Atlanta, GA

T4. Sutureless Aortic Valve Replacement in High Risk Patients Neutralizes Expected Worse Hospital Outcome: a Clinical and Economic Analysis Emmanuel Villa, Poliambulanza Foundation Hospital, Brescia, Italy

T5. Aortic Valve Repair for Aortic Insufficiency Associated with Ascending Aortic Aneurysms using Geometric Ring Annuloplasty

*J. Scott Rankin, West Virginia University, Morgantown, WV

T6. Hemodynamic Follow-up after Valve-in-valve TAVI for Failed Aortic Bioprosthesis

Konstantin Alexiou, University Heart Center, Dresden, Germany

T7. Robotic Hybrid Coronary Bypass Grafting

Gianluca Torregrossa, Mount Sinai Hospital, New York, NY

T8. Computational Fluid Dynamics Assessment of Type-B Dissections as Tool to Predict Evolution of the Disease and Indicate Treatment Strategies Domenico Calcaterra, Minneapolis Heart Institute, Minneapolis, MN

For additional details regarding the presentations, abstracts, and authors, please visit www.aats.org/centennial



uesday MAY



T9. Primary Repair of Total Anomalous Pulmonary Venous Connection With Sutureless Strategy

*Yiqun Ding, Shenzhen Children's Hospital, Shenzhen, China

T10. Anatomical Correction Including Aortic Root Translocation and Hemi-Senning / Bidirectional Glenn Atrial Switch Procedure in a Patient with Congenitally Corrected Transposition of the Great Arteries, Ventricular Septal Defect, Pulmonary Stenosis and Dextro

*Eun Seok Choi, Sejong General Hosptial, Bucheon, Republic of Korea T11. Novel Surgical Strategy for Complicated Pulmonary Stenosis

T11. Novel Surgical Strategy for Complicated Pulmonary Stenosi Using Hemodynamic Analysis Based on a Virtual Operation with Numerical Flow Analysis

*Kagami Miyaji, Kitasato University, Sagamihara, Japan

T12. Repair Quadricuspid Truncal Valve with Utilization of Pulmonary Cusp to Reconstruct RVOT, Repair without Conduit

Shu-chien Huang, National Taiwan University Hospital, Taipei, Taiwan

T13. Chimney Reconstruction of the Aortic Arch in the Norwood Procedure Satoshi Asada, Kyoto Prefectural University of Medicine, Kyoto, Japan

T14. Through Tricuspid Closure for Doubly Committed Subarterial Ventricular Septal Defect with Right Vertical Subaxillary Mini-incision: a Matched-pair Analysis

Zhongdong Hua, Chinese Academy of Medical Sciences & Peking Union Medical College Fuwai Hospital, Beijing, China

T15. A Successful Biventricular Repair for a Neonate with Critical Aortic Stenosis Complicated With Left Ventricular Aneurysm and Endocardial Fibroelastosis

Yujiro Ide, Mt. Fuji Shizuoka Children's Hospital, Shizuoka City, Japan

GENERAL THORACIC EMERGING TECHNOLOGIES AND TECHNIQUES / CASE VIDEO FORUM

TUESDAY, MAY 2, 2017 7:00 – 8:25am

T16. Laparoscopic Ligation of Cisterna Chyli

*Ilitch Diaz Gutierrez, University of Minnesota, Minneapolis, MN

T17. The Role of Minimally Invasive Thoracoscopic Approach for The Operation of Non-small Cell Lung Cancer Involving Vertebral Column Kwanyong Hyun, Seoul National University College of Medicine, Seoul, Republic of Korea

T18. Endoscopic Repair of Bronchogastric Fistula after Esophagectomy Igor Brichkov, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

T19. Thoracoscopic Anatomical Lung Segmentectomy based on Dissection along the Intersegmental Veins, Left Lateral Basal Segmentectomy Hiroyuki Oizumi, Yamagata University, Yamagata, Japan

T20. Electromagnetic Navigation Bronchoscopy-Guided Dye Marking for Minimally Invasive Resection of more than 100 Pulmonary Nodules Kunal Mehta, University of Pittsburgh, Pittsburgh, PA

T21. Predicting Pulmonary Air Leak Resolution Using Transpleural Airflow Data after Lung Resection

*Sebastien Gilbert, University of Ottawa, Ottawa, ON, Canada

T22. Laparoscopic Trans-diaphragmatic Chest Surgery: Early Experience Ilitch Diaz Gutierrez, University of Minnesota, Minneapolis, MN

