

OCTOBER 2023

THE

VOLUME 55 NO 10

# SURGICAL TECHNOLOGIST

OFFICIAL JOURNAL OF THE ASSOCIATION OF SURGICAL TECHNOLOGISTS, INC.

**The Role of  
Aortic Coronary  
Artery Bypass  
Grafting**



# ADVOCATE FOR YOURSELF.



**You advocate for your patients – no question. Now it's time to advocate for the critical role you play as a key member of the surgical team and how important your role is to patient safety.**

AST developed a toolkit specifically for surgical technologists to use when you're explaining just how crucial is it that certified surgical technologists earn education from an accredited program thus making them eligible to sit for the national certifying exam and earn the distinguished CST credential. Scan the QR code to access documents, AST position statements and other resources you need to keep advocating for the profession.



**The Workforce Shortage: A Message from AST**



**CSTs Many Lifesaving Roles**



**AST Encourages Healthcare Facility Leaders to Support Local, Accredited Surgical Technology Educational Programs**



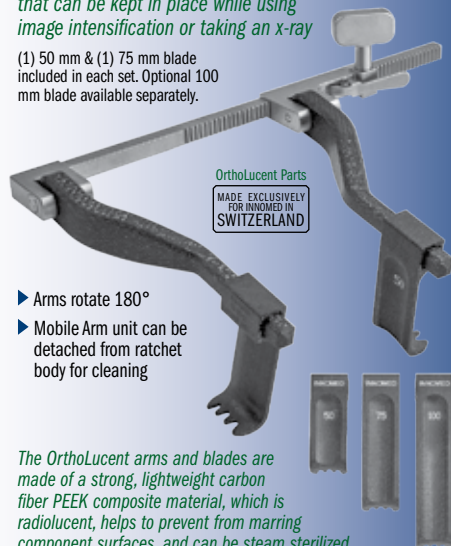
**Recommendations for CSTs, Program Directors, and State Assemblies when Addressing On-the-Job Training with a Healthcare Facility**



## Stainless Steel Hip Surgery Ratchet Frame Set with OrthoLucent™ Arms and Blades

Designed with radiolucent arms and blades that can be kept in place while using image intensification or taking an x-ray

(1) 50 mm & (1) 75 mm blade included in each set. Optional 100 mm blade available separately.



- ▶ Arms rotate 180°
- ▶ Mobile Arm unit can be detached from ratchet body for cleaning

The OrthoLucent arms and blades are made of a strong, lightweight carbon fiber PEEK composite material, which is radiolucent, helps to prevent from marring component surfaces, and can be steam sterilized.

### PRODUCT NO'S:

7428-00 [Set]

Optional Blade - Not Included In Set:

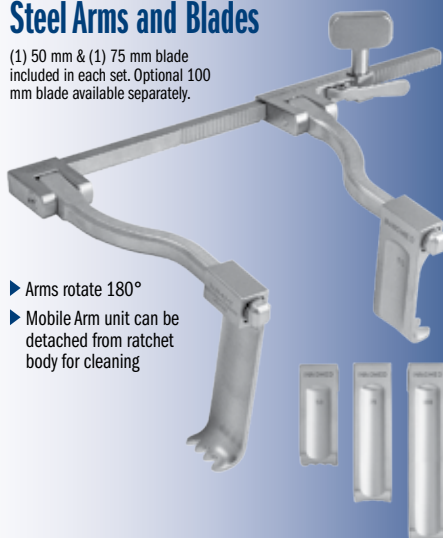
7427-04 [100 mm OrthoLucent Blade]



Designed for self-retaining wound exposure

## Stainless Steel Hip Surgery Ratchet Frame Set with Stainless Steel Arms and Blades

(1) 50 mm & (1) 75 mm blade included in each set. Optional 100 mm blade available separately.



- ▶ Arms rotate 180°
- ▶ Mobile Arm unit can be detached from ratchet body for cleaning

### PRODUCT NO'S:

7429-00 [Set]

Optional Blade - Not Included In Set:

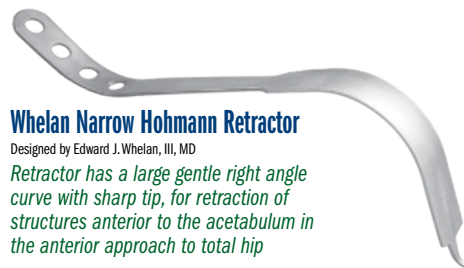
7429-04 [100 mm Stainless Steel Blade]



## Basic Anterior Approach Instrument Set

A Basic Starter Set for the Direct Anterior Approach

Chosen by Edward J. Whelan III, MD



### Whelan Narrow Hohmann Retractor

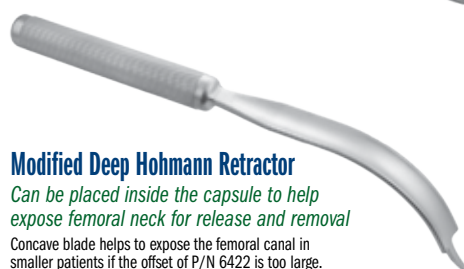
Designed by Edward J. Whelan, III, MD

Retractor has a large gentle right angle curve with sharp tip, for retraction of structures anterior to the acetabulum in the anterior approach to total hip



### Modified Anterior Hip Retractor

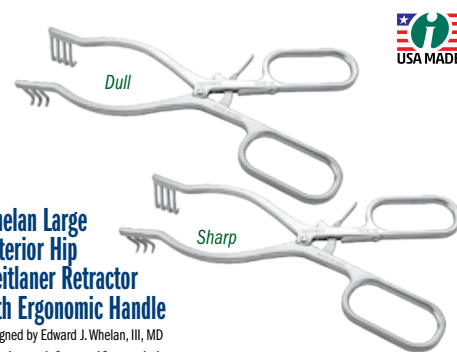
Trochanteric Retractor helps to expose femoral canal and helps protect gluteal muscles



### Modified Deep Hohmann Retractor

Can be placed inside the capsule to help expose femoral neck for release and removal

Concave blade helps to expose the femoral canal in smaller patients if the offset of P/N 6422 is too large.



### Whelan Large Anterior Hip Weitlaner Retractor with Ergonomic Handle

Designed by Edward J. Whelan, III, MD

Designed for self-retaining exposure during anterior approach THA



### Whelan Femoral Neck Elevator

Designed by Edward J. Whelan, III, MD

Elevator has long tines to rest on the stronger bone at the base of the neck and calcar, and also fits well over the lesser trochanter and iliopectas tendon for femoral broaching

### PRODUCT NO'S:

6165-00 [Basic Anterior Approach Instrument Set]  
Set includes (2) #6162 and (1) of the other instruments shown below

Set Includes / Available Individually:

1576-B [Whelan Large Weitlaner Retractor - Blunt]

1576-S [Whelan Large Weitlaner Retractor - Sharp]

3414 [Whelan Femoral Neck Elevator]

6162 [Modified Deep Hohmann Retractor]

(2) included in set, (1) only with this product number

7116 [Whelan Narrow Hohmann Retractor]

6422 [Modified Anterior Hip Retractor - Wide Tip]

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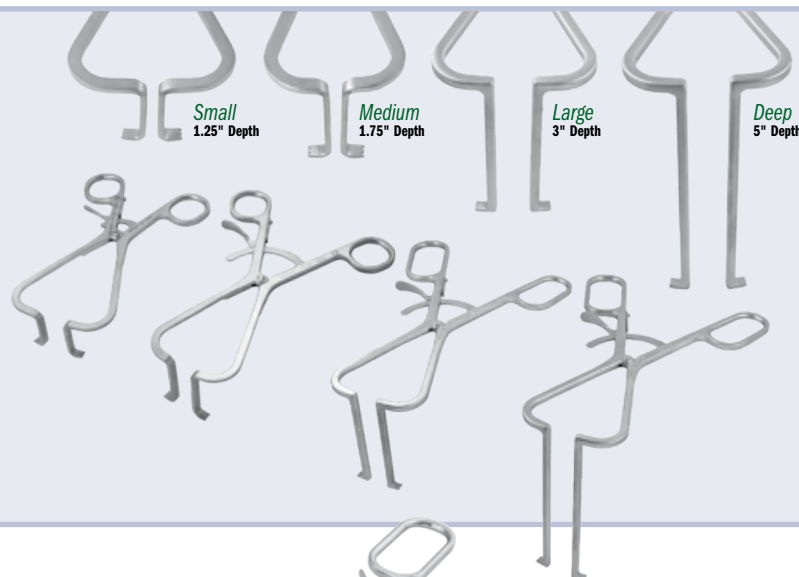
### PRODUCT NO'S:

4191 [Small]

4192 [Medium]

4193 [Large]

4194 [Deep]



## Deep Meyerding Retractor with Ergonomic Handle

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# AST EDUCATORS CONFERENCE

**Save The Date!**

Orlando –  
February 16-17, 2024,  
with the  
Leadership Symposium  
February 15



Registration opening fall 2023.  
Stay tuned for more information!



**STATEMENT OF EDITORIAL PURPOSE** The purpose of the *Journal* is to advance the quality of surgical patient care by providing a forum for the exchange of knowledge in surgical technology and by promoting a high standard of surgical technology performance.

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professional network!



## The Role of Anaortic Coronary Artery Bypass Grafting

*FABIO RAMPONI, MICHAEL SECO, AND MICHAEL P. VALLELY*

As the population ages and co-morbidities become more prevalent, the complexity of patients presenting for coronary artery bypass surgery is increasing. Cardiopulmonary bypass and aortic cross-clamping in these patients carry increased risk. Total-arterial anaortic coronary artery surgery is a technique that provides complete surgical coronary artery revascularization without cardiopulmonary bypass and without manipulating the ascending aorta. The technique essentially eliminates the risk of cerebral embolization of aortic atheroma and aortic injury.

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# Foundation for Surgical Technology Focuses on Providing Support

DUSTIN CAIN, CST, FAST, AST TREASURER, FOUNDATION FOR SURGICAL TECHNOLOGY CHAIR

## BOARD MESSAGE

The Foundation of Surgical Technology's goal is to help surgical technologists prepare, serve, and give back. Through monetary support, the Foundation provides surgical tech students with scholarships to help them through their educational journey and get started into our profession, allow military members the ability to attend a national conference, give educators the recognition they deserve, and support CSTs financial reimbursement for costs occurred during medical mission trips.

The Foundation of Surgical Technology (FFST) is a joint venture by the Association of Surgical Technologists (AST) and the National Board of Surgical Technology and Surgical Assisting (NBSTSA). The committee is composed of three members of the AST board of directors and two members of the NBSTSA board of directors. Members are appointed annually by the board of directors from each organization; it is currently chaired by the AST treasurer. Both organizations donate equal amounts to the Foundation annually, and state assemblies, members and industry partners contribute as well. The Foundation's two big fundraising events occur annually at the Educator's Conference and the AST National Conference. You may have purchased a super bowl square or a raffle number rubber duck to help support our cause. You too can be a Foundation Donor by visiting [www.ffst.org/scholarships/donate-online/](http://www.ffst.org/scholarships/donate-online/). All donations to the Foundation for Surgical Technology are tax deductible.

The Foundation for Surgical Technology awards the following each year.

### Constellation Awards

*Deadline is December 1*

The Constellation Awards presented by the Foundation for Surgical Technology recognizes the profession's hard-work-

If you or someone you know fits into one of these categories, please have them visit [www.ffst.org](http://www.ffst.org) for more information and to apply. You will find more information and deadlines for each of the Foundation awards below.

ing surgical technology educators at three different career levels: early, mid-level and veteran. Since educators nurture our techs-to-be and mentor practitioners, the Foundation hopes that these recognized professionals will share their successes, provide insights on avoiding pitfalls and offer encouragement to other CSTs who are considering making the leap to academia.

Educators can qualify in three categories. One recipient will be selected at each level.

- Rising Stars - Educators with 1-5 years of teaching experience
- Shining Stars - Educators with 6-14 years of teaching experience
- Guiding Stars - Educators with 15 or more years of teaching experience

Each award, valued at \$1,000, includes registration for the AST Educators Conference the following February and monetary support.

Awarded annually at the Educator's Conference.

### Military Scholarships

*Deadline is February 1*

In 2015, Jean Carty-Turner, CST, CSFA, FAST, former AST Secretary and AST Director, established a fund to benefit military members in honor of her father's service. In 2020,

the Foundation's board voted to continue funding this scholarship indefinitely.

The Everett McCreary Military Conference Scholarship offers \$1,000 conference scholarships so that AST members who are active, retired or disabled military and who have never gone to a national conference, can afford to attend AST's Surgical Technology Conference.

### Medical Mission Scholarships

*Deadline is December 31*

This award is for those members who have served on a medical mission. The Foundation reimburses members for costs of the trip that they have paid out of pocket. If the medical mission is sponsored by AST, the Foundation can still reimburse costs that AST didn't cover.

### Student Scholarships

*Deadline is March 1*

The Foundation's biggest commitment is to help surgical technology students pay for tuition or pay off their educational debt. If you have the desire and ability to pursue a career in the operating room and need financial assistance, you should apply for a scholarship.

Applications open December 1 and scholarship award amounts range year to year.

To be eligible for the Foundation's academic scholarships, students must demonstrate strong academic ability, have a need for financial assistance and be enrolled in an accredited program, thus making you eligible to sit for the national certification exam through the NBSTSA.

In 2022, we had over 100 applications and awarded around \$40,000.

Scholarships are announced at AST's national conference.

