

TSRA Announcements & Deadlines

**** LAST CHANCE TO TAKE SURVEY AND ENTER PRIZE DRAWING ****

Academic Cardiothoracic Surgery Survey
 If you are an integrated, traditional, or 4+3 cardiothoracic surgery trainee, please complete the following short survey assessing current trainee experience and exposure to academic cardiothoracic surgery: [CLICK HERE FOR SURVEY](#)

New Survey Proposals — Deadline 5/3
 We encourage any resident to submit interesting research proposals for a nationwide survey of current trainees.

Examples of previous TSRA research publications can be found here: [Bibliography](#)

Eligibility:

- Must be a TSRA member (i.e., any U.S. cardiothoracic surgery resident enrolled at an ACGME-accredited program)
- IRB approval from the primary author's home institution is required.

Please submit all application materials using THIS FORM

Deadline: May 3, 2020 at 11:59pm ET

STS COVID-19 Webinars

Global Summit on Reactivating Cardiothoracic Surgery Programs
 5/4/2020 at 11:00am ET

Special 90-minute worldwide seminar will focus on the recovery of cardiothoracic surgery programs in the post-COVID era. [Featured speakers](#) include leadership from the U.S., Europe, and Asia.

Cardiothoracic Surgery in the COVID Crisis: Impact on Residency and Training
 5/7/2020 at 5:00pm ET

Join the webinar for featured speakers from the ABTS, TSRA, program directors, and a panel of cardiothoracic trainees. Look for e-mail updates from the STS for more details.

Trainee Opportunities in CT Surgery

By: J. Hunter Mehaffey

Click on the links below for more information about these opportunities:

Get Involved!
 To get involved with a [TSRA committee](#), contact the Committee Chairs for more details:

Projects Committee: [Clauden Louis](#)
 Education Committee: [Hunter Mehaffey](#)
 Membership Committee: [Jordan Bloom](#)
 Communications Committee: [Alex Brescia](#)

General surgery residents, cardiology fellows, and international cardiothoracic surgery residents are eligible for Associate Membership in the TSRA by submitting [this application form](#)

No deadline; rolling

The **Metricron Foundational Mitral and Tricuspid Skills Course** has been rescheduled for **October 22-24, 2020**. Please contact [Mary Kay Keers](mailto:mary.kay.keepers@metricron.com) at mary.kay.keepers@metricron.com for more information or to register for this funded opportunity.

Rolling; event Oct 22-24, 2020

[Denton A. Cooley Fellowship](#)

Deadline TBD

[Honoring Our Cleveland Clinic Mentors Program](#)

Deadline TBD

[TSRA/STS Global Outreach Fellowship in Cardiothoracic Surgery](#)

December 15, 2020

[AATS 100th Annual Meeting: A Virtual Learning Experience \(Meeting Program\)](#)

May 22-23, 2020

See the end of this Newsletter for a list of discounts available to trainees during COVID-19

TSRA Advice Column: Burnout

By: Jason Han

Our Advice Column this month included mentor responses to the following question:

**What do you do to prevent burnout in your career?
 What can trainees do to mitigate burnout?**

Here are excerpts from the mentors who answered this month:

JaBaris D. Swain, MD, MPH
 Advanced Fellow
 Cardiopulmonary Transplantation & Mechanical Circulatory Support
 Hospital of the University of Pennsylvania

"Many surgeons do not understand or can relate to the concept of burnout until it is upon them. More often than not, by then burnout is already in its advanced stages, often when irreparable consequences have already encroached upon our lives.

For cardiothoracic surgery, our craft commands a certain level of risk, stress, dedication, and discipline that often exceed those of most other specialties. Therefore, we remain a particularly vulnerable population.

The first important step to mitigating burnout..."

Tom C. Nguyen, MD
 Chief of Cardiac Surgery
 Director of Minimally Invasive Valve Program
 Associate Program Director for Cardiothoracic Surgery
 McGovern Medical School at the University of Texas

"I recommend all trainees and active surgeons read a short essay by Seneca "Brevity of Life" written in 49AD. It is a manifesto on how to get back control of your life. Many of us believe that life is short, and in many ways, it is, but we make it shorter by the daily/hourly decisions and choices we make. Seneca argues that life isn't really that short, but we make it so by our decisions."

Curtis G. Tribble, MD
 Adult Cardiac Surgeon
 Associate Program Director of the Thoracic Surgery Residency
 Professor of Cardiothoracic Surgery
 University of Virginia School of Medicine

"I like to think of this subject as, 'energy management.' Specifically, I think of it in three buckets: 1) things you can do to care for yourself 2) to care for your patients 3) to care for your team members.