T23. The Impact of an Energy Sealing Device in Thoracoscopic Anatomic Segmentectomy for Small-sized Pulmonary Nodules Hirohisa Kato, Yamagata University, Yamagata-shi, Japan

T24. Using a Biploar Seal-and-Cut Device for Minimally Invasive Lung Resections Seal-and-Cut Device for Minimally Invasive Lung Resections Thomas Kiefer, Klinikum, Konstanz, Germany; 2Yale University, New Haven, CT



PLENARY SCIENTIFIC SESSION

TUESDAY, MAY 2, 2017 8:35 am - 12:35 pm

39. Intraoperative Extracorporeal Membrane Oxygenation Improves Survival in Lung Transplantation

Konrad Hoetzenecker, Medical University of Vienna, Vienna, Austria

40. Long-term Outcome Following Concomitant Mitral Valve Surgery and Cox Maze Procedure for Atrial Fibrillation: High Return to Sinus Rhythm and Remarkably Low Incidence of Stroke

*Niv Ad, West Virginia University Heart and Vascular Institute, Morgantown, WV

41. Surgery for Congenital Heart Disease Beyond 50 Years of Age: Mid-term Outcomes and Risk Factors of an Emerging Population Mauro Lo Rito, IRCCS Policlinico San Donato, San Donato Milanese, Italy

IN THE BEGINNING...A VIDEO HISTORY OF THE AATS

AWARD PRESENTATIONS

WINNER OF THE 20^{TH} annual C. Lillehei resident forum presentation

42. Clinical Outcomes and Rates of Aortic Reoperation Following 1-Stage Repair of Extensive Chronic Thoracic Aortic Dissection

*Nicholas T. Kouchoukos, Missouri Baptist Medical Center, St. Louis, MO

43. Definitive Chemoradiation Compared to Induction Chemoradiotherapy Followed by Surgery in The Treatment of Esophageal Squamous Cell Carcinoma Arianna Barbetta, Memorial Sloan Kettering Cancer Center, New York, NY

44. Surgeon Volume Impact on Mitral Valve Repair Rates, Durability and Survival in New York State

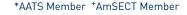
*Joanna Chikwe, Mount Sinai Medical Center and Stony Brook University Hospital, New York, NY



HONORED GUEST LECTURE

11:45 am - 12:35 pm General Stanley A. McChrystal, McChrystal Group, Alexandria, VA

MODERATED POSTER COMPETITIONS IN THE EXHIBIT HALL 12:45 - 2:00pm







uesday MAY

ADULT CARDIAC MODERATED POSTER COMPETITION

P1. Outcomes of Aortic Valve Replacement with Bioprostheteic or Mechanical Valves in End-Stage Renal Disease Patients Taro Nakatsu, Kyoto University, Kyoto, Japan, Japan

P2. Long-Term Effects of Prosthesis Selection in Adults Under 40 Years Old Undergoing Mitral Valve Replacement At 117 Hospitals in the State of California Andrew B. Goldstone, Stanford University, Stanford, CA

P3. Early Reperfusion Strategy Improves the Outcome of Surgery for Type A Acute Aortic Dissection with Malperfusion

Keiji Uchida, Yokohama City University Medical Center, Yokohama, Japan

P4. Combined Transaortic and Transapical Approach to Septal Myectomy in Patients with Hypertrophic Cardiomyopathy and Complex Subaortic and Midventricular Obstruction

Dustin Hang, Mayo Clinic, Rochester, MN

P5. Computed Tomography versus Coronary Angiography for Coronary Screening in Heart Valve Surgery

Joon Bum Kim, Asan Medical Center, Seoul, Republic of Korea

P6. Surgical Treatment of Atrial Fibrillation with Different Lesion Set and **Energy Sources: Mid-term Results in Nine Hundred Patients**

Alexander Bogachev-Prokophiev, Novosibirsk State Research Institute of Circulation Pathology, Novosibirsk, Russian Federation

P7. The Impact of Specific Preoperative Organ Dysfunction in Patients **Undergoing Mitral Valve Surgery**

Amalia Winters, Emory University, Atlanta, GA

P8. Comparison of Hemodynamic Performance and Exercise Capacity of 3 Contemporary Bioprosthetic Aortic Valves: Results from A Prospective **Randomized Study**

Matteo Pettinari, Ziekenhuis Oost Limburg, Genk, Belgium

P9. Intercostal Artery Management in Thoracoabdominal Aortic Surgery: To Reattach or Not to Reattach?