# AST Follow Us

Connect with the AST online community







# AST News

## AT A GLANCE

### SCHOLARSHIPS

#### Educators – Apply for a Constellation Award!

The Constellation Awards presented by the Foundation for Surgical Technology recognizes the profession's hard-working surgical technology educators at three different career levels: early, mid-level and veteran.

Educators nurture our techs-to-be and mentor practitioners. It is a difficult step to move outside the OR and into the classroom. The Foundation hopes that these recognized professionals will share their successes, provide insights on avoiding pitfalls and offer encouragement to other CSTs who are considering making the leap to academia.

Educators can qualify in three categories. One recipient will be selected at each level.

**RISING STARS** - Educators with 1-5 years of teaching experience

**SHINING STARS** - Educators with 6-14 years of teaching experience

**GUIDING STARS** - Educators with 15 or more years of teaching experience

Each award, valued at \$1,000, will include a registration for the AST Educators Conference in February and monetary support.

**Applications are due December 1.**

To view more details and to apply online, visit [fstf.org](http://fstf.org) – Constellation Awards.

#### Military Members – Apply for a Conference Scholarship!

Are you a military member and never been to an AST national conference, but would like to attend? There's a scholarship to help you do just that. Come join us in Denver in May 2024!

To review the requirements and application, visit the Foundation for Surgical Technology website at [fstf.org](http://fstf.org) and click on Military Scholarships.

#### Apply for a Medical Mission Scholarship

Did you serve on a medical mission during the first couple months of this year, prior to the global pandemic? If so, you may be eligible to apply for a medical mission scholarship.

##### Eligibility

To be eligible for a mission scholarship you must:

- Be an active AST member with currency.
- Complete and submit the Mission Medical Application and the Medical Mission Verification Form by December 31 of the year of your mission.
- Provide a description of your membership history—join date and any AST involvement.
- Upload official documentation of the mission program you have described.
- Upload official receipts documenting the costs incurred by the individual and all costs must be shown in dollars. All assistance is determined after the medical mission trip has occurred and the appropriate documentation has been provided. Upload supporting documents below.
- Upload two letters of recommendation, along with an article describing your experience for The Surgical Technologist journal and related photos.
- Write an article describing your experience for The Surgical Technologist and provide related photos before you will be reimbursed.

### MILESTONES

#### Happy Anniversary!

Congratulations to the following state assemblies as they celebrate an anniversary this month! AST appreciates your hard work, dedication and all your years of service for making our state assemblies the backbone of this organization.

- |                            |                         |
|----------------------------|-------------------------|
| • Indiana – 23 years       | • New Jersey – 17 years |
| • Kentucky – 19 years      | • Oregon – 23 years     |
| • Louisiana – 22 years     | • Texas – 23 years      |
| • Massachusetts – 22 years | • Utah – 17 years       |
| • Minnesota – 23 years     | • Virginia – 23 years   |

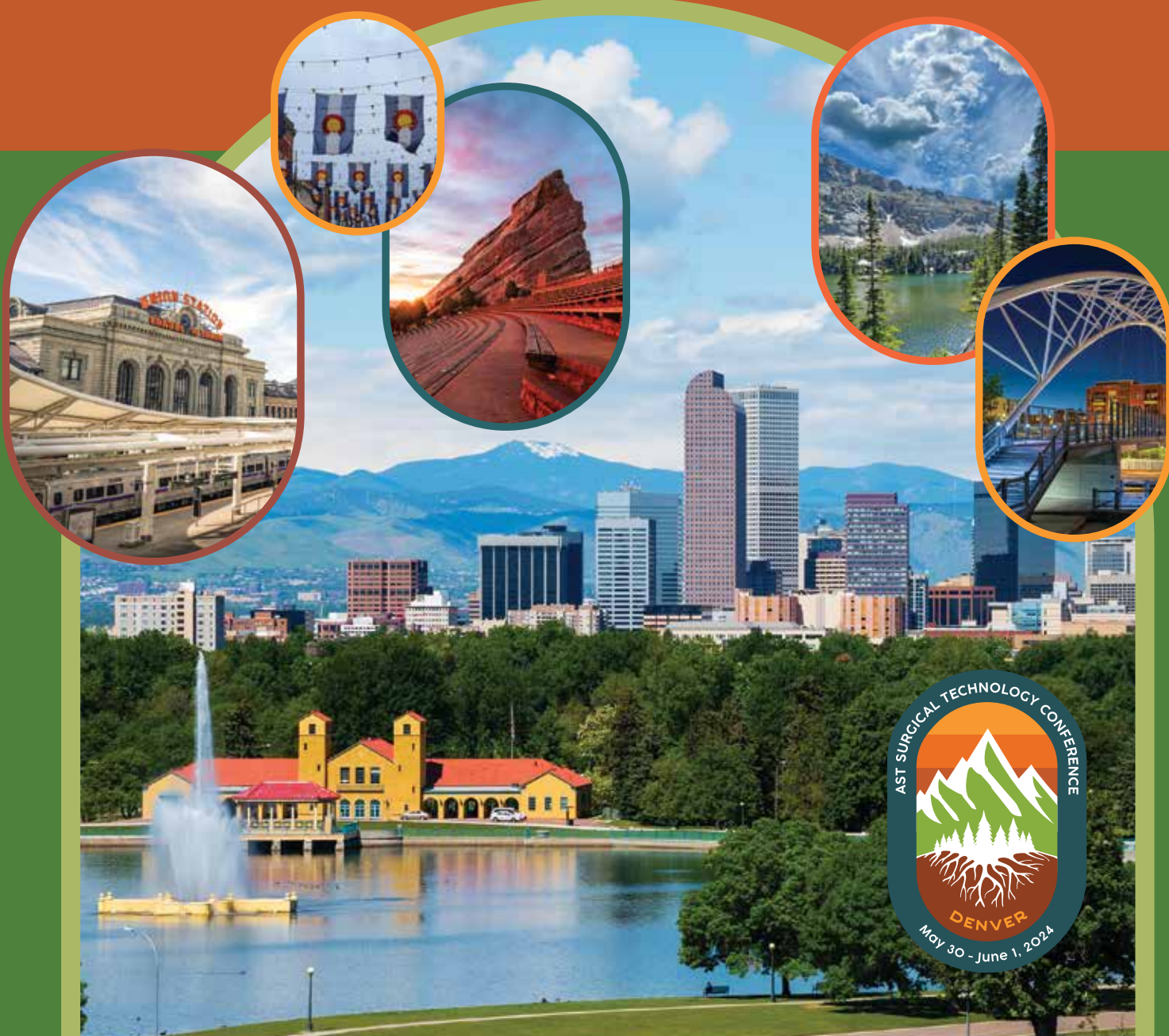


# SAVE THE DATE

## AST SURGICAL TECHNOLOGY CONFERENCE

# DENVER

## MAY 30 - JUNE 1, 2024



# AST Board Update

JESSICA ELLIOTT, CST, RN, FAST, AST SECRETARY



## MEETING MINUTES: AUGUST 2023

A regular monthly meeting of the 2023-2024 AST Board of Directors was called to order at 6 pm EST August 31, via Zoom.

Called to order – Dr. Joseph Charleman, CST, CSFA, FAST, AST President

Roll call – Jessica Elliott, CST, RN, FAST, Secretary

AST BOD members present:

Dr. Joseph Charleman, CST, CSFA, FAST, President

Peggy Varnado, CST, CSFA, FAST, Vice President

Jessica Elliott, CST, RN, FAST, Secretary

Dustin Cain, CST, FAST, Treasurer

Nicol Bates, CST, FAST, Director

Katie Noyce, CST, CSFA, FAST, Director

Sheridan Poffenroth, CST, CRCST, FAST, Director

Alison Wilson, CST, FAST, Director

Nikki Van Vonderen, CST, FAST, Director

Directors absent:

Rob Blackston, CST, CSFA, FAST, Director

Monica Thulon, CST, CFSA, Director

Staff present:

Bill Teutsch, CAE, FASAHP, CEO, Executive Director

### AUGUST BOARD MEETING AGENDA

#### 1. Good News.

- AST Board will work on greetings to the AST membership. AST Board will highlight the positive accomplishments of AST.
- Texas State Assembly and Georgia State Assembly were able to get their respective governors to sign proclamations for National Surgical Technologists Week.

c. Surgical technologists have been recognized in Diversity magazine, a nationally recognized collegiate magazine.

d. Director Van Vonderen wrote an argumentative research paper on why surgical technologists should be certified. One of their state legislators requested to read the paper. This led to a seven-page bill being drafted to present to the Wisconsin legislature. It is being edited for verbiage to present for senate approval.

#### 2. Military Committee – Update

- The committee consisting of Director Bates, Ron Shaffer and Rebecca Music are arranging a meeting in conjunction with the TX AST workshop. They will be visiting with Navy and Army students to talk about AST and our benefits as well as giving information on certification. The committee will meet on September 6 to finalize plans.
- The committee will be getting pictures of military members for the military article for the November Journal.
- The military challenge coin will be redesigned prior to next year's conference.

#### 3. Conference Committee – Update

- Treasurer Cain has met with Jodi Licalzi, Director of Marketing & Communications and staff liaison to the committee, to address member concerns.
- Michael Pickering from Ohio reached out to see if Columbus could be a host city.

#### 4. Advocacy Committee – Update

- The committee met on August 16. The committee's focus is on the development of the toolbox and promotion of advocacy.
- The committee has created a mission statement.



- c. Director Blackston, and chair of the committee, will travel to Nevada to speak about advocacy.
- 5. Restructuring and Reorganizational Committee
  - Update
  - a. Vice President Varnado has selected the committee but has not contacted members yet. Former president Sandy Edwards is continuing to work on a document for clarification.
- 6. State Assembly Meetings
  - a. Director Thulon will attend the Florida AST meeting on September 30.
  - b. SALC Chair Lisa Day and Amy Whitacre will attend the PA AST on September 16.
- 7. Rubric for Committee Chairs
  - a. President Charleman will meet with standing committee chairs to provide a rubric to evaluate their respective members.
- 8. AST Strategic Plan
  - a. An association-leading professional firm has been hired to lead the strategic planning session with the AST Board, titled “Building a World-Class Board.” They will meet with the AST Board of Directors on 10/19 and a half day on 10/20. They also asked to do a separate select interview with a few board members. Those individuals will be Secretary Elliott and Directors Blackston and Noyce.
- 9. Board Meeting in September
  - a. There will be no full AST board meeting in September. There will be an executive officer meeting with CEO Bill Teutsch.
- 10. Medical Mission Committee - Update
  - a. The Healing the Children New Jersey mission trip on 10/7-10/13 to La Romana, Dominican Republic is on schedule.
  - b. The committee will meet with Hearts in Motion for potential future trips.
- 11. CSPS - Update
  - a. CSPS restructured its executive officers to reflect President, Vice-Chair, and Secretary/Treasurer. They have combined the secretary and treasurer positions. This will affect AST appointee Michelle Gay Payne as she moves into the Secretary/Treasurer position but only for a year and then will move to Vice-Chair.

- 12. Virtual Chat and Chew
  - a. President Charleman and Jodi Licalzi, Director of Communications, are putting together a webinar to communicate with members.
- 13. Housekeeping Items
  - a. Committee chairs need to send in their reports.
  - b. Agenda items need to be sent.
  - c. Travel arrangements need to be made and forwarded to Vice President Varnado.
- 14. AST to be Honored
  - a. AST will be recognized at the Healing the Children New Jersey (HTCNJ) Gala schedule for 10/29 at 1 pm. President Charleman, Vice President Varnado, Secretary Elliott, and Directors Bates and Poffenroth, along with AST staff liaison Jodi Licalzi, will attend.
- 15. New Business – None.

The meeting adjourned at 6:58 pm EST/3:58pm PST.



# Federal Registered Apprenticeships: How They Align with CST Values and Opportunities for Advocacy

Vanessa Hannemann, AST DIRECTOR OF GOVERNMENT AFFAIRS

## LEGISLATIVE NEWS

### Do Federal Registered Apprenticeships Align with CST Values?

How do you feel when you hear the word “apprenticeship”? For some Certified Surgical Technologists (CSTs), the response to the word “apprenticeships” is a strong, negative, visceral response: “apprenticeships” are equated to on-the-job training; on-the-job training that puts patients in harm’s way, burdens staff beyond what’s bearable, and is unfair to the 95%+ of the current surgical technologist workforce who earned an accredited education. For others, it’s more upbeat; apprenticeships provide funding to help surgical technology students complete accredited programs and be successfully prepared for the operating room. How a certified surgical technologist responds to the word “apprenticeship” depends on how much they believe apprenticeships align with their values of accredited education and CST certification. CSTs often hold these values dear because they know how vital a CST’s education is for patient safety and surgical patient outcomes. So, what’s the story? Are apprenticeships a force for patient safety or not? Are they fair? Let’s dive in. This article focuses on federal Registered Apprenticeships.

### Current Federal Registered Apprenticeship Legislation

At a policy level, apprenticeships are being discussed more in response to the high-visibility issue of the workforce shortage impacting all industries. In Congress this session (2023-2024), many bills have been introduced to expand federal support for apprenticeships: the American Apprenticeship Act by Representative DeLauro and Senator Klobuchar, the Apprenticeships to College Act by Representative Harder and Senator Klobuchar, the Apprenticeship Hubs Across America Act by Senator Coons and Representative Norcross, the Strengthening Youth Apprenticeships Act of 2023 by Representative Castro and Senator Hickenlooper, and the National Apprenticeship Act of 2023 by Representative R. Scott and Senator Baldwin. There are also many other federal apprenticeship bills. You can see it’s a popular topic.