For yourself":

- Eat well. Avoid junk food. Stock up on apples and your favorite nuts (almonds, peanuts, etc.) and keep them handy throughout your day. Drink water rather than soft drinks.
- Keep an exercise log. Record everything you do, including walking the stairs. A log of this sort can serve both as a source of pride and as an impetus to do just a little more when you can.
- Always choose your routes around the hospital to see something or someone pleasant, even if those routes take a bit longer..."

Colleen M. Pietras, MD
 Adult Cardiac Surgeon
 Heart Transplant and Mechanical Circulatory Support
 Assistant Professor at Yale School of Medicine

"Overall, prevention of burn-out involves awareness and attention. I recommend finding ways of circling back to why you entered the field in the first place. Identify your own unique contributions to the specialty, and do not compare yourself with others. It is important to learn how to take criticism and to identify with what is constructive. But it is often self-awareness of what you have accomplished to get to this point that is the best source of satisfaction to keep yourself going..."

[Click here to see their full responses](#)

Manuscript of the Month

By: Jordan Bloom

Late Survival and Patient-Perceived Health Status of the Congenital Heart Surgeons' Society dextro-Transposition of the Great Arteries Cohort

Paul J. Devlin, MD, Anusha Jegatheeswaran, MD, PhD, William G. Williams, MD, Eugene H. Blackstone, MD, William M. DeCampi, MD, PhD, Linda M. Lambert, MSN-cFNP, Kathleen A. Mussatto, PhD, RN, Carol J. Prospero, BS, Igor Bondarenko, MD, PhD, and Brian W. McCrindle, MD, MPH

Devlin and colleagues report a multi-institutional retrospective series examining late survival and patient-perceived health status after repair of d-Transposition of the great arteries. 830 neonates from 24 Congenital Heart Surgeons' Society (CHSS) institutions were included in the analysis if they underwent repair from 1985-1990. Operative technique included the arterial switch (62%), Senning (21%), Mustard (13%) and Rastelli (3.5%) operations. The authors present long term outcomes data with a median follow-up of 24 years. Multiphase parametric hazard analysis was used to quantify survival after repair and patient-perceived functional health status was obtained via validated questionnaires.

Remarkably, survival is very good after surgical correction of d-transposition with the mean around 80%. The arterial switch had the lowest hazard for late death (Figure 2). Patient-reported functional health status was similar to non-TGA population in all domains except physical health. Arterial switch patients reported higher functional health status than the atrial switch patients in all domains.

The authors conclude that arterial switch patients have a lower risk of premature death and better FHS than those with an atrial switch. Increased surveillance in atrial switch patients is warranted because of their increased risk of late death.

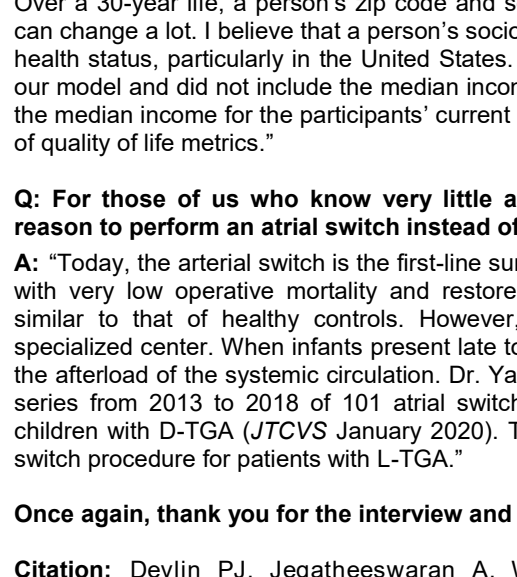


Figure 2. (A) Survival and (B) hazard for death by dextro-transposition of the great arteries (TGA) repair type. The dashed lines show the 70% confidence intervals. (n = number at risk)

Question and answer with lead author Dr. Paul Devlin

Q: Dr. Devlin, congratulations on your high impact publication and being selected as the J. Maxwell Chamberlain Memorial Paper for Congenital Heart Surgery by the STS. Your large study sheds light on very important and difficult to obtain data: long-term outcomes. Given your experience with this project, do you think that the common practice of collection and reporting short-term outcomes is inadequate and needs to be expanded facilitating easier access to longitudinal data?