Rana O. Afifi, McGovern Medical School, UTHealth at Houston, Houston, TX

P10. Statewide Impact of Proposed Coronary Artery Bypass Grafting **Bundled Payment**

Robert B. Hawkins, II, University of Virginia, Charlottesville, VA

P11. Use of an Administrative Database Improves Accuracy of Hospital **Reported Readmission Rates**

*James Edgerton, Texas Quality Initiative, Irving, TX

P12. Cardiothoracic Surgery T32 Training Grants Are Vital to the **Development of Academic Surgeons**

Eric J. Charles, University of Virginia, Charlottesville, VA

CONGENITAL HEART DISEASE MODERATED POSTER COMPETITION

P13. Surgical Strategy of Anatomical Repair for Congenitally Corrected Transposition of The Great Arteries

Kai Ma, Fuwai Hospital, Beijing, China

P14. MELD Score and Ventilation Indices are Strong Determinants of Death, Intensive Care Morbidity and Massive Transfusion after Adult Congenital **Heart Disease Surgery**

Jane E. Heggie, Toronto General, Toronto, ON, Canada

P15. The CHSS Complete Atrioventricular Septal Defect Inception Cohort: **Pre-Intervention Echocardiographic Characteristics**

James M. Meza, Hospital for Sick Children, Toronto, ON, Canada

P16. Effect of Atrioventricular Valve Repair on Multi-stage Palliation Outcomes of Single Ventricle Anomalies
*Bahaaldin AlSoufi, Emory University, Atlanta, GA

P17. Long-term Results of Tissue-engineered Vascular Grafts in Pediatric **Patients with Congenital Heart Disease**

Tadahisa Sugiura, Nationwide Children's Hospital, Columbus, OH

P18. Outcomes and Prognostic Factors for Acquired Pulmonary Vein Stenosis in the Current Era

David Kalfa, Columbia University, New York, NY

P19. Autosomal Dominant Mannose-Binding Lecithin Binding Deficiency is Associated with Worse Neurodevelopmental Outcomes After Cardiac **Surgery in Infants**

Daniel Seung Kim, University of Washington, Seattle, WA

P20. Bovine Arch Anatomy Influences Re-Coarctation Rates in the Era of the Extended End-to-End Anastomosis

*Joseph W. Turek, University of Iowa Children's Hospital, Iowa City, IA

P21. Atrioventricular Valve Regurgitation in Patients Undergoing Total Cavopulmonary Connection: Impact of Valve Morphology on Survival and Reintervention

Masamichi Ono, German Heart Center Munich, Munich, Germany

P22. Cardiac Progenitor Cell Infusion to Treat the Patients with Single Ventricle Univentricular Heart Disease Strategy using Cardiac Progenitor Cell Infusion in Children with Single Ventricle Regenerative Therapy Using Cardiac Progenitor Cell for Congenital Heart Disease

*Shunji Sano, Okayama University, Okayama, Japan

P23. Selective Versus Standard Cerebro-Myocardiall Perfusion in Neonates Undergoing Aortic Arch Repair: a Multi-Center European Study. Versus Standard Cerebro-Myocardial Perfusion in Neonates Undergoing Aortic Arch Repair: a Multi-Center European Study *Giovanni Battista Luciani, University of Verona, Verona, Italy

P24. The Most Prevalent Tetralogy of Fallot Surgical Repair Strategy is Associated with Unfavourable Right Bundle Branch Block Sara Hussain, Population Health Research Institute, Hamilton, ON, Canada

GENERAL THORACIC MODERATED POSTER COMPETITION

P25. Comparison of a Digital with a Traditional Thoracic Drainage System for Postoperative Chest Tube Management after Pulmonary Resection: A Prospective Randomized Trial

Kazuya Takamochi, Juntendo University, Tokyo, Japan

P26. Are Minimum Volume Standards Appropriate for Lung and Esophageal **Cancer Surgery?**

*Brendon M. Stiles, Weill Cornell Medical College, New York-Presbyterian Hospital, New York, NY

P27. Pneumonectomy after Induction Therapy for Non-small Cell Lung Cancer: Development of a Nomogram Using Machine Learning Techniques to Assist **Patient Selection**

Chi-Fu Jeffrey Yang, Duke University, Durham, NC

P28. Impact of the Number of Lymph Nodes Examined During a Sublobar Resection on the Survival of Patients with Stage I Non-Small Cell Lung Cancer