### Registered Apprenticeship History

Federal Registered Apprenticeships have existed for about 85 years. The original National Apprenticeship Act §29 USC 50 was signed in 1937 as part of the New Deal. At that time, it primarily affected the skilled trades. At the beginning of this century, its scope was increased to include health care. A Department of Labor report recently stated that only 0.3% of the workforce participates in an apprenticeship. The original *surgical technologist* apprenticeship was introduced by the US Department of Labor in 2003. It was structured as a 4,000-hour apprenticeship.

### Today’s Registered Apprenticeships

Each state’s Registered Apprenticeships are either run through a state apprenticeship agency or, if the state does not have a state apprenticeship agency, through the Office of Apprenticeship at the US Department of Labor. These offices provide technical support, provide funding, and ensure federal regulations are followed. Their staff aims to work collaboratively with employers to develop a well-trained workforce and uplift underserved populations and communities. “Registered” means the apprenticeship meets US Department of Labor standards. The US Department of Labor states, “Registered Apprenticeships” are industry-vetted and approved and validated by the US Department of Labor or State Apprenticeship Agency.” Federal apprenticeship grants are given to organizations such as state labor departments, community colleges, and nonprofits. For example, a student might get paid clinicals through an apprenticeship. Apprenticeship funding varies and may also pay for tuition, wages, employer training costs, childcare, or transportation.

### Do Federal Registered Apprenticeships align with AST values of accredited education and CST certification?

AST surveyed all the surgical technologist Registered Apprenticeships nationally, and the good news is a vast majority of federal Registered Apprenticeships are set up in collaboration with accredited surgical technology programs. That means a vast majority of apprenticeships provide comprehensive, high-quality didactic education, 225 hours of skills lab, 540 hours of diverse

clinical experiences, and qualify apprentices for the CST certification from the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

### **High Standards Required**

The US Department of Labor has many regulations to try to ensure well-trained apprentices. When apprenticeships are done collaboratively with CAAHEP- or ABHES-accredited programs, they naturally meet and exceed the requirements of a federal Registered Apprenticeship.

### **A “Portable, Nationally Recognized Credential within Their Industry” Required**

The US Department of Labor states apprentices should earn a portable, nationally recognized credential within their industry. Registered Apprenticeships should qualify trainees to take the CST exam given by the NBSTSA because:

- The CST is the only credential recognized in every state;
- The CST is the only credential recognized by the American College of Surgeons (ACS), the national Council on Surgical and Perioperative Safety (CSPS), the Association of Surgical Technologists (AST), and the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA); and because the
- Association of periOperative Registered Nurses’ (AORN) qualifications for the scrub role require surgical technologists to (a) graduate from an accredited surgical technology program; (b) Certified Surgical Technologist (CST) certification; (c) Basic Life Support (BLS) certification; and (d) basic computer skills.

Similarly, the US Department of Labor states that Registered Apprenticeships are “industry-vetted and approved to ensure alignment with industry standards.”

### **Experienced Mentors Required**

The federal regulation states that Registered Apprenticeships must have instructors that “meet the State Department of Education’s requirements for an instructor in the State or be a subject matter expert ... who is recognized within an industry as having expertise in a specific occupation.” A certified surgical technologist should mentor apprentices based on the industry standards listed above.

### **Education Required**

Apprentices in federal Registered Apprenticeships must have enough education to ensure “quality and success.” That means apprenticeship education should be appropriately accredited if Registered Apprenticeships follow the guidelines set forth by ACS, AST, CSPS and other operating room professional associations.

### **Skills for Safety Required**

Yet another reason apprentices in federal Registered Apprenticeships should be educated through an accredited program is that apprentices must be equipped with safety skills. The operating room is perilous, especially for someone without enough knowledge and practice. Apprentices deserve to understand laser safety, bloodborne pathogen safety, sharps safety, chemical safety, microbiology/infection prevention, personal protective equipment, the immune system, and much more to be safe. Students also deserve a skills lab to practice with blades, needles, and other sharps before setting foot in the fast-paced operating room with speedy surgeons, traumas, and large surgical teams.

### **Federal Registered Apprenticeships are Either Time-Based or Competency-Based**

Surgical technology Registered Apprenticeships should be 4,000 hours in alignment with the original surgical technologist apprenticeship approved by the US Department of Labor. This is how long it takes to educate a surgical technologist. Federal regulations require either a time-based, competency-based, or hybrid structure. Registered Apprenticeships, in general, are moving more toward a competency-based design.

I am concerned about the movement toward a competency-based design. I can easily envision an operating room manager swiftly checking off the competency list before the trainee is genuinely ready. We all know some operating room managers who put getting surgeries done and making surgeons happy ahead of ensuring a well-prepared surgical technologist.

### **What Have You Seen in the Field?**

Hopefully, this helps you understand the history and status of Registered Apprenticeships and, most importantly, to what degree Registered Apprenticeships align with certified surgical technologist values in support of patient safety and optimal patient outcomes. This information helps guide how AST and its members can speak up to shape Registered Apprenticeships to align with CST values. I’m curious what you’ve seen in the field. Please email [governmentaffairs@ast.org](mailto:governmentaffairs@ast.org) with information about what you’ve seen regarding Registered Apprenticeships.

## **Want to Learn More?**

If you’re curious to learn more about apprenticeships, email [governmentaffairs@ast.org](mailto:governmentaffairs@ast.org). We’ve done a lot of research. We’re happy to share our apprenticeship report, links, and documents with our members.



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A screenshot of a laptop screen displaying the AST Career Center website. The page has a light blue background with a dark blue header. The header contains the AST logo (a stylized 'A' and 'S' forming a triangle) and the text 'AST Association of Surgical Technologists'. Below the header, the text 'AST Career Center' is prominently displayed, followed by 'Job Search'. There is a white search input field and a red 'Search' button. The laptop is shown from a slightly elevated angle, with a blue polka-dot pattern visible on the surface it's resting on.

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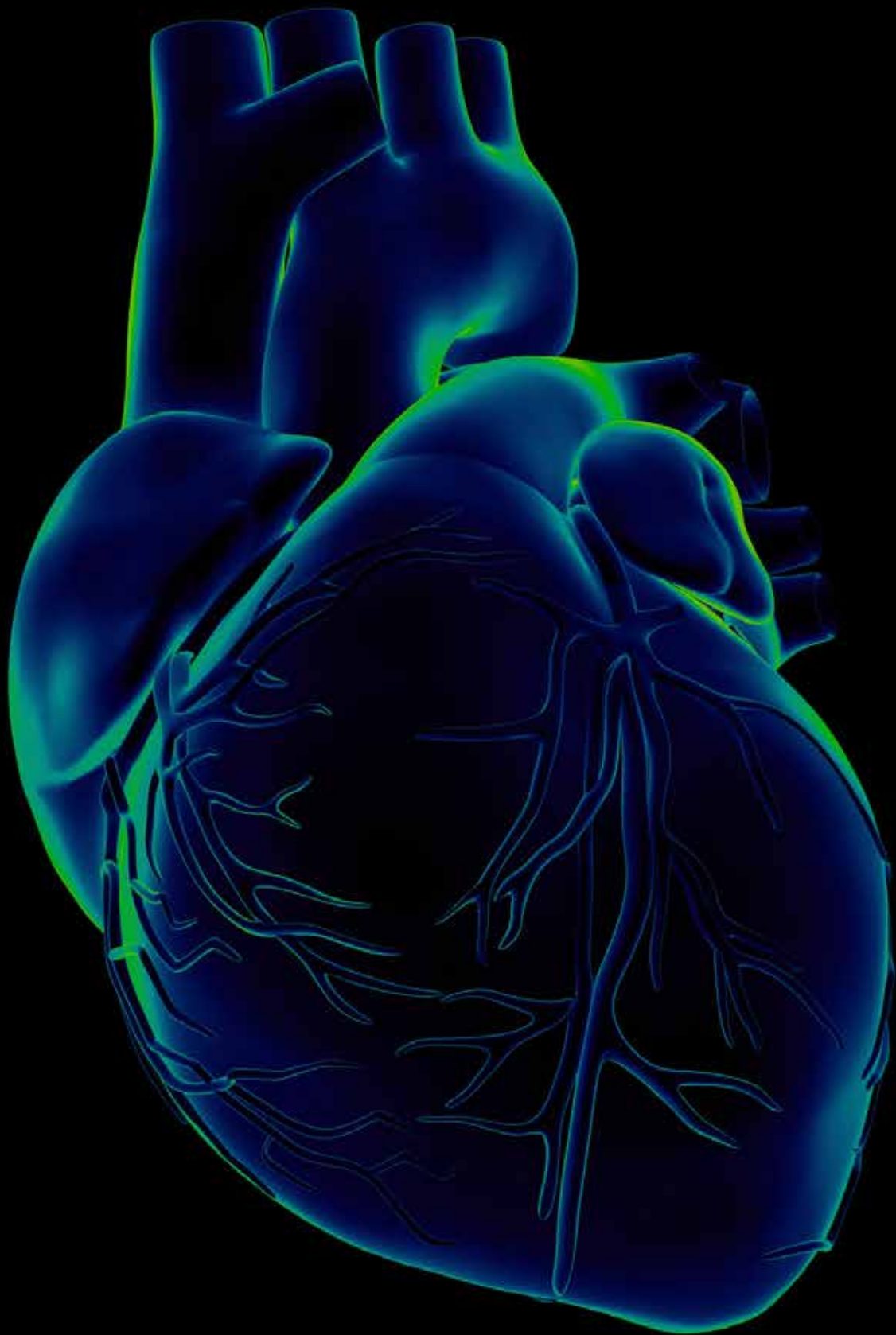
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# Defining the Role of Anaortic Coronary Artery Bypass Grafting

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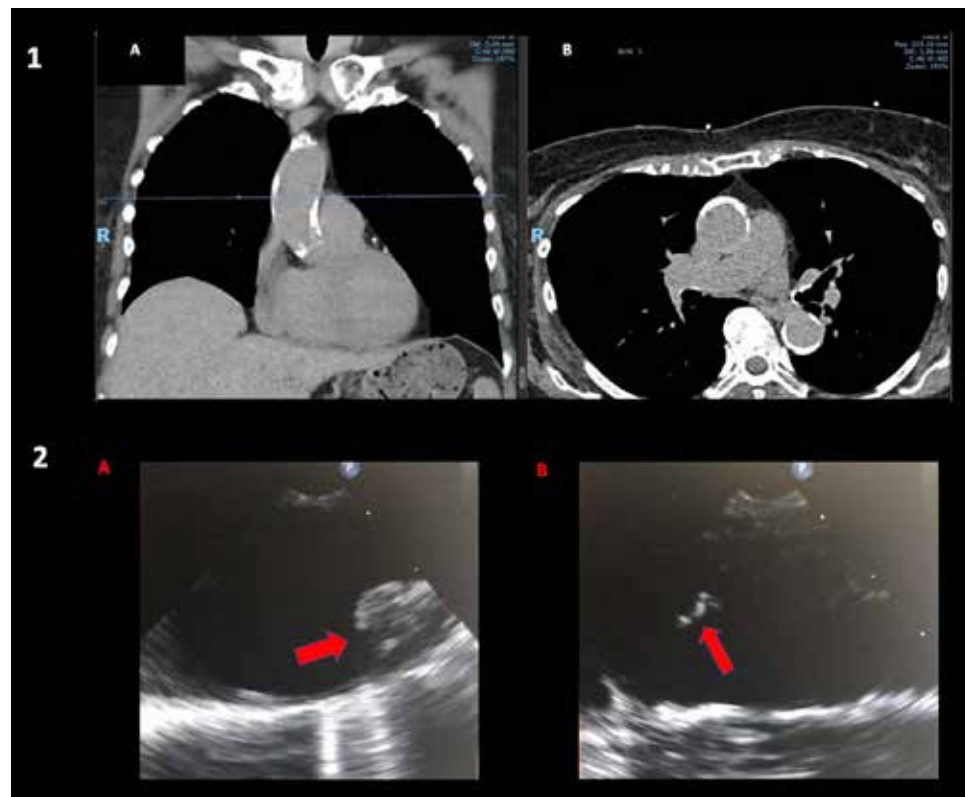
**Abstract:** As the population ages and co-morbidities become more prevalent, the complexity of patients presenting for coronary artery bypass surgery is increasing. Cardiopulmonary bypass and aortic cross-clamping in these patients carry increased risk and, indeed, in some patients, with ascending aortic disease, the risks are prohibitive. Total-arterial anaortic coronary artery surgery is a technique that provides complete surgical coronary artery revascularization without cardiopulmonary bypass and without manipulating the ascending aorta. The technique essentially eliminates the risk of cerebral embolization of aortic atheroma and aortic injury. Anaortic techniques are an essential skillset for coronary artery surgery centers treating higher-risk patients.