A: "I don't believe that reporting short-term outcomes is inadequate. As operative mortality has improved across the entire spectrum of cardiothoracic surgery, there has been a movement toward reporting longer-term outcomes and quality of life metrics. I believe we will see similar shifts in nationwide databases. The length of follow-up required for a given project will always be determined by the research question. Our research group sought to analyze the long-term survival of infants who underwent arterial and atrial switch operations for dextro-transposition of the great arteries (D-TGA). It was my privilege to work with the Congenital Heart Surgeons' Society TGA cohort, a large multi-institutional cohort that was followed for over 30 years thanks to the foresight and efforts of the data coordinators across North America, the dedicated staff of the CHSS Data Centre at The Hospital for Sick Children in Toronto, and, most importantly, the cohort participants and their families."

Q: The patients who contributed their data underwent operative repair of TGA during a period of time in which the treatment of transposition of the great arteries was in transition from the atrial switch procedures to the arterial switch procedure. Do any of your data inform us on how best to manage L-TGA?

A: "The cohort established by the CHSS included only neonates and infants with D-TGA, therefore we cannot draw conclusions about how to best manage L-TGA from our data. L-TGA is a different entity that requires a more individualized treatment approach as patients present to care at different ages and with varying levels of symptomatology. Our data help to provide some guidance for congenital heart teams caring for people living with atrial switch repairs of D-TGA."

Q: One of the limitations of your study, as you mentioned, was the inability to adjust for socioeconomic status (SES). This is clearly a challenging variable to quantify. Many studies have suggested that a patient's zip code is one of the best indicators of SES. Do you think using zip code would be adequate and if so, could it improve the R2 in your multivariable model?

A: "Adjusting for socioeconomic status for adult survivors of congenital heart surgery can be tricky. Over a 30-year life, a person's zip code and socioeconomic status, and those of his/her parents, can change a lot. I believe that a person's socioeconomic status throughout his/her life affects their health status, particularly in the United States. We chose to include patient employment status in our model and did not include the median income for each participant's current zip code. Including the median income for the participants' current zip codes may have improved the R2 in the models of quality of life metrics."

Q: For those of us who know very little about congenital heart surgery, is there ever a reason to perform an atrial switch instead of an arterial switch for TGA?

A: "Today, the arterial switch is the first-line surgery for neonates with D-TGA. It can be performed with very low operative mortality and restores normal anatomy with long-term survival that is similar to that of healthy controls. However, it requires early diagnosis and treatment at a specialized center. When infants present late to care, the left ventricle may not be able to assume the afterload of the systemic circulation. Dr. Yacoub's group in Aswan, Egypt recently described a series from 2013 to 2018 of 101 atrial switch repairs performed in late-presenting infants and children with D-TGA (JTCVS January 2020). The atrial switch is also used as part of the double switch procedure for patients with L-TGA."

Once again, thank you for the interview and for your excellent paper.

Citation: Devlin PJ, Jegatheeswaran A, Williams WG, Blackstone EH, DeCampi WM, Lambert LM, Mussatto KA, Prospero CJ, Bondarenko I, McCrindle BW. Late Survival and Patient-Perceived Health Status of the Congenital Heart Surgeons' Society dextro-Transposition of the Great Arteries Cohort. *Ann Thorac Surg.* 2019;108(5):1447-1455.

[Click here to read the full manuscript in The Annals of Thoracic Surgery](#)

Featured TSRA Podcast

By: Garrett Coyan

As we all adjust to the new reality that is cardiothoracic surgery training in the COVID-19 era, we are facing many new daily challenges. Obtaining the knowledge and technical skill to treat our patients will likely look much different for some of us in the near future and even beyond. Please take a moment to listen to our newest special edition podcast featuring Dr. Smood interviewing TSRA president Dr. Vaporiyan regarding the changing landscape of cardiothoracic surgery training during the COVID-19 pandemic:

[TSRA Podcast: Career - COVID19 Training](#)

Please visit the [TSRA website](#) for a follow-up FAQ and review of statements from graduate medical education governing bodies including the ACGME, ABTS, and TSDA.

Call for New TSRA Podcast Ideas
 We want to expand our popular podcast series with new ideas & topics. Our existing collection is available on [Soundcloud](#) & [iTunes](#)

Here is a list of unclaimed topics that need to be recorded:

Adult Cardiac

- Brain and spinal cord protection + neuromonitoring
- Atrial fibrillation (common arrhythmias, postop arrhythmias)
- SAVR: suturesless vs traditional
- Mitral repair: resect or respect