*Sai Yendamuri, SRoswell Park Cancer Institute, Buffalo, NY

P29. Improvements in TNM Staging of Pulmonary Neuroendocrine Tumors Requires Histology and Regrouping of Tumor Sizes

Maria Cattoni, Swedish Cancer Institute, Seattle, WA

P30. Tumor Site Microenvironment Factors May Influence Number of Circulating **Tumor Cells in NSCLC Patients**

Lukasz Gasiorowski, Poznan University of Medical Sciences, Poznán, Poland

P31. Prognostic Significance of Ground Glass Opacity Component in the Clinical T Classification of Non-Small Cell Lung Cancer

Aritoshi Hattori, Juntendo University, Tokyo, Japan

P32. Natural History of Ground Glass Lesions Among Patients with Previous **Lung Cancer: Predictors of Progression**

Mara B. Antonoff, MD Anderson Cancer Center, Houston, TX

P33. The Dose-Response Relationship between Perioperative Blood Transfusion and Decreased Survival after Pulmonary Resection for Non-Small Cell Lung Cancer

James Isbell, Memorial Sloan Kettering Cancer Center, New York, NY

P34. Impact of Body Mass Index on Lung Transplant Survival in the United States Following Implementation of the Lung Allocation Score Ramiro Fernandez, Northwestern University, Chicago, IL

P35. Anastomotic Complications after Esophagectomy: Impact of Omentoplasty in Propensity-Weighted Cohorts Following Neoadjuvant Chemoradiation Michael Lu, University of Pittsburgh, Pittsburgh, PA

P36. Using the National Cancer Database to Create a Scoring System that Identifies Patients with Early-Stage Esophageal Adenocarcinoma at Risk for Nodal Metastases

*Benny Weksler, University of Tennessee, Memphis, TN



TRANSCATHETER MITRAL VALVE THERAPIES Implications for Your Practice

TUESDAY, MAY 2, 2017 2:00 - 3:20 pm

TCT1. Outcomes after Transcatheter and Surgical Aortic Valve Replacement in Intermediate Risk Patients with Preoperative Mitral Regurgitation: Analysis of PARTNER IIA Randomized Cohort

*S. Chris Malaisrie, Northwestern University, Chicago, IL

TCT2. Transcatheter Aortic Valve Replacement in Patients With Severe Mitral or Tricuspid Regurgitation at Extreme Surgical Risk

*Michael J. Reardo, Houston Methodist Hospital, Houston, TX

ADULT CARDIAC SURGERY Simultaneous Scientific Session

TUESDAY, MAY 2, 2017 3:55 - 5:35 pm

VALVE REPAIR

45. Complex vs. Simple Degenerative Mitral Valve Disease: Does Valve Complexity Matter?

Hoda Javadikasgari, Cleveland Clinic, Cleveland, OH

46. Respect When You Can, Resect When You Should: A Realistic Approach to Mitral Valve Repair

*Gilles Daniel Dreyfus, Cardiothoracic Center of Monaco, Monte Carlo, Monaco

47. Outcome of Tricuspid Valve Surgery in the Presence of Permanent Pacemaker: Analysis of 616 Patients

Nishant Saran, Mayo Clinic, Rochester, MN

48. Transcatheter or Surgical Intervention for the Failed Pulmonary Valve Homograft in the Ross Population?

Khadija Alassas, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia

49. The Aortic Root and Arch Do Not Dilate Over Time After Aortic Valve and Ascending Aorta Replacement in Patients With Bicuspid Aortic Valves Sonya R. Hui, University of Toronto, Toronto, ON, Canada

EXECUTIVE SESSION AATS Members Only



TUESDAY, MAY 2, 2017 3:55 - 5:35 pm

50. Impact of Initial Pump Positioning on Pump Thrombosis: Insights from the PREVENT Study

*Ahmet Kilic, Ohio State University, Columbus, OH

51. The High Cost of Gastrointestinal Bleeding in LVAD Patients: Impact of Readmissions on Financial Burden and Patient Morbidity Danielle Savino, University of Pennsylvania, Philadelphia, PA

52. Posttransplant Outcomes in Patients on Venoarterial Extracorporeal Membrane Oxygenation: A Comparison with Population on Continuous-Flow Left Ventricular Assist Device Support