**Keywords:** coronary surgery; off-pump; anaortic; stroke

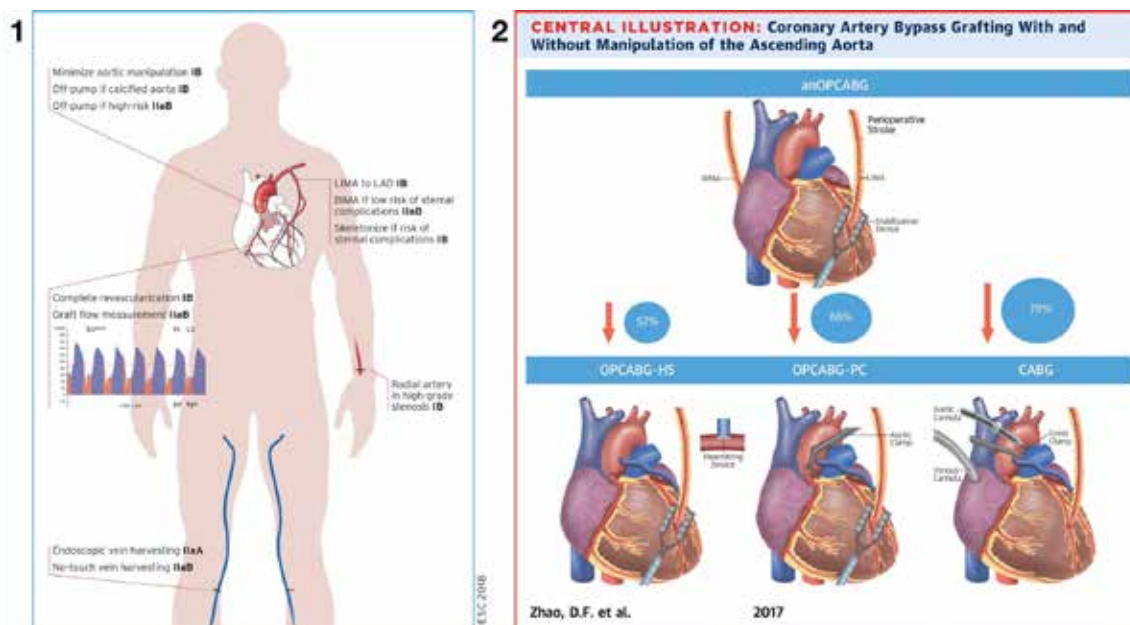
Anaortic coronary artery bypass grafting is a technique of off-pump surgical coronary artery revascularization that completely avoids aortic manipulation by using composite grafts with in-flow from one or both IMAs or the gastro-epiploic artery, often using all-arterial grafts. Typically, the IMAs are used for in-flow, and our group has published on the use of a single IMA and double IMAs as the in-flow for the radial artery as a composite T or I graft, respectively [1,2].

There are patients for whom the use of cardiopulmonary bypass and aortic cross-clamping confers such a risk that its use is absolutely contraindicated. These patients include but are not limited to those with a porcelain ascending aorta and/or grade V mobile atheroma in the ascending aorta or aortic arch (Figure 1, Panel 1a and 1b, and Panel 2a and 2b). These patients have a prohibitive risk of disseminated emboli from the aortic cross-clamp, the jet from the aortic cannula inflow and, in the case of a porcelain aorta, aortic rupture and or dissection from a cross-clamp injury [3].

To define the role of anaortic or “aortic not touch” coronary surgery, it is now widely accepted that the technique confers the greatest clinical benefit to patients at high risk for aortic atheroembolism because of aortic manipulation during CABG from aortic cannulation, cross-clamping, and the placement of aorto-coronary grafts on the ascending aorta [4,5]. Indeed, anaortic surgery carries a Class 1b indication in the EACTS/ECC 2018 Coronary Revascularization Guidelines for patients with a diseased ascending aorta [6] (Figure 2, Panel 1). Similarly, a joint statement from the American Heart Association and The American Stroke Association in 2021 established that Anaortic OPCAB was the standard of care in the elimination of embolic stroke after CABG [7] and is a Class 2a indication in the most recent AHA coronary guidelines [8].



**Figure 1. (Panel 1):** Coronal (A) and axial (B) views of a chest CT showing extensive ascending aortic calcifications in a 75-year-old lady admitted with unstable angina; coronary angiogram showed severe distal left main disease. **(Panel 2):** Intraoperative TOE showing grade IV (>5 mm) (A) and grade 5 (mobile) (B) aortic arch atheroma of a 72-year-old man undergoing combined right carotid endarterectomy and anaortic OPCAB.



**Figure 2. (Panel 1):** The 2018 ESC/EACTS Coronary Revascularization Guideline recommendations for specific surgical techniques [6]. Reprinted with permission. **(Panel 2):** Four surgical methods of

coronary artery bypass grafting with increasing degrees of aortic manipulation. Percentages pictured represent the relative decrease in risk of perioperative stroke using anOPCABG compared to the other techniques [4]. Reprinted with permission. (CABG: coronary artery bypass grafting with cardiopulmonary bypass; anOPCABG: anaortic off-pump coronary artery bypass grafting; LIMA: left internal mammary artery; OPCABG-HS: off-pump coronary artery bypass grafting with the Heartstring system; OPCABG-PC: off-pump coronary artery bypass grafting with partial clamp; RIMA: right internal mammary artery).

However, there is increasing evidence to show that embolic strokes, as defined by new lesions on diffusion-weighted MRI [9], occur in up to 40% of patients undergoing on-pump coronary artery bypass surgery with aortic cross-clamping [9]. It has also been established that occult strokes are not benign and lead to significantly higher short- and long-term morbidity and mortality [9,10]. Therefore, there may be a compelling argument for a more widespread use of anaortic techniques in the performance of routine CABG.

The CORONARY trial is widely regarded as the most robust randomized controlled trial comparing on-pump to off-pump CABG in higher-risk cases, performed by experienced surgeons [11]. The CORONARY trial, however, failed to demonstrate a neurological benefit of OPCAB over on-pump CABG. The likely reason why the CORONARY trial failed to show a benefit was that the OPCAB technique was not specified or reported in the results. Some patients had proximal anastomoses performed using a side-biting clamp, others were treated with a proximal anastomotic device, and some patients had anaortic surgery. Therefore, it was not possible to demonstrate the benefit of anaortic surgery in the setting of a surgical randomized control trial.

In an effort to establish the evidence for reducing aortic manipulation during CABG, a network meta-analysis of more than 46,000 patients published by our group in 2017 demonstrated a clear neurological benefit of completely avoiding aortic manipulation during CABG, with a 78% stroke reduction compared to on-pump CABG [4] (Figure 2, Panel 2). More recently, a randomized controlled trial of OPCAB with and without aortic manipulation showed a three-fold reduction in post-operative delirium and cognitive dysfunction when anaortic surgery was compared to a side-biting clamp on the ascending aorta [12].

The technical details of the performance of anaortic OPCAB have been described in several publications by our group [1,13]. There are three potential arterial inflows for the composite grafts. These are the left and right internal mammary arteries and the gastroepiploic artery. Our group has limited experience with the gastroepiploic artery which is more commonly used in Japan and other Asian countries, with excellent published outcomes [14].

We prefer using two IMA inflows, with a LIMA to the LAD and a RIMA/radial artery composite “T” graft, via the transverse sinus, using multiple sequential distal anastomoses to targets on the lateral and inferior walls. This offers separate inflows, maintaining the integrity of the LIMA to the LAD, reducing the risk of competitive flow away from the LAD. There is also a theoretical benefit of increased blood flow for exercise. There is some evidence to show that long-term survival is greater with two IMA in-flows compared to a single LIMA in-flow [15]; however, other authors have demonstrated excellent long-term outcomes for single-IMA/radial composite Y/T grafts [16].

Concerns regarding deep sternal wound infection and the use of BIMAs have been used by some as a reason not to pursue this technique. However, data from the ART trial [17] and our own series [18] support the routine use of BIMA in CABG if the IMAs are harvested using a skeletonized technique. Skeletonized arteries are also longer, often easier to use, and offer flexibility for the construction of composite grafts and the performance of sequential grafts. There is also evidence for less bleeding and need for transfusion if the IMAs are taken in a skeletonized fashion [19].

The use of composite grafts allows for significant flexibility in the deployment of grafts, and the common configurations are demonstrated in Figure 3 (Panel 1). The mainstay of our technique remains the two IMA inflows with a RIMA/RA tandem/I graft. However,



several researchers [16] have published on the use of a single LIMA in-flow with RA composite T or Y grafts. Both techniques are easily reproducible when the surgeon and the wider team have sufficient training and become proficient. The use of composite grafts has been shown to be equivalent, if not superior, to the use of aorto-coronary grafting [20,21]. Another advantage of composite grafts is the ability to perform more grafts, often increasing the number of arterial grafts and decreasing or eliminating the use of vein grafts [22]. The conduit harvesting time is reduced, and there is also a need for fewer proximal anastomoses.

Cardiac positioning is facilitated using pericardial release incisions down to the SVC at the SVC/RA junction and at the diaphragm/IVC junction. Care must be taken to avoid a phrenic nerve injury when performing these release incisions (Figure 3, Panel 2). Placing the left-sided pericardium behind the sternal retractor also delivers the heart anteriorly and creates more space to observe the lateral wall when grafting. The use of silastic intracoronary shunts is also imperative. This not only provides a relatively bloodless field and distal coronary perfusion but also makes catching the back wall of the coronary artery virtually impossible, therefore minimizing technical mishaps. The use of TTFM flow probe assessment is also an essential quality control measure in all coronary surgery scenarios [23].

There are some patients for whom off-pump surgery is not possible or its performance compromises the perfusion of other organs. Cardiomegaly can be problematic when positioning the heart in order to graft the lateral wall. Some hearts dilate in a longitudinal fashion, and the procedure can be assisted with a more aggressive “verticalization” of the heart to facilitate lateral wall grafting. Some hearts dilate in the transverse plane, and it can be almost impossible to deliver the lateral wall safely to facilitate grafting. In our experience, this scenario is most common in obese patients with diabetes and poorly controlled hypertension.

If conversion to on-pump surgery is required, then it is important that this is managed in a controlled fashion. We have a relatively simple approach to this situation. If the positioning of the heart is not possible, despite all anesthetic and OR table maneuvers having been tried, then we stratify the patients into those in whom the risk of aortic cross clamping is unacceptable and those in whom it is not. Beating heart on-pump is a good strategy in cases where the conversion to on-pump surgery is for ischemia; however, when it is for cardiomegaly, the heart may not decompress enough to be easily positioned. In this situation, we may use the traditional aortic cross-clamping, cardioplegic arrest, and left ventricular venting technique.

As the population ages and the complexity of intercurrent co-morbidities increases, cardiovascular interventionalists are facing increasing challenges to deliver appropriate therapy to this group of patients. Patients with severe structural heart disease, such as aortic stenosis or mitral regurgitation, often have intercurrent coronary artery disease. The severity of atherosclerosis and vascular calcification can mean that coronary stents are inappropriate or have been used in the past and have now failed and that coronary disease requires surgical correction. This can be managed with anaortic CABG techniques, as described above and elsewhere [3]. However, a significant challenge is when the patient also has structural heart disease of a severity that precludes a staged approach.

Our group developed a program of concurrent anaortic OPCAB and TAVR during the same anesthetic, performed in a hybrid operating room. The anaortic OPCAB is performed first via median sternotomy or a left-anterior thoracotomy. The heparin is reversed, and the patient is then closed, re-prepped, and draped, and the transfemoral TAVR is performed in the routine fashion. This allows for the concurrent safe treatment of complex coronary artery disease and severe aortic stenosis, peri-operatively avoiding cardiac ischemia or aortic stenosis related low cardiac output. We recently published a series of eight patients, including technical considerations [24].

Similarly, patients with severe mitral regurgitation in the setting of a porcelain circulation may undergo anaortic OPCAB and then have the mitral valve treated with percutaneous edge-to-edge repair. However, the challenges of positioning the heart for OPCAB in

the setting of severe mitral regurgitation are not insignificant. A more reasonable approach may be to treat the mitral valve with a Mitra-Clip at least three months prior to anaortic OPCAB. This would allow for the endothelialization of the Mitra-Clip and perhaps a reduction in left ventricular size, thus preventing clip dislodgement and assisting in cardiac positioning during OPCAB, respectively.

Patients with complex cerebrovascular and peripheral vascular disease often present for surgical coronary revascularization. We reported on a series of 39 combined carotid endarterectomy and anaortic CABG with 5.2% mortality and a 2.6% stroke rate [25]. The carotid endarterectomy was performed first by a specialist vascular surgeon and then anaortic OPCAB was performed by an anaortic specialist. More recently, our group presented the results of a network meta-analysis which established that a combined carotid endarterectomy and OPCAB approach resulted in superior neurological and cardiac outcomes over a staged or reverse-staged approach [26].

Coronary artery bypass surgery remains the most frequently performed operation in adult cardiac surgery. It is a procedure that is often viewed as a commodity item and not as a sub-specialist procedure. The sheer volume of patients requiring the procedure and the fact that it is often performed in smaller centers in a sub-acute setting perpetuates this. However, there is a need for this specialty to recognize the role that advanced coronary artery surgery plays in the delivery of care for patients, especially in the context of the ageing population.

Today, coronary artery surgery is being recognized as a heterogeneous technique, where the use of more advanced techniques such as all-arterial and anaortic approaches may yield superior shorter- and longer-term outcomes. Traditionally, surgeons have been reluctant to refer patients on to sub-specialist surgeons for fear of losing their own practice. However, it behooves us as a craft group to recognize that not all patients can be treated safely by all surgeons and/or centers, and there needs to be mechanisms with which to recognize complex patients and have them referred on appropriately.