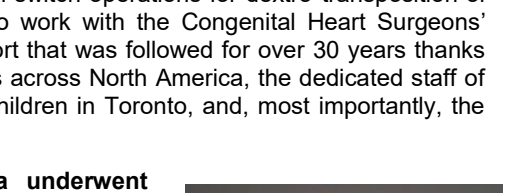
General Thoracic

- Advanced endoscopy + POEM
- Interventional pulmonology skills for surgeons
- Lung rescue and PV ECMO management
- Mediastinal staging
- Mesothelioma and extrapleural pneumonectomy
- Thoracic outlet syndrome

Congenital

- Ozaki procedure
- Scimitar syndrome
- Tricuspid atresia
- Minimally-invasive techniques in pediatrics
- Adult congenital heart disease
- Interventional congenital heart procedures
- Congenital mitral valve disease

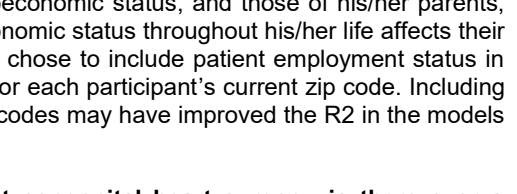
If you are interested in recording one of the unclaimed podcast topics -OR- have new topics to propose, please contact [Clauden Louis](#).



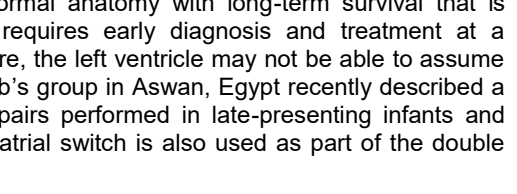
Paul Devlin, MD



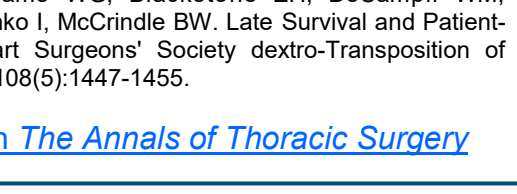
Garrett Coyan



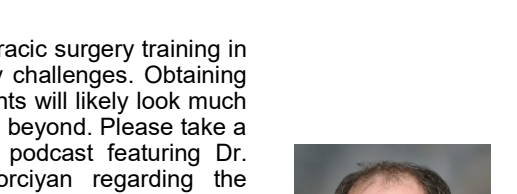
Alex Brescia



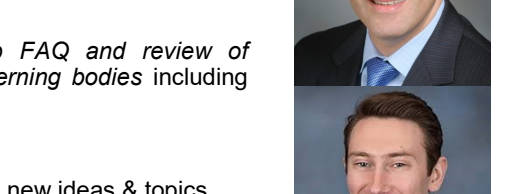
Hunter Mehaffey



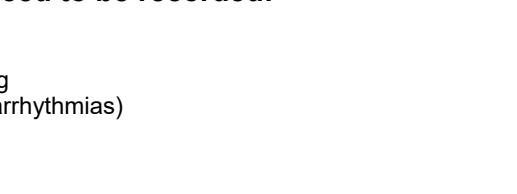
Jordan Bloom



Clauden Louis



Jason Han



David Blitzler



Anthony Mozer

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TSRA Educational Resources

TSRA Decision Algorithms in Cardiothoracic Surgery

- As a print book on [Amazon](#).
- As a [Kindle](#) e-book on Amazon.

TSRA Review of Cardiothoracic Surgery (2nd Ed)

- As a print book on [Amazon](#).

TSRA Clinical Scenarios in Cardiothoracic Surgery

- As a print book on [Amazon](#).
- As a [Kindle](#) e-book on Amazon.
- As an iPad & iPhone app on [iTunes](#).

TSRA Operative Dictations in Cardiothoracic Surgery

- As a print book on [Amazon](#).
- As a [Kindle](#) e-book on Amazon.

TSRA Primer of Cardiothoracic Surgery

- Download from [iTunes](#)

TSRA Multiple Choice Review of Cardiothoracic Surgery

Check out the official website with free [registration](#).