Shinichi Fukuhara, Columbia University, New York, NY

53. High-Risk Conventional Cardiac Surgery in Patients with Profound Left Ventricular Dysfunction - A Proposed Treatment Algorithm in the Mechanical Circulatory Support Era

Nassir M. Thalji, Mayo Clinic, Rochester, MN

54. Ten-year Experience with Continuous-flow External Ventricular Assist Device: Evolution and Improving Outcomes in the Treatment of Refractory Cardiogenic Shock

Koji Takeda, Columbia University, New York, NY

55. Early Circulatory Support with Extracorporeal Membrane Oxygenation Improves Outcomes after Severe Graft Dysfunction

Pierre-Emmanuel Noly, Montreal Heart Institute, Montreal, QC, Canada

EXECUTIVE SESSION AATS Members Only

*AATS Member *AmSECT Member





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57. Epidemiologic Analysis and Descriptive Assessment of Management Strategies for Thoracic Aortic Dissections and Thoracic Aortic Aneurysms — A Population Based Study

R. Scott McClure, University of Calgary, Calgary, AB, Canada

58. Stroke Following Thoracic Endovascular Aortic Repair: Implications for Branched Endovascular Arch Repair

Arnoud V. Kamman, University of Michigan, Ann Arbor, MI

59. The Impact Of Chronic Kidney Disease on Outcomes after Crawford Extent II Thoracoabdominal Aortic Aneurysm Repair in 1003 Patients

*Joseph S. Coselli, Baylor College of Medicine, Houston, TX

Aortic Surgery in the 21st Century: Have We Gone Too Far? *D. Craig Miller, Stanford University, Stanford, CA

60. Height Alone (Rather than Body Surface Area) Suffices for Risk Estimation in Ascending Aortic Aneurysm

Mohammad A. Zafar, Yale University, New Haven, CT

61. Differences in Outcomes Between Mechanical and Non-Mechanical Valve Replacement following Repair of Acute Type A Dissection Gabriel Loor, University of Minnesota, Minneapolis, MN

62. Late Reoperations After Acute Type A Dissection: A Report from the Nordic Consortium for Acute Type A Aortic Dissection Study Emily Pan, University Hospital of Turku, Turku, Finland

63. Total Aortic Arch Replacement With Frozen Elephant Trunk Technique. Results From Two Eurpean Institutes

*Davide Pacini, S.Orsola-Malpighi Hospital, Bologna, Italy

64. Valve Sparing Root Replacement in Patients With Bicuspid vs. Tricuspid Aortic Valves

Maral Ouzounian, University of Toronto, Toronto, ON, Canada

65. The Fate of Abdominal Aorta after TEVAR in Chronic Debakey IIIb Aneurysms and Risk Factor Analysis - Is Residual Abdominal Aortic Dissection Stabilized after TEVAR?

Tae-Hoon Kim, Yonsei University College of Medicine, Seoul, Republic of Korea

EXECUTIVE SESSION AATS Members Only

CONGENITAL HEART DISEASE Simultaneous Scientific Session

TUESDAY, MAY 2, 2017 2:00 - 5:35 pm

Insights from the Congenital Heart Surgeons' Society Anomalous Coronary Artery Database

*Marhsall Jacobs, Johns Hopkins Hospital, Baltimore, MD

66. Patients with Anomalous Aortic Origin of the Coronary Artery Remain at Risk Even After Surgical Repair

Shannon N. Nees, Columbia University, New York, NY

67. Selection of Prosthetic Aortic Valve and Root Replacement in Young Patients Less Than Thirty Years of Age

Rita K. Milewski, University of Pennsylvania, Philadelphia, PA

68. Outcomes of the Arterial Switch Operation in ≤2.5kg Neonates: A 10 Year Study

Michael Salna, Columbia University, New York, NY

69. Reoperation for Coronary Artery Stenosis after Arterial Switch Operation Joon Chul Jung, National University Hospital, Seoul, Republic of Korea

70. Laryngeal Ultrasound Detects A High Prevalence of Vocal Cord Paresis After Aortic Arch Repair in Neonates and Young Children

Melissa G. Y. Lee, Royal Children's Hospital, Parkville, Australia

71. Management of Aortic Aneurysms Following Repair of Congenital Heart Disease

*Christian Pizarro, Alfred I duPont Hospital for Children, Wilmington, DE

72. Outcomes of Patients Undergoing Surgical Repair of Multiple Ventricular Septal Defects: a 22-year Study of 157 Patients Michael Daley, Royal Children's Hospital, Melbourne, Australia