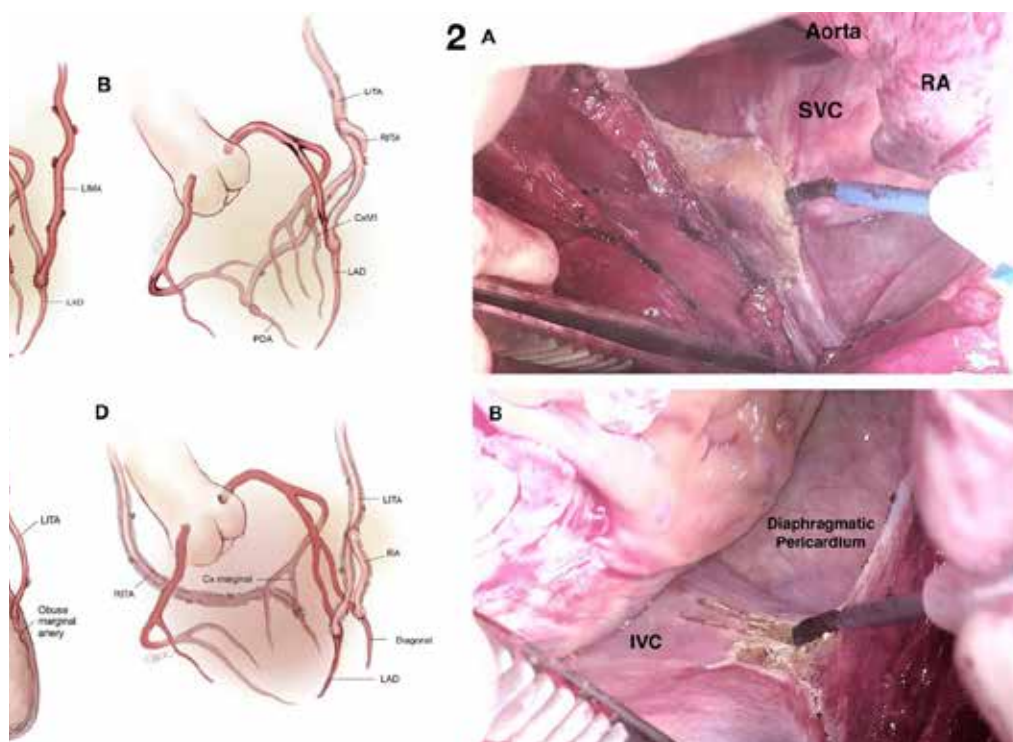
A pragmatic approach to more advanced techniques in cardiac surgery needs to be accepted. Not all surgeons are comfortable with all techniques. As highlighted above, the advantages of anaortic surgery are most relevant in patients with severe aortic disease. A simple approach is to pre-operatively screen all-comers with a non-contrast CT and to triage the patients to the appropriate surgeon within the unit and to refer outside the unit if the expertise does not exist within the unit. In our practice, we perform a non-contrast CT chest for all-comers, with the exception of very young patients (i.e., <50 yo) and unstable patients for whom transfer to a CT scanner would be unsafe. We perform epi-aortic US for all patients regardless of the revascularization technique.

Across the spectrum of cardiac surgery, high-volume surgeons and high-volume centers have been shown to achieve better outcomes than their lower-volume counterparts [27,28]. Surgery is a technical exercise, and there are subtleties to each patient that require the surgeon and the wider team to make decisions of a technical and management nature that will affect the outcome. OPCAB is widely accepted to be a technically more difficult procedure than on-pump CABG, and to this end, volume and expertise will more than likely confer significant outcome benefits for patients [29].

Individual surgeon experience in OPCAB is an important determinant in patient selection for OPCAB. The unique technical challenges of OPCAB grafting (especially anaortic techniques) and its relative unfamiliarity have raised concerns that the adoption of OPCAB may lead to poorer outcomes during each surgeon's "learning curve." With careful patient selection, OPCAB surgery can be gradually assimilated into clinical practice while preserving and ultimately improving clinical outcomes. Very early in a surgeon's experience, it is reasonable to exclude patients with depressed left ventricular function and left main disease and those requiring multiple lateral wall grafts. With experience, more complex and technically challenging cases can be performed safely off-pump; a step-wise approach is recommended to take an individual surgeon and a surgical program from the "basic" LIMA/SVG on-pump CABG to more advanced techniques including, inter

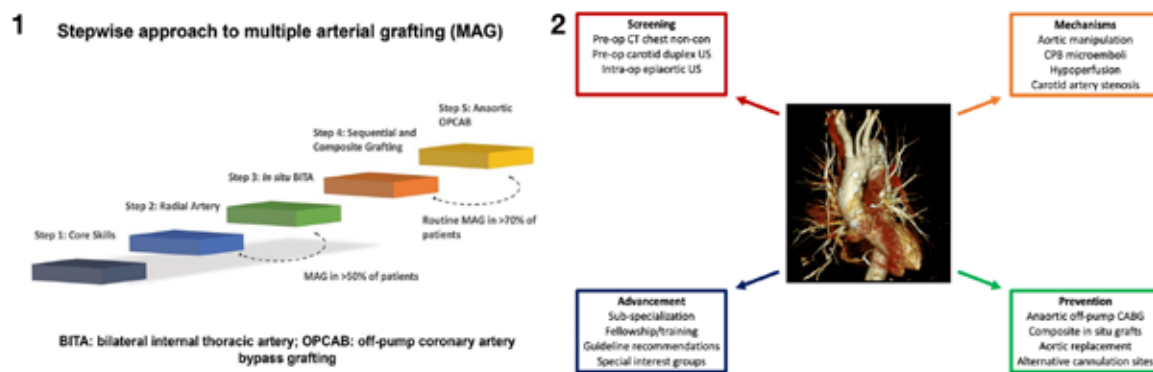
alia, total-arterial anaortic OPCAB [30]. To facilitate the safe implementation of advanced coronary surgery techniques, especially during the initial “learning curve”, a dedicated period of fellowship training should be devoted to learning those complex procedures under the mentorship of expert surgeons and in a safe environment of specialist teams [31].

Whilst anaortic OPCAB may be more technically demanding than on-pump CABG, it is not so by a substantial or unreasonable margin. It is a reproducible technique, and it is a teachable technique (Figure 4, Panel 1). We adopted the routine use of the all-arterial anaortic OPCAB approach for all-comers. The primary reason for this is that we believe, as supported by evidence, that the technique offers superior short-term neurological benefits afforded by eliminating aortic manipulation [4] and the superior long-term benefits of all-arterial grafting [32]. A secondary and possibly equally important reason is that the technique becomes routine for the surgeon and the team. This results in technical proficiency and the ability to easily manage complex patients (Figure 4, Panel 2).



**Figure 3. (Panel 1):** Common configurations of composite arterial grafts. **(A)** LITA to LAD and RITA-LRA extension through the transverse sinus to the lateral and inferior system [1]; **(B)** LITA to LAD and RITA as a Y graft from LITA to the lateral and inferior systems [33]; **(C)** in situ RTA to LAD and LITA to obtuse marginal [34]; **(D)** LITA to LAD, LRA as a Y graft from LITA to diagonal branch and RITA to obtuse marginal [33]. Figures reprinted according to CC BY-NC-ND 4.0 license. **(Panel 2):** **(A)** Right superior pericardial slit. During a brief period of apnea, a vertical pericardial slit is made with diathermy down to and including the pericardial fold at the right atrial/SVC junction. The assistant retracts the thymus with their right hand using the Yankeur sucker head and retracts the aorta using reversed De Bakey forceps in their left hand. Extreme care must be taken not to injure the right phrenic nerve. **(B)** Right inferior pericardial slit. A vertical pericardial incision is made with diathermy down to the IVC. Care is taken to remain extra-pleural and to avoid injury to the right phrenic nerve [35]. Figures reprinted according to CC BY-NC-ND 4.0 license. (LITA: left internal thoracic artery; RITA: right internal thoracic artery; LRA: left radial artery).





**Figure 4.** (Panel 1): Stepwise progression to multiple arterial grafting from the basics of acquiring the core skills to total arterial anOPCAB [30]. Reprinted with permission. (Panel 2): Integrated approach to reducing neurologic injury during surgical coronary revascularization [3]. Reprinted with permission. (MAG: multiple arterial grafting; anOPCAB: anaortic off-pump coronary artery bypass grafting; BITA: bilateral internal thoracic artery; CABG, coronary artery bypass grafting; CPB, cardiopulmonary bypass; CT, computed tomography.)

Finally, a subgroup of patients that might benefit less from an anaortic all arterial OPCAB include patients with cardiomyopathies requiring additional interventions [36].

Although a detailed description of total endoscopic coronary artery bypass (TECAB) techniques is beyond the scope of this paper, TECAB is safely adopted in specialized centers to provide multivessel revascularization either as a single procedure or as part of a hybrid strategy [37,38]. The appeal of off-pump anaortic robotic TECAB is to obtain the long-term benefit of IMA grafting while limiting invasiveness by minimizing the surgical incisions with the aid of robotic technology. The avoidance of sternotomy and CPB has led to a reduction in post-operative length of stay (down to 2.7 days in some series) and an earlier return to normal activity and work. The application of OPCAB to patients with multivessel disease is also performed in combination with the percutaneous coronary intervention (PCI) of other territories by combining minimally invasive LIMA-LAD grafting with the PCI of non-LAD vessels. Hybrid procedures are being rigorously evaluated to determine what subpopulation of patients with multivessel disease may benefit from this approach. Patients with multivessel disease currently being treated with percutaneous techniques alone represent a group for whom hybrid procedures may be increasingly used. A recent propensity-matched analysis of the New York cardiac surgery and percutaneous interventions registries showed no difference in 6-year mortality between hybrid coronary revascularization (HCR) and conventional CABG, although the latter group were more likely to be free from repeat revascularization [39].

In conclusion, the role of anaortic surgery can be defined as a necessary tool in the kit of all surgeons who wish to undertake advanced coronary artery surgery. All major units need an advanced coronary team and need to maintain good relationships with surrounding, smaller units to facilitate appropriate care for their more complex patients.

Coronary surgery and the management of ischemic heart disease need to emerge as a genuine sub-specialty with the appropriate training and recognition of expertise in the field by surgeons and referring physicians alike. The ageing population, increasing complexity of patients, and the increased scrutiny of, and expectations for, cardiac surgery demands it.

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# The Role of Anaortic Coronary Artery Bypass Grafting

#479 OCTOBER 2023 1 CE CREDIT \$6

1. Anaortic coronary artery bypass grafting is a technique of off-pump surgical coronary artery revascularization that completely avoids aortic manipulation by using composite grafts with in-flow from:
  - a. One IMAs
  - b. Both IMAs
  - c. Gastro-epiploic artery
  - d. All of the above
2. Anaortic means:
  - a. Aortic valve
  - b. Aortic not touch
  - c. Aortic atheroembolism
  - d. Aortic coronary
3. Increasing evidence to show that embolic strokes occur in up to \_\_\_\_ of patients undergoing on-pump coronary artery bypass surgery with aortic cross-clamping.
  - a. 15%
  - b. 27%
  - c. 40%
  - d. 56%
4. There are three potential arterial inflows for composite grafts including:
  - a. Left internal mammary artery
  - b. Right external mammary artery
  - c. Gastroepiploic artery
  - d. Only a and c
5. Skeletonized arteries are beneficial because:
  - a. They are longer and offer flexibility.
  - b. They give an option to perform sequential grafts.
  - c. There is evidence of less bleeding when used.
  - d. All of the above statements are reasons skeletonized arteries are beneficial for this procedure.
6. True or False: The use of composite grafts has been shown to be inferior to the use of aorto-coronary grafting.
  - a. True
  - b. False
7. Cardiomegaly can be problematic when positioning the heart in order to graft the:
  - a. Lateral wall
  - b. Anterior wall
  - c. Left anterior artery
  - d. Mitral valve
8. Placing the left-sided pericardium behind the sternal retractor delivers the heart \_\_\_\_\_, creating more space to observe when grafting.
  - a. Laterally
  - b. Anteriorly
  - c. Distally
  - d. Posteriorly
9. The use of silastic intracoronary shunts provides:
  - a. A relatively bloodless field
  - b. Distal coronary perfusion
  - c. Minimal technical mishaps
  - d. All of the above
10. When might traditional aortic cross-clamping be used?
  - a. When the conversion to on-pump surgery is for ischemia
  - b. When the conversion to on-pump surgery is for cardiomegaly
  - c. When beating heart on-pump is performed
  - d. All of the above

THE ROLE OF ANAORTIC CORONARY ARTERY BYPASS GRAFTING #479 OCTOBER 2023 1 CE CREDIT \$6

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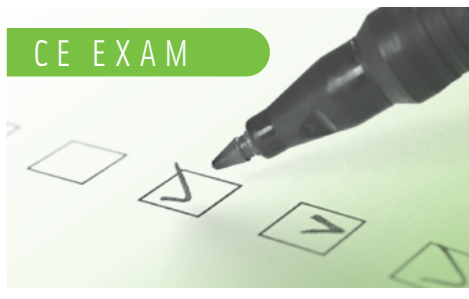
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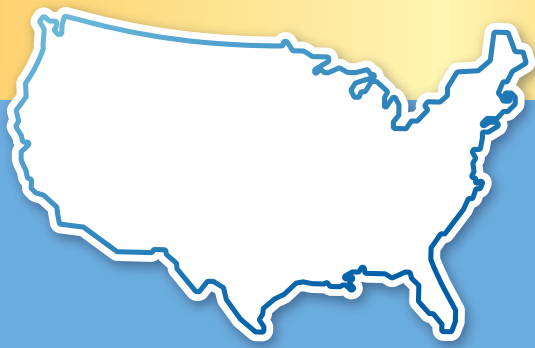


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# Meet Your SALC Representatives

The State Assembly Leadership Committee (SALC) is a standing committee of the Association of Surgical Technologists. The committee members shall be appointed by the AST President with approval from the Board of Directors for a term of two years with the possibility of reappointment of a second and third term. The committee members are selected by evaluation of their leadership skills, expertise and talent within the state assembly arena.