TSRA Newsletter Editorial Team

Alex Brescia — Editor

Hunter Mehaffey — Trainee Opportunities

Jason Han — TSRA Advice Blog and Young Surgeon's Notes

Jordan Bloom — Manuscript of the Month

Garrett Coyan — Featured Podcast

Clauden Louis — TSRA Educational Resources and Multiple Choice Questions

Zachary Spigel — Abstract & Conference Dates

Tariq Sohail Babar — Diagnostic Challenge

Parth Patel — Graphic Support

Abstract Deadlines and Conference Dates

By: Zachary Spigel

Meeting	Submission deadline	Location	Dates
American Association of Thoracic Surgery (AATS)	CLOSED	Virtual	May 22-23, 2020
American Society for Artificial Internal Organs (ASAI0)	CLOSED	Virtual	June 10-13, 2020
Transcatheter Valve Therapy (TVT) Structural Heart Summit	May 15, 2020	Virtual	June 17-20, 2020
Western Thoracic Surgical Association (WTSA)	CLOSED	Vail, CO	Jun-24-27-2020 CANCELED
Extracorporeal Life Support Organization (ELSO)	July 15, 2020	Waikoloa, HI	Sept 23-26, 2020
Transcatheter Cardiovascular Therapeutics (TCT)	June 15, 2020	Miami, FL	Sep 23-27, 2020
American Heart Association (AHA)	June 4, 2020	Dallas, TX	Nov 14-16, 2020
Southern Surgical Association (SSA)	June 30, 2020	Palm Beach, FL	Dec 6-9, 2020
Society of Thoracic Surgeons (STS)	Aug 11, 2020	Austin, TX	Jan 30 - Feb 2, 2021
Academic Surgical Congress (ASC)	Aug 26, 2019*	Houston, TX	Feb 2-4, 2021
Southeastern Surgical Congress (SESC)	Sep 13, 2019*	Atlanta, GA	Feb 13-16, 2021
American College of Cardiology (ACC)	Oct 31, 2019*	Atlanta, GA	Mar 20-22, 2021
American Surgical Association (ASA)	Nov 25, 2019*	Seattle, WA	Apr 15-17, 2021
International Society for Heart and Lung Transplantation (ISHLT)	Oct 15, 2019*	TBD in North America	Apr 21-24, 2021
AATS Mitral Conclave	Jan 6, 2019*	New York, NY	Apr 29-30, 2021
American Association of Thoracic Surgery (AATS)	Oct 15, 2019*	Seattle, WA	May 1-4, 2021
American Society for Artificial Internal Organs (ASAI0)	Feb 3, 2020*		
Transcatheter Valve Therapy (TVT) Structural Heart Summit	April 15, 2020*	Chicago, IL	June 9-12, 2021
Western Thoracic Surgical Association (WTSA)	Jan 6, 2020*	Victoria, BC	Jun 23-26, 2021
CHEST Annual Meeting	Mar 31, 2020*		
Southern Thoracic Surgical Association (STSA)	April 5, 2020*	Atlanta, GA	Nov 3-6, 2021

* Designates previous year's deadline, if current deadline not yet available.

To request inclusion of other specific meetings that may of interest to TSRA members, please contact [Zach Spigel](mailto:Zach Spigel at zxsipigel@texaschildrens.org) at zxsipigel@texaschildrens.org

Sample Questions from the TSRA Multiple Choice Question Bank

By: Clauden Louis

1. As compared to a hemi-Fontan, a modified Glenn shunt has:

- A. Lower degree of sinus node dysfunction
- B. Less atrial suture lines
- C. Does not require CPB
- D. Chance of making future lateral Fontan difficult

Answer and Explanation

Answer D. A hemi-Fontan and patch by amalgamation of the superior cavo-atrial junction with the right pulmonary artery is created by closure of superior cavo-atrial junction in the RA. This method is used if the final configuration will be a lateral tunnel Fontan. It does require CPB and is prone to sinus node dysfunction.

As we oversee the cardiac end of the SVC in a BDG, a future lateral tunnel Fontan may be difficult since dissection of the RA has to be performed to free the cardiac end and that may also entail damage to the artery to the SA node.

2. A patient with a Type A aortic dissection has a pulseless right leg. The following is correct:

- A. After repair of the dissection, the pulse will return following true lumen flow return
- B. After repair, begin anticoagulation and flow will return
- C. An extra-anatomic bypass such as a femoro-femoral/ axillofemoral bypass may be required if due to thrombosis
- D. After repair of dissection, begin below the knee amputation

Answer and Explanation

Answer C. The femoral vessel is obstructed either dynamically by compression by the false lumen or statically by thrombus. While the former may resolve with the type A repair, the latter will require an adjunctive procedure like an extra-anatomic bypass. Choice A requires dynamic compression of false lumen to be the only cause.

3. Which is true regarding thymoma?

- A. Most patients with myasthenia gravis have a thymoma
- B. Patients with a thymoma rarely have myasthenia gravis
- C. Patients with myasthenia gravis without evidence of thymoma can sometimes benefit from thymectomy
- D. Cervical thymectomy is associated with significantly reduced phrenic nerve injury compared to sternotomy approaches

Answer and Explanation

Answer C. Approximately 10-15% of patients with MG will have a thymoma and 30-40% of patients with thymoma will have MG. Thymectomy can improve MG symptoms even in the absence of thymoma for select patients.