EXECUTIVE SESSION AATS Members Only



GENERAL THORACIC SURGERY Simultaneous Scientific Session

TUESDAY, MAY 2, 2017 2:00 - 5:35 pm

PRACTICE MANAGEMENT AND ECONOMICS

73. The Impact of Enhance Recovery After Surgery Protocol Compliance on Morbidity from Resection for Lung Cancer: Experience from a UK Specialist Center

Luke J. Rogers, Derriford Hospital, Plymouth, United Kingdom

74. The Economic Impact of a Nurse Practitioner Directed Lung Cancer Screening, Incidental Pulmonary Nodule, and Tobacco Cessation Clinic Christopher R. Gilbert, Swedish Cancer Institute, Seattle, WA

75. Intraoperative Costs of VATS Lobectomy can be Dramatically Reduced without Compromising Outcomes

Michael T. Richardson, Stanford University, Palo Alto, CA

76. Financial Impact of Adapting Robotics to a Thoracic Practice in an Academic Institution

*Abbas E. Abbas, Temple University, Philadelphia, PA

LUNG TRANSPLANT AND LUNG FAILURE

77. Lung Transplantation in the Era of Lung Allocation Scoring: A Single Center Experience of 1500 Patients

Keki Balsara, Washington University, St. Louis, MO

78. Extracorporeal Life Support as a Bridge to Lung Transplantation: Experience of a High-Volume Transplant Center

Konrad Hoetzenecker, University of Toronto, Toronto, ON, Canada

79. Early Initiation of Extracorporeal Membrane Oxygenation for Influenza Associated Adult Respiratory Distress Syndrome Improves Survival Gary S. Schwartz, Baylor University, Dallas, TX

80. Management of Bronchial Stump in Lobar Lung Transplantation Hidenao Kayawake, Kyoto University, Kyoto, Japan

81. A Propensity Score Matched Study of Lung Transplant Surgery and Concomitant Coronary Artery Bypass Surgery
*Yoshiya Toyoda, Temple University, Philadelphia, PA

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For additional details regarding the presentations, abstracts, and authors, please visit www.aats.org/centennial



Pulmonary Embolism

82. Triage and Optimization: A New Paradigm in the Treatment of Massive

Chetan Pasrija, University of Maryland, Baltimore, MD

83. Mid-term Outcomes in 850 Patients Treated with Aortic Valve Neo-cuspidization using Glutaraldehyde-treated Autologous Pericardium *Shigeyuki Ozaki, Toho University, Tokyo, Japan

84. Role of Transcatheter versus Surgical Mitral Valve Procedures in High-Risk Patients with Recurrent Mitral Valve Disease Dave G. Cervantes, Emory University, Atlanta, GA

85. Training the Cardiothoracic Surgeon of the Future: The Power of High Fidelity Simulation and the UK Tailored Continued Learning Programme Louise Kenny, Freeman Hospital, Newcastle, United Kingdom

Integrity and Professionalism: Our Guides to Educating the Next Generation *G. Alexander Patterson, Washington University, St. Louis, MO

86. Teaching Operative Cardiac Surgery in the Era of Increasing Patient Complexity: Can it Still Be Done?

George Tolis, Jr., Massachusetts General Hospital, Boston, MA

87. Sutureless Aortic Valves Versus Transcatheter Aortic Valve in Patients with Severe Aortic Stenosis and Intermediate Risk Profile: A Propensity Match Comparison in the Real World

*Claudio Muneretto, University of Brescia, Brescia, Italy

88. Oral Anticoagulation Is Not Necessary following Cox-MAZE IV Procedure for Persistent Atrial Fibrillation Discharged in Sinus Rhythm Takashi Murashita, West Virginia University, Morgantown, WV

89. Concomitant Cox-Maze IV Procedure is Associated with Improved Long-Term Survival in Patients with a History of Atrial Fibrillation **Undergoing Cardiac Surgery: A Propensity Matched Study** Farah N. Musharbash, Washington University, St. Louis, MO

CONGENITAL HEART DISEASE Simultaneous Scientific Session

WEDNESDAY, MAY 3, 2017 7:30 - 9:35 am

90. Staged Ventricular Recruitment via Atrial Septation Alone in Patients with Borderline Ventricles and Large Ventricular Septal Defects Olubunmi Oladunjoye, Boston Children's Hospital, Boston, MA