## THE MISSION STATEMENT OF THE STATE ASSEMBLY LEADERSHIP COMMITTEE IS:

*"To encourage and oversee growth and leadership of the State Assemblies of AST through education, membership and guidance."*

## SOME OF THE RESPONSIBILITIES OF THE COMMITTEE MEMBERS INCLUDE:

- State assemblies
- Exchange professional knowledge through networking to stimulate continued interest within the state assemblies
- Recruit qualified candidates to run for elected positions in their states
- To represent each state with accuracy, professionalism and confidentiality
- Follow strict adherence to all AST State Assembly Bylaws and procedures
- Maintain open communication with AST Board of Directors and the AST staff

The SALC consists of nine members who represent individual states.

The State Assembly Leadership Committee is currently composed of:



**Lisa Day, CST, CSFA, BAS, FAST, CHAIR**  
ldaycsfa@gmail.com

*Represents Hawaii, Maryland/Delaware, Montana, Nebraska, New Jersey, New Mexico*

Lisa is a 1998 graduate of Our Lady of the Lake College in Baton Rouge, Louisiana, and a 2011, graduate of Meridian Institute of Surgical Assisting, in which she continued on to earn her AAS in surgical assisting in 2018. Lisa graduated from Siena Heights University with a Bachelor of Applied Science in surgical technology and is pursuing her Master of Education in Higher Education Leadership. She has served on the Virginia State Assembly as chair to various committees, as well as director, vice president, president and is the current secretary. She was honored to receive the FAST designation at AST's 50th national conference in 2019.

Her passion for her profession and rewarding career as a CST and CSFA has led her to the path of education,

and now serves as the program director of surgical technology at Reynolds Community College in Richmond, Virginia.

Lisa and her husband will soon celebrate 37 years of marriage and have three grown daughters. She enjoys spending her free time with her family and spoiling her houseful of hounds and two “house horses” aka Great Danes. She is excited and honored to be able to serve as the chair of SALC and to continue to be a resource for other state assemblies.



**Stephanie Austin, CST, MA, FAST**

seastin1971@gmail.com

*Represents Georgia, Mississippi, Texas, West Virginia, Wisconsin*

Stephanie has been a CST and a member of AST since 2004. She graduated from the Tennessee College of Applied Technology, Crossville (TCAT) with a certificate in surgical technology. She furthered her education, graduating from Roane State Community College in 2013 with an Associate of Applied Science in General Technology, a Bachelor of Applied Science in Surgical Technology in 2016, and a Master of Arts in Higher Education Leadership in 2019, both from Siena Heights University in Adrian, Michigan. She is currently working on her EdD in teaching and learning at the University of St. Augustine for health sciences.

She began her career as a surgical

technologist at the University of Tennessee Medical Center in Knoxville. She spent more than 10 years in both full-time and PRN positions, specializing in orthopedic surgery, but also working in all other specialties, including trauma. Stephanie also began her teaching career during this time. She worked as an instructor at the TCAT in Crossville in 2007 but returned to the field in 2009. In 2015, Stephanie became the program director for Virginia College in Knoxville, later moving to Florida to become the program director at Keiser University in Clearwater in 2016. Family brought her back to Tennessee in July of 2017 where she became the director of the Walters State Community College program, the position she holds today.

During the last four years, Stephanie has become involved in the Tennessee AST State Assembly where she has held a position on the Board of Directors for three years. She is currently in her second term as the vice president on the board. Additionally, Stephanie has served as a site visitor for the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA) since 2019, reviewing surgical technology programs across the country and ensuring compliance with the standards required to provide quality education for new surgical technologists. Stephanie was also awarded the FAST designation in 2021.

In her free time, she enjoys traveling, especially cruises. She also loves to hang out with her family, cooking out, exploring the mountains (especially Cades Cove in the Great Smoky Mountains), and watching the Tennessee Volunteers play football ... GO VOLS! Stephanie has three grown sons, a wonderful daughter-in-law, and a granddaughter. She also has a wonderful partner and a stepson who keeps her on her toes.



**Raetta Coleman, CST, BAS, FAST**

rscolem35@aol.com

*Represents Alabama, Arkansas, Florida, Illinois, Louisiana*

Raetta is honored to serve on the State Assembly Leadership Committee. She celebrates 28 years as a Certified Surgical Technologist. She graduated from Florence-Darlington Technical College in Florence, South Carolina, in 1995, and began working for McLeod Regional Medical Center. In 2003, she began working for McLeod Dillon in Dillon, South Carolina. In 2010, she began working at Robeson Community College in Lumberton, North Carolina, as a clinical coordinator and shortly thereafter became the program director. She has been in the role for 10 years. Her passion is surgical technology and teaching what she loves.

Raetta has served on the South Carolina State Assembly Board since 2011. She has held the position of vice president, president, and is currently serving as treasurer. She has been a member of AST for many years, and in 2016 was awarded the Fellow of the Association of Surgical Technologists (FAST) designation. She also completed a Bachelor of Applied Science in Surgical Technology from Siena Heights University.

When she isn't scrubbing or teaching, she enjoys spending time with her husband, three boys, and special friends. Traveling, shooting sports, and boating are just a few of her hobbies.

**Donta Davis, CST**

ddonta40@yahoo.com

*Represents Indiana, Iowa, Kansas, Ohio, Oklahoma*

Donta Davis has been a member of AST since 2011 and retains her CST and CRCST credentials. She currently works as a clinical coordinator and lab instructor at Angelina College in Lufkin, Texas. Donta was a 2009 graduate of the first surgical technology class at Angelina College and received her associate degree from Trinity Valley Community College in Athens, Texas. She is currently pursuing her bachelor's degree in surgical science. Donta is currently a member of the Texas State Assembly Board of Directors and serve on various committees within the Texas State Assembly, including the Education and Professional Standards Committee, Teller's Committee, Policies Committee, Scholarship Committee, and Workshop Committee.

She also volunteers and serves her community whenever she can, including having the privilege of setting up, organizing, and managing the first-ever Lufkin workshop.

Donta has participated in various activities on the national level which includes presenting at the AST Educators Conference in 2020. She represented the State of Texas as an alternate delegate at the AST National Conference in May 2021 and was appointed

as delegate at the AST National Conference in May 2023.

Donta is passionate about volunteering and speaking to youth in her community about the surgical technology profession, whether it is at career fairs or college tours. She is pleased to serve as the new SALC representative.

**Lori Newman Groinus, CST, FAST**

lori.groinus@gmail.com

*Represents North Carolina, North Dakota, South Carolina, South Dakota, Tennessee*

Lori has been a surgical technologist for 31 years, graduating from St. Cloud Technical College in St. Cloud, Minnesota. After graduation, she worked as a CST in the Minneapolis area at Fairview Southdale Hospital before returning to the St. Cloud area where she worked as a CST at the St. Cloud Hospital. While working as a CST, Lori realized that she enjoyed the teaching/precepting role and decided to pursue a degree in education, graduating with an elementary education degree and later her master's degree in curriculum and instruction. In 2006, she began her career as a surgical technology instructor and program director with Rasmussen University and in 2021, she joined St. Cloud Technical & Community College as a professor and its surgical technology program director.

Lori has served on the Minnesota State Assembly board since 2014. She has held the positions of president and vice president, director and currently is serving as secretary. Lori received the FAST in 2021. Lori feels that instilling a sense of commitment and pride in her students and other CSTs is the foundation of growing as professionals. Writes Lori, "We have an important, amazing role and patients put their trust in us. We need to live up to it!" As a SALC member, Lori hopes to be able to assist and support other state assemblies the way that the SALC has helped and supported her state board.

Lori enjoys spending time with her family and friends and tries to be a fun mom to Carter (18) and Madelyn (16) but is sometimes incredibly embarrassing. She also likes to listen to podcasts, music and audiobooks, read, see live music and theater, and watch far too much Netflix.

**Heather Hodges, CST, FAST**

hyhodges@gmail.com

*Represents Arizona, Kentucky, Missouri, Nevada, New York*

Heather is honored to be serving her third term on the State Assembly Leadership Committee. She graduated from Cabarrus College of Health Sciences in Concord, North Carolina, in 2011. She began working for CMC Northeast in Concord, and while

there, she served as the robotic coordinator as well as the general lead. In 2018, Heather began employment with Gateway Surgery Center in Concord. Gateway has given Heather the opportunity to scrub ENT, plastics, orthopedics, eyes, general, and gynecology. She is now PRN at Gateway Surgery and works full time at Cabarrus College of Health Sciences as the lab instructor and clinical coordinator for the surgical technology program.

Heather has been a member of AST since 2010, the same year she attended her first conference as a student in San Francisco. At AST's 50th National Conference in May 2019, she received the FAST recognition. Heather has been a part of the North Carolina State Assembly since 2013 and has served two terms as the board of director, one term as secretary, two terms as president, and is currently serving her last term as treasurer. Heather has a passion for her career and loves to speak about it with those who have no idea what a surgical technologist is or does. She also has a passion for the state assembly along with AST because together they grow awareness for our profession as well as make it stronger.

Heather and her husband of 25 years live in Mooresville, North Carolina, with their two boys, Hatten, and Liam, as well as her two spoiled hounds, Daisy and Finn. She enjoys hiking, camping, paddling, and gardening in her free time.



**Allison Lacey, CST, FAST**  
sunrise267@yahoo.com

*Represents Idaho, Massachusetts, New Hampshire/Vermont, Rhode Island, Virginia*

Allison has been an AST member for 16 years. She is a graduate of the 2006 Maine Medical Center School of Surgical Technology and obtained her associates of applied science in surgical technology from Southern Maine Community College. Prior to moving to Maine, she grew up in Vermont, where she still visits family as much as possible. She currently works as a Certified Surgical Technologist in the operating room at Mercy Hospital in Portland, Maine, and has served on the Maine State Assembly in the past as president, secretary, and director positions. She was honored to receive the FAST designation in 2019.

In her free time, Allison enjoys searching for sea glass and sand dollars on Maine beaches, jewelry making, playing games, spending time with family, fishing with her husband, floating in inner tubes in the summer, and skiing in the winter.



**Marsha Lyles, CST, CSFA**  
mnmcst@yahoo.com

*Represents Alaska, California, Colorado/Wyoming, Oregon, Utah, Washington*

Marsha is serving her third year, second term on the State Assembly Leadership Committee. She began her career in the US Navy in 1991 directly upon graduating from high school and served 10 years on active duty, being honorably discharged in November 2000. She is a Disabled American Veteran and a huge supporter of that organization. She started her civilian career at St Vincent's Healthcare in Billings Montana. After 12 years in Billings, she began work at Logan Health, in the northwest corner of the state, in Kalispell. Marsha has been employed at Logan Health for over 11 years. She serves as a preceptor for both first assistants and surgical technologists at Logan Health. She is the surgical services lead for surgical oncology, trauma, general, cardiac, vascular, and thoracic services as well as robotics in those services. Specializing with several decades of experience in cardiac, thoracic, vascular and robotic surgery in both the CST and CSFA roles.

Marsha has served on the Board of Directors for the Montana State Assembly, noting that her passion for the future of Montana and the profession are at the forefront of her service.



She has sat numerous terms as director, treasurer and vice president, and currently serves as president. Marsha attended her first national conference in 1997 while in the Navy and has attended six since. As one of the SALC representatives, Marsha will work alongside the state assemblies to help keep them active and keep each student, practitioner, OR and facility educated and knowledgeable about the need for continuing education, certification, and involvement in this profession.

Marsha and Mike, her husband of 31 years, enjoy their free time at their home on 15 forested acres in northwest Montana. They are the proud parents of their adult children: Michael (30), who is a detention officer with Flathead County Sheriff Department, and Jessica (25) who is a trooper with the Montana Highway Patrol. Marsha enjoys fishing in the many lakes, rivers and streams Montana offers as well as hunting, gardening, canning & food preservation. Marsha was a volunteer firefighter/EMT for many years. She is nationally certified in both wildland forest and structure firefighting as well as nationally certified as an EMT.



### **Amy Whitacre, CST**

[amywhitacre88@yahoo.com](mailto:amywhitacre88@yahoo.com)

*Represents Connecticut, Maine, Michigan, Minnesota, Pennsylvania*

Amy is a 2017 graduate of Miller-Motte Technical College where she earned her associate degree in surgical technology. Prior to beginning this career, Amy worked as a CNA, LVN (LPN) and RN earning her ADN from Pacific Union College in California. She recently completed her bachelor's in psychology with a forensics emphasis at Southern New Hampshire University with hopes of completing her master's sometime in the next five years.

Amy has served on the Virginia State Assembly since 2020 on several committees, chair of the fundraising committee, director, and now on her second term as Treasurer. She has attended four national conferences and has served as a delegate. Amy has participated in several career fairs promoting her passion for this profession.

Amy and her husband of 11 years have four grown children – three sons and a daughter – and five grandchildren. Amy also has 6 dogs, 3 of which are bloodhounds, and she spends most of her time at home spoiling them and cleaning up after their biggest talent which is slinging slobber.

Amy is newly appointed to the State Assembly Leadership Committee and is honored and excited to

work with our awesome state assemblies. Amy currently works as a traveler staying as close as possible to her home in Amherst, Virginia. In her spare time, she enjoys spending time with her grandchildren and reading or watching pretty much anything related to true crime and forensics.

# In Memoriam

## Benjamin Bowerman, CST

**B**enjamin Bowerman was an exemplary surgical technologist who hadn't missed a day of work in five years. He excelled at anticipating the surgeon's needs and because he understood the procedures, he was able to identify solutions quickly and creatively to problems when they arose. Unfortunately, and unexpectedly, Ben passed away at age 38 last October.

Ben was trained as a surgical technologist in the US Army and then went on to serve in the Army Reserves for four years. He earned his CST credential in 2012, joined AST and took pride in everything he did as a certified surgical technologist. He landed in New York City at the New York Presbyterian Hospital where he was beloved by his fellow work staff and truly cared for them and most definitely his patients. According to his mother, Ben was a stickler when it came to sterile technique. He embodied Aeger Primo. He also enjoyed precepting and was incredibly thorough in his oversight and as he helped teach rising surgical technologists.

At his memorial service, his work family collected donations in his name and after some reflection, his mother, Delita Smiley, saw *The Surgical Technologist* and knew his name and persona needed to be honored in the profession that Ben loved so dearly. Earlier this year in honor of Ben, she donated \$2,500 to the Foundation for Surgical Technology so that others in need – particularly military students and members – may benefit from an otherwise heartbreaking situation.

On the anniversary of his passing, the Foundation for Surgical Technology along with AST, is honoring Ben and his contributions to the profession, the role and the future of surgical technology. The donation made in Ben's name will go directly to help military members and students advancing the profession.



# 2023 Scholarship Recipients

The Foundation for Surgical Technology funds various awards during the year, but it is best known for the academic scholarships that assist students entering the field. In 2023, a total of more than \$40,000 was awarded. Over the next couple months, we will be introducing you to this year's scholars and allowing them to describe what this award means to them.



THE NATIONAL BOARD  
OF SURGICAL TECHNOLOGY  
AND SURGICAL ASSISTING



**MARISSA BARSOTTI, CST**  
WASHTENAW COMMUNITY COLLEGE,  
ANN ARBOR, MICHIGAN

SPONSORED BY THE FOUNDATION  
FOR SURGICAL TECHNOLOGY  
\$1,000

Becoming a surgical technologist was something that appealed to me because I wanted to help people in an impactful and meaningful way. When leaving work each day, I want to know that I've made a positive difference in someone's life. I want to be a part of a team whose goal is to improve a patient's quality of life.

It's been four months since being certified, and I'm a part of the neuro/spine team that I did my clinicals with. I wake up excited to go to work every day knowing that I'm going to do something I enjoy, but also something that has so many other positive aspects.

If I were asked what my favorite surgery is, I would have to say craniotomy. I enjoy them the most because not only is it important to respond quickly with what instruments the surgeon needs, but also to be very precise because the brain is so delicate.

I plan to take my passion and excitement for scrubbing and use it to improve my skills and expand my knowledge. I have a goal to cross train into other specialties in addition to neuro/spine so I can continue to grow as a surgical technologist.



**SAVANNA BURNSIDE, CST**  
CENTRAL NEW MEXICO COMMUNITY  
COLLEGE, ALBUQUERQUE, NEW MEXICO

SPONSORED BY THE FOUNDATION  
FOR SURGICAL TECHNOLOGY  
\$1,000

Thank you for the opportunity to be a recipient of your scholarship. I couldn't be more thrilled to be a part of a profession that values patients and their safety. I recently graduated with my AAS degree in surgical technology from CNM in Albuquerque, New Mexico.

I took my board exam and became a Certified Surgical Technologist in August 2023. During my clinical rotation, I gained so much experience first scrubbing various open, laparoscopic, and Da Vinci Robotic cases. I was most proud of mastering gynecology during my first clinical rotation. Since I felt confident in scrubbing GYN, I applied and got hired in Labor and Delivery in May 2023. I wanted to be proficient in this service, so I was determined to learn obstetrics. I've been working in L&D for almost four months now and recently became a preceptor for new hires. It feels rewarding to know that my colleagues can rely on me to train them.

I add value to L&D because I was able to scrub in on various services including GYN, urology, podiatry, hand, general, plastics, vascular, ENT, and ortho as a student. Having this experience allows me to prepare colleagues to be familiar with how to handle emergent and stressful situations in the OR and delivery rooms.

During my time in L&D, I hope to be able to bridge the gap for those who enter the field without any surgical background. Later, I plan to bring the skills I've gained and scrub hearts and vascular cases. The idea of becoming a CST has been a dream of mine for nearly a decade. I feel as though I will continue to learn everyday which is why I chose to pursue this career.



**DANIELLA CAMBREA**

EASTWICK COLLEGE, RAMSEY, NEW JERSEY

SPONSORED BY THE FOUNDATION FOR SURGICAL TECHNOLOGY

\$1,000

I have chosen the surgical technology field because I have a strong passion for anatomy and patient care, and with this career they both go hand and hand. I knew from a very young age that I wanted to pursue the medical field. After trial and error with other medical careers, it wasn't until I heard about surgical technology and gave it a try to find out it was the perfect fit. I also like how no two days will ever be the same. Every day will be full of new cases and new opportunities to learn and enhance my knowledge.

As a future surgical technologist, I plan to make a difference every day. I will do this by understanding that no two patients are the same. Every patient has different needs and stressors that the surgical technologist needs to adapt to, even if it means going out of your comfort zone to ensure the patient the proper physical and psychological care.

My personal experiences in surgical technology are very minimal. However, I am looking forward to our clinical internship through school in the near future. It will be an amazing learning opportunity to prepare us to become certified surgical technologists. Post graduation, I am looking forward to becoming certified and landing a job. I don't know where I'll end up, but I'm excited and looking forward to the journey.



**MEGAN HAMANN**

LAKE SUPERIOR COLLEGE, DULUTH, MINNESOTA

SPONSORED BY THE FOUNDATION FOR SURGICAL TECHNOLOGY

\$1,000

I chose surgical technology as my career path as I have always had a passion for surgery, even from a young age. Before I started my journey in healthcare, I worked at a veterinary clinic where I assisted in multiple surgeries, from spays and neuters to amputations. I feel that the time spent in this position helped to push me into pursuing my dream of becoming a surgical technologist.

I am currently employed at Memorial Medical Center in Ashland, Wisconsin, where I plan to start my career as a surgical technologist. After graduation I am looking forward to working as a surgical technologist, honing my skills, and potentially becoming a traveling surgical technologist. I can't wait to see where my journey as a surgical technologist takes me!



**SHABNAM HAYATULLAH**

TROCAIRE COLLEGE, BUFFALO, NEW YORK

SPONSORED BY THE FOUNDATION FOR SURGICAL TECHNOLOGY

\$1,000

The reason I chose surgical technology as my career is because I knew I wanted to go into the healthcare field because of the ability to be able to help people. I did lots of research and found surgical technology. I learned more about what a surgical technologist does and knew it was exactly what I was looking for.

I continued to research institutions that were accredited and found Trocaire College, where I am now currently a student. I hope to make a difference in the field by helping others continue their education. Many hospitals require continuing education, and I would love to help others learn and grow while continuing their education once I gain that experience.

After graduating from Trocaire and receiving a job in a local Buffalo hospital, I would love to be a part of that environment. Even with my time at clinicals, I have seen what it takes to be a part of a family at a hospital, working well with coworkers, respecting everyone, and taking part in what it takes to keep a hospital running. Being someone who does not come from an education-oriented background, I feel honored to be awarded this scholarship and thank everybody of the Foundation for Surgical Technology deeply.





**JANA JARRELL, CST**  
NASSAU COMMUNITY COLLEGE, GARDEN CITY, NEW YORK

SPONSORED BY THE FOUNDATION  
FOR SURGICAL TECHNOLOGY  
\$1,000

When Covid-19 hit back in 2020, I was working from home. As things started to get worse, I felt helpless for not being able to do more. I started researching healthcare programs and stumbled across surgical technology. As I read more, this program had everything I was looking for. It was a fast-paced environment that required a lot of dedication and tolerance. The most rewarding part of my job is witnessing my patients begin their healing journey. My hope as a member of a facility is not just to help the patients but to assist surgical technologists. I want to be able to advocate for how intelligent, hard-working, and resilient surgical techs are!

Being in the surgical technology program over the last two years changed my life. Graduating was my biggest and best accomplishment. I held a leadership position in the Surgical Technology Club, was a member of Phi Theta Kappa, and won the Nassau Community College Excellence in Student Activities award. I even traveled to New Orleans for the AST conference and competed in the Scrub Bowl as a student. My classmates and I took 3rd place and were the only first-year team! As a graduate, I am excited to be in the field and do what I love daily. From the moment I clock in until the moment I clock out, I know that I have made a difference and served a purpose in my patients' lives. I look forward to the future and growing as a healthcare worker!



**JENNIFER LORONA**  
AMERICAN CAREER COLLEGE, LOS ANGELES, CALIFORNIA

SPONSORED BY THE FOUNDATION  
FOR SURGICAL TECHNOLOGY  
\$1,000

I am more than honored to be a recipient of the Foundation for Surgical Technology scholarship. As long as I can remember I have always just wanted to do something to help others. When I signed up for the program, I was unaware of who a surgical technologist was, but regardless I was instantly pulled in! Being the righthand man to the surgeon and being able to assist in surgery sounded so unattainable. When watching movies or shows that have a surgery scene, I never imagined being there one day. I always thought you needed to be a surgeon to be able to witness surgery firsthand. I am grateful to have stumbled upon such an inspiring profession.

Once I hold the title of Certified Surgical Technologist, and even sooner when embarking in my clinical rotation, I can wholeheartedly say that I will treat every patient that is brought into any operating room I scrub with the utmost care. My mom recently had surgery and all I could hope for was a good CST in there with her. Every person deserves to leave surgery with the relief that everything went as planned. I just hope to make a difference in people's lives by making sure they go home and are able to continue their regular everyday life, one surgery at a time.

My experience as a surgical technologist has not been long. I have yet to work in a real operating room, and all my patients have been mannequins up to this point. Currently, I am less than five weeks away for my first day in a real operating room. Having amazing instructors alongside the support of friends and family I have had an unforgettable experience. I cannot lie classes have been challenging and slightly overwhelming at times, but I have been blessed to have a mentor like Mr. David Alfaro, CST, FAST, to guide me through this rigorous journey. Being surrounded by people that have an undeniable passion for this career makes it all worth it. Being a surgical technologist is a whole different world in itself starting with the terminology we use – it really makes you feel like you're a part of something bigger.

My plans after graduation are just to absorb as much information from my future colleagues, surgical technologists with more years of experience than I do so I can learn how to be a great tech myself. Back in May I attended the 2023 AST National Conference in Chicago, and I learned so much about this profession. I met people that were doing unthinkable things with their degrees and hearing their stories motivated me to finish strong and start saving some lives.

Once again, thank you for this amazing opportunity. To be chosen out of who knows how many applicants is an incredible feeling. I am very appreciative.



**MACKENZIE KOETJE, CST**  
WASHTENAW COMMUNITY COLLEGE,  
ANN ARBOR, MICHIGAN

*SPONSORED BY THE FOUNDATION  
FOR SURGICAL TECHNOLOGY*

\$1,000

I am honored to have received the scholarship! So far, I am enjoying this wonderful career and I feel like I have learned so much since graduating in May 2023 and starting my career at Trinity Health Ann Arbor. I have always wanted to work in the medical field due to being in and out of hospitals while growing up, for my mom who was diagnosed with pseudo tumor cerebri (idiopathic intracranial hypertension) in 2004 and she also had neurosurgery in 2010 to have a VP shunt placed.

I wasn't really sure what I wanted to be when I graduated high school, but I knew I wanted to care for other people. I heard about surgical technology around the time COVID-19 started and then I began researching where I could go to school for it. I have always had a passion for helping people and this career seemed like it would be an amazing fit for me. It has truly been a rewarding career. Knowing that every day you get to go to work and help another person get better is an amazing feeling. That is why I chose surgical technology to help other people like my mom and I am so grateful for all of my mentors who have helped me along the way to get to where I am today.



**CARISSA MANZO, CST**  
MT DIABLO ADULT EDUCATION,  
CONCORD, CALIFORNIA

*SPONSORED BY THE FOUNDATION  
FOR SURGICAL TECHNOLOGY*

\$1,000

Becoming a surgical technologist has been so incredibly rewarding. Being a mama to three children diagnosed with separate health issues with medical complications has given me different lenses and awareness on how to approach each scenario based on the specific needs of each individual patient. In the operating room, I strive to be a good patient advocate and voice concerns when the patient is unable to, knowing that their health and well-being are always my main priority. My love for patient care is what continues to drive me, and I can confidently say that being a surgical technologist is exactly where I belong.

This past year as a student has molded me, challenged me, and given me a level of confidence in the operating room that I will carry with me as I start my new career at Stanford Tri-Valley. I am humbled and honored to have been awarded the Foundation for Surgical Technology scholarship. Thank you!



**BROOKE PROCHASKA, CST**  
MOHAVE COMMUNITY COLLEGE,  
KINGMAN, ARIZONA

*SPONSORED BY THE FOUNDATION  
FOR SURGICAL TECHNOLOGY*

\$1,000

I chose to become a surgical technologist because I want to make a difference in our health-care system. I enjoy helping people and love contributing to making our world better.

I plan on making a difference by advocating for my patients and always staying up to date on the latest technology and equipment to provide the best care I can give. Surgery is often the scariest part of a patient's life, so if I can contribute to make that a little easier for them I absolutely will!

I love working with and contributing to a great medical team for my patients. I am working as a surgical tech and plan to become the best I can be for my patients.



**KAYLEE SWARTZ**

SOUTHERN TECHNICAL COLLEGE, TAMPA,  
FLORIDA

*SPONSORED BY THE FOUNDATION  
FOR SURGICAL TECHNOLOGY*

\$1,000

I have chosen my career in surgical technology because I want to make a great impact on people's lives. There is a high demand in this field, and I think I will be exceptionally good at it. I absolutely love the thought of being able to be a part of something that has a significant impact on people's lives so that they can keep living a happy, healthy life. I have always loved learning about the science and medical side of things in people, even from an early age, so I am excited to learn everything there is about being a surgical technologist. I am extremely passionate about wanting to help people get back to a healthy lifestyle where they can do all that they themselves are passionate about doing.

I am excited for being a part of surgery most. I look forward to being in the operating room and taking part in something so vital to a person's life. Since I have always been interested in learning about the human body, I look forward to seeing all the things I have learned about in a real-life setting. In addition, I am passionate about making a personal impact on people's lives. I want people to come into the operating room feeling secure and comfortable, not anxious, or uncomfortable. Someone should come into the room and leave knowing that someone cared and had their best interest in mind. This is the greatest thing I look forward to when I get to the field.



**JESUS ZEPEDA**

AMERICAN CAREER COLLEGE, LOS  
ANGELES, CALIFORNIA

*SPONSORED BY THE FOUNDATION  
FOR SURGICAL TECHNOLOGY*

\$1,000

I am deeply grateful for being a recipient of the Foundation for Surgical Technology scholarship. I have always admired the medical field and those who work within it. This career requires individuals with determined mindsets and care-driven hearts that are willing to go above and beyond for others. It is for this reason that I decided to become a surgical technologist.

I plan on making a difference as a surgical technologist by striving to help those around me. Seeking knowledge at any chance, using criticism and advice to find a new perspective, and then using those experiences to help other individuals who also decide to join the field. We all begin the field as newborns and cling to those willing to help us grow. In a few years from now, I hope to be the one others can come to for advice and help.

The best part of the job is the feeling I receive at the conclusion of the surgery, although I am yet to perform an actual surgery. The hands-on practice I have received at school has given me a clear picture of what to expect. It is a great feeling knowing that I was able to come together with others and help the individual who needed our care, even if the patient may have been a mannequin. Everyone in the operating room is doing their part yet intermingling to make the case a success. Knowing that my participation contributed to success is the largest motivator.

After graduation I hope to have obtained a job as a surgical technologist. Doing what I like best and striving to continue the education that I received at school. I envision myself wearing a work badge that reads surgical technologist and showcasing it as representation of all the hard work I have put in.



## FOUNDATION *for* SURGICAL TECHNOLOGY

### **What is The Foundation for Surgical Technology?**

The Foundation is a 501c3 organization comprised of representatives from the Association of Surgical Technologists (AST) and the National Board of Surgical Technology and Surgical Assisting (NBSTSA). This type of organization also means any donation you give to the Foundation is tax deductible.

### **Who does The Foundation support?**

- ✿ The Foundation provides scholarships to the following:
- ✿ Students
- ✿ Educators
- ✿ Military personnel
- ✿ and CSTs who have helped others by serving on medical mission trips

### **When are the annual deadlines for the scholarships?**

- ✿ Students scholarships - March 1
- ✿ Military scholarships - March 1
- ✿ Constellation (Educator) Awards - December 1
- ✿ Medical mission reimbursement - December 31

**Learn more at [www.ffst.org](http://www.ffst.org) and give today!**



# UPCOMING PROGRAMS



**AST MEMBERS:** Keep your member profile updated to ensure that you receive the latest news and events from your state. As an AST member you can update your profile by using your login information at [www.ast.org](http://www.ast.org). You may also live chat at [www.ast.org](http://www.ast.org) or contact Member Services at [memserv@ast.org](mailto:memserv@ast.org) or call 1-800-637-7433. AST business hours are Monday-Friday, 8 am - 4:30 pm, MST.

## ARKANSAS STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** October 21, 2023  
**Title:** Mastering the Latest Surgical Techniques and Technologies  
**Location:** University of Arkansas-Fort Smith, 800 N 50th St, Fort Smith, AR 72904  
**Contact:** Ashley Smith, PO Box 15772, Little Rock, AR 72231, 479-420-6363, [ortho-wife83@gmail.com](mailto:ortho-wife83@gmail.com)  
**CE Credits:** 6 Live

## CALIFORNIA STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** November 4, 2023  
**Title:** CSTs Help Patients Create New Beginnings  
**Location:** UCLA Santa Monica Medical Center, 1250 16th St, Santa Monica, CA 90404  
**Contact:** Suzette Robinson, 602-578-9869, [ca.sastateassembly@gmail.com](mailto:ca.sastateassembly@gmail.com)  
**CE Credits:** 6-8

## COLORADO/WYOMING STATE ASSEMBLY

**Program Type:** Webinar (approved only Colorado/Wyoming State Assembly members)  
**Date:** November 4, 2023  
**Title:** Fall Workshop  
**Contact:** Jessica Brueggen, 13456 Via Varra, Unit 226, Broomfield, CO 80020, 715-507-0163, [information@coloradoast.com](mailto:information@coloradoast.com)  
**CE Credits:** 3

## GEORGIA STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** March 9, 2024  
**Title:** Spring Forward into Learning  
**Location:** Northeast Georgia Medical Center - Walters Auditorium, 743 Spring St, Gainesville, GA 30501  
**Contact:** Erin Baggett, PO Box 216, Lawrenceville, GA 30046, 678-226-6943, [gasawebmaster@gmail.com](mailto:gasawebmaster@gmail.com)  
**CE Credits:** 7

## IOWA STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** October 14, 2023  
**Title:** Iowa State Assembly Fall 2023 Annual Business Meeting and Workshop  
**Location:** Des Moines Area Community College - Urban Campus, 1100 7th St, Des Moines, IA 50314  
**Contact:** Tim Danico, 319-540-6008, [timothy-danico@uiowa.edu](mailto:timothy-danico@uiowa.edu)  
**CE Credits:** 7 Live

## KANSAS STATE ASSEMBLY

**Program Type:** Workshop  
**Date:** October 7, 2023  
**Title:** Fall 2023 Workshop  
**Location:** Cosmosphere, 1100 N Plum St, Hutchinson, KS 67501  
**Contact:** Sarah Handley, 1427 Tamarisk Court, Eudora, KS 66025, 308-830-2992, [ks.st.assembly@gmail.com](mailto:ks.st.assembly@gmail.com)  
**CE Credits:** 6

## MAINE STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** October 21, 2023  
**Title:** MESA Fall Symposium  
**Location:** Northern Light Mercy Hospital, 175 Fore River Parkway, Portland, ME 04102  
**Contact:** Jeffrey Anderson, 26 Stillwater Dr, Unit 6, Westbrook, ME 04092, 207-838-9676, [jeffanderson1075@gmail.com](mailto:jeffanderson1075@gmail.com)  
**CE Credits:** 5

## MARYLAND/DELAWARE STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** October 21, 2023  
**Title:** Fall Workshop and Annual Business Meeting  
**Location:** Community College of Baltimore County-Essex Campus, 7201 Rossville Blvd, Baltimore, MD 21237  
**Contact:** Norah Bennett, 6713 Hearn's Pond Road, Seaford, DE 19973, 410-490-2336, [norah717@gmail.com](mailto:norah717@gmail.com)  
**CE Credits:** 6

## MASSACHUSETTS STATE ASSEMBLY

**Program Type:** Webinar (approved only Massachusetts State Assembly members)  
**Date:** October 21, 2023  
**Title:** 2023 Fall Webinar  
**Contact:** Kristen Urbanek, 187 Riverside Ave, Medford, MA 02155, 617-257-5384, [rdsox805@yahoo.com](mailto:rdsox805@yahoo.com)  
**CE Credits:** 4

## MINNESOTA STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** October 14, 2023  
**Title:** 2023 Fall Workshop & Annual Business Meeting  
**Location:** Rasmussen University - Hennepin/Anoka Campus, 5555 96th Ave N, Brooklyn Park, MN 55443  
**Contact:** Lori Molus, PO Box 163, Becker, MN 55308, [mnast2016@outlook.com](mailto:mnast2016@outlook.com)  
**CE Credits:** 6

#### MISSISSIPPI STATE ASSEMBLY

**Program Type:** Workshop  
**Date:** October 28, 2023  
**Title:** Advancing Excellence in Surgical Technology  
**Location:** University of Mississippi Medical Center, 2500 N State St, Jackson, MS 39216  
**Contact:** Tommie Wells, 447 Highway 35 N, Forest, MS 39074, 601-750-5293, twwells10@yahoo.com  
**CE Credits:** 5 Live

#### NEW HAMPSHIRE/VERMONT STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** October 7, 2023  
**Title:** Fall Conference and Elections  
**Location:** Southern New Hampshire Medical Center, 8 Prospect St, Nashua, NH 03060  
**Contact:** Lynn Jones, PO Box 3312, Concord, NH 03302, 603-370-1489, nhvt-stateassembly@gmail.com  
**CE Credits:** 5

#### NEW YORK STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** October 14-15, 2023  
**Title:** NYAST 2-Day Conference, Business Meeting & Elections  
**Location:** Turning Stone Resort, 5218 Patrick Road, Verona, NY 13478  
**Contact:** Emily Runions, 576 E River Road, Grand Island, NY 14072, 716-380-0677, boardnyast@gmail.com  
**CE Credits:** 12

#### NORTH DAKOTA STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** October 7, 2023  
**Title:** NDSA 2023 Workshop & Business Meeting  
**Location:** Dakota Medical Facility, 4141 28th Ave S, Fargo, ND 58104  
**Contact:** Cherie Frenzel, PO Box 231, Mandan, ND 58554, 701-471-1255, cfrenzel38@hotmail.com  
**CE Credits:** 6

#### OHIO STATE ASSEMBLY

**Program Type:** Webinar (approved only Ohio State Assembly members)  
**Date:** October 14, 2023  
**Title:** Ohio AST Fall Webinar 2023  
**Contact:** Michael Pickering, ohioast@gmail.com  
**CE Credits:** 4

#### OKLAHOMA STATE ASSEMBLY

**Program Type:** Workshop  
**Date:** November 11, 2023  
**Title:** OKSA Fall Conference  
**Location:** Lemley Memorial Campus – Tulsa Technology Center, 3420 S Memorial Dr, Tulsa, OK 74145  
**Contact:** Miguel Agosto, 580-301-1648, oksaoftheast@gmail.com  
**CE Credits:** 6

#### OREGON STATE ASSEMBLY

**Program Type:** Workshop  
**Date:** October 21, 2023  
**Title:** Oregon Fall Conference 2023  
**Location:** PeaceHealth Sacred Heart Medical Center at Riverbend, 3333 Riverbend Dr, Springfield, OR 97477  
**Contact:** Christa Hagenauer, 503-400-8872, oast.oregon@gmail.com  
**CE Credits:** 4

#### SOUTH CAROLINA STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** October 28-29, 2023  
**Title:** SCSA Fall Workshop  
**Location:** Horry Georgetown Technical College, 950 Crabtree Lane, Myrtle Beach, SC 29577  
**Contact:** Katrina Williams, PO Box 10001, Dillon, SC 29536, 843-615-7454, katinawilliams89@yahoo.com  
**CE Credits:** 12

#### SOUTH DAKOTA STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** October 6-7, 2023  
**Title:** SDSA Fall Conference & Elections  
**Location:** Western Dakota Technical College, 800 Mickelson Dr, Rapid City, SD 57703  
**Contact:** Tiffany Howe, 800 Mickelson Dr, Rapid City, SD 57703, 303-619-3666, sunset4114@yahoo.com  
**CE Credits:** 9

#### TEXAS STATE ASSEMBLY

**Program Type:** Workshop  
**Date:** October 14, 2023 CANCELLED  
**Title:** South Padre Island Workshop  
**Location:** South Padre Island, TX  
**Contact:** Stacy Rimes, txsastateassembly@gmail.com  
**CE Credits:** 8

**Program Type:** Workshop  
**Date:** November 4, 2023  
**Title:** San Antonio Workshop  
**Location:** TBA, San Antonio, TX  
**Contact:** Stacy Rimes, PO Box 152982, Arlington, TX 76015, 682-699-3400, txsastateassembly@gmail.com  
**CE Credits:** 8

**Program Type:** Workshop  
**Date:** January 20, 2024  
**Title:** Port Arthur Workshop  
**Location:** Lamar State College, 1500 Procter St, Port Arthur, TX 77640  
**Contact:** Stacy Rimes, PO Box 152982, Arlington, TX 76015, 682-699-3400, txsastateassembly@gmail.com  
**CE Credits:** 8

#### UTAH STATE ASSEMBLY

**Program Type:** Onsite Workshop & Webinar (Webinar approved only Utah State Assembly members)  
**Date:** October 21, 2023  
**Title:** Redrocks and Robots  
**Location:** Intermountain Health Saint George Regional Hospital - Foremaster Auditorium, 1424 E Foremaster Road, St George, UT 84770  
**Contact:** Heather Osness, 325 W 670 N Circle, St George, UT 84770, 435-215-1060, heather.osness@utahtech.edu  
**CE Credits:** 4

#### VIRGINIA STATE ASSEMBLY

**Program Type:** Workshop