91. Planned Growth of Hypoplastic Cardiac Structures to Achieve Improved **Long-Term Outcomes**

Daniel Labuz, Oregon Health Sciences University, Portland, OR

Staged Ventricular Recruitment- Strategies to Rehabilitate **Borderline Ventricles**

*Sitaram Emani, Boston Children's Hospital, Boston, MA

92. Surgical Algorithm and Results for Repair of Pulmonary Atresia/Ventricular Septal Defect/Major Aortopulmonary Collaterals

*Frank L. Hanley, Stanford University, Stanford, CA

93. Descending Aortopexy and Posterior Tracheopexy for Severe Tracheomalacia and Left Mainstem Bronchomalacia Hester F. Shieh, Boston Children's Hospital, Boston, MA

94. Early and Mid-Term Results of Autograft-Sparing/Ross Reversal: A One-Valve Disease need not become a Two-Valve Disease Syed T. Hussain, Cleveland Clinic, Cleveland, OH

95. Surgical Unroofing of Hemodynamically Significant Myocardial Bridges in a Pediatric Population

Katsuhide Maeda, Stanford University, Stanford, CA

96. Intraoperative Completion Angiogram may be Superior to Transesophageal Echocardiogram for Detection of Pulmonary Artery Residual Lesions in Congenital Heart Surgery Luke Lamers, University of Wisconsin, Madison, WI

GENERAL THORACIC SURGERY Simultaneous Scientific Session

WEDNESDAY, MAY 3, 2017 7:30 - 9:35 am

97. Induction Therapy for Locally Advanced Distal Esophageal Adenocarcinoma: Is Radiation Always Necessary? Douglas Z. Liou, Stanford University, Stanford, CA

98. Use of Drain Amylase allow for Early and Definitive Intervention of Esophageal Leaks and Aids in Preventing Esophagectomy Mortality *Philip A. Linden, University Hospitals Cleveland Medical Center, Cleveland, OH

99. Endoscopic Mucosal Resection for Submucosal Esophageal Cancer David B. Nelson, MD Anderson Cancer Center, Houston, TX

100. Esophagectomy versus Endoscopic Resection for Patients with Early-Stage Esophageal Cancer: A National Cancer Database Propensity-Matched Study Katy A. Marino, University of Tennessee, Memphis, TN

101. AdjUniversity of Virginiant Chemotherapy Improves Survival in Patients with Completely Resected, T3N0 Non-Small Cell Lung Cancer Invading the Chest Wall

Justin Drake, University of Tennessee, Memphis, TN

102. Macroscopic Complete Resection Does Not Affect Survival In Patients With Malignant Pleural Mesothelioma: It Is All Histology And Nodal Disease *Hasan F Batirel, Marmara University Hospital, Istanbul, Turkey

103. A Phase I Trial of Extrapleural Pneumonectomy or ${\bf Pleurectomy/Decortication,\,Intrathoracic/Intraperitoneal\,Hyperthermic}$ Cisplatin and Gemcitabine with Intravenous Amifostine and Sodium Thiosulfate Cytoprotection for Patients with Resectable Malignan *David J. Sugarbaker, Baylor College of Medicine, Houston, TX

104. Lung Adenocarcinoma with Perioperatively Diagnosed Pleural Seeding: Is Main Tumor Resection Beneficial for Prognosis? Mong-Wei Lin, National Taiwan University Hospital, Taipei, Taiwan

105. Lymph Nodal Metastasis in Thymic Malignancies-Results of the Chinese Alliance for Research in Thymomas Prospective Observational Study Wentao Fang, Shanghai Chest Hospital, Shanghai, China

MASTER OF SURGERY SESSIONS 9:45 - 11:30 am

- **Adult Cardiac Masters Of Surgery Video Session**
- **Congenital Masters Of Surgery Video Session**
- General Thoracic Masters Of Surgery Video Session

AATS CENTENNIAL ADJOURNS 11:30 am

*AATS Member +AmSECT Member



April 28-May 2, 2018

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- Access to all the Sunday Symposia
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- Lunch in the Exhibit Hall on Monday and Tuesday
- · Attendance to the Welcome Reception in the exhibit hall



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Please note you can only attend the AATS Innovation Summit or the Saturday Skills Courses. You cannot choose to attend both events on Saturday.

Separate registration is required for the Saturday Hands On Sessions, Member for a Day Session, Survival Guide for the Cardiothoracic Surgical Team, MOC Breakfast, Cardiothoracic Residents' Luncheon, Ethics Forum Luncheon and all social events and tours.



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DEADLINES AND MEETING FEES

| Registration Deadlines | | | | | |
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| March 20, 2017 | and April 18, 2017 | April 19, 2017 | | | |

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| Non-Physician | Genius | \$600 | \$900 | \$1,050 |
| | Innovation | \$675 | \$875 | \$975 |
| Resident/Fellow** | Genius | \$250 | \$350 | \$400 |
| | Innovation | \$375 | \$475 | \$525 |
| Medical Student** | Genius | \$0 | \$300 | \$350 |
| | Innovation | \$125 | \$425 | \$475 |
| Non-Exhibiting Industry | Genius | \$1,450 | \$1,750 | \$1,900 |
| | Innovation | \$1,825 | \$2,025 | \$2,125 |

^{**}Resident/Fellows and Medical Students can only attend the AATS Centennial by registering for the Genius Pass or the Innovation Pass.

| Pricing for Saturday Courses & Sunday Symposia | Early | Advanced | Onsite |
|--|-------|----------|--------|
| Member, Non-Member Physician, & Non-Exhibiting Industry Non-Physicians | \$225 | \$325 | \$375 |
| | \$125 | \$225 | \$275 |

- Prices are shown for each day.
- Register for a Saturday course and/or Sunday Symposium and you will have access to all other courses/symposia taking place that same day.
- If you would like to attend a Hand-On Session on Saturday from 4-6pm, there will be an additional \$75 fee.

| Registration Rates for the AATS Centennial | Early | Advanced | Onsite |
|--|---------|----------|---------|
| AATS Member | \$0 | \$0 | \$0 |
| Non-Member Physician | \$500 | \$600 | \$650 |
| Non-Physicians | \$350 | \$450 | \$500 |
| Non-Exhibiting Industry | \$1,000 | \$1,100 | \$1,150 |

HOUSING INFORMATION

MEETING HOTELS | Housing Deadline: March 20, 2017

- Sheraton Boston Hotel & Towers, (Headquarter Hotel), Connected to the Hynes Convention Center via The Shops at Prudential Center
- Boston Marriott Copley Place, 2 blocks from the convention center and connected via The Shops at Prudential Center
- Westin Hotel Copley Place, 2 blocks from the convention center and connected via Skybridge and The Shops at Prudential Center

SOCIAL EVENTS

AATS / AmSECT **KICK-OFF RECEPTION** Saturday, April 29, 6:30 – 8:30 pm

Skywalk Oservatory - Top of the Prudential Tower \$20 per ticket

Come celebrate with colleagues and leaders of AmSECT and AATS at the Centennial Kick-Off Reception which will be held at the Skywalk Observatory, Boston's only sky-high vantage point for sweeping 360 degree views of Greater Boston and beyond. Views from the Skywalk include Fenway Park, Back Bay, the Charles River and Boston Harbor. Come network with colleagues and kick-off this historic meeting in Boston while enjoying passed beverages and hors d'oeuvres.



AATS **CENTENNIAL GALA**Monday, May 1, 6:00 – 11:30 pm Wang Theater \$250 per ticket for AATS members \$350 per ticket for non-members

The Celebration continues on Monday, May 1st at the once in a lifetime AATS Centennial Gala, which will be held at the famed Wang Theater. This black tie affair will include a cocktail reception, sit-down four-course dinner on the stage, and performances from local musicians representing prestigious Boston institutions.

During this historic evening, the documentary film "In the Beginning" will be unveiled which features an in-depth look at the formative years and challenges faced in cardiothoracic surgery and also includes interviews with Past Presidents and members of the Centennial Committee. This is truly an event not to be missed. Enjoy a night of networking, premieres, performances, and dinner.

TOURS

- Italian Gastronomy North End Market Tour Sunday, April 30, 2017 10:30 – 1:15 pm \$95 per person
- 2. A Visit To The Isabella Stewart Gardner Museum Monday, May 1, 2017 12:15 pm – 2:45 pm \$85 per person
- 3. Beacon Hill Circle "Behind The Brahmin Doors" Tuesday, May 2, 2017 9:15 am – 11:45 pm \$110 per person

All tours depart from the Hynes Convention Center.

3 WAYS TO REGISTER & BOOK HOUSING

- 1 Online at www.aats.org
- 2 Call the AATS/Experient Customer Service Desk at 800-424-5249 (USA) or 847-996-5829 (International).
- 3 Mail/Fax Download a registration form from www.aats.org.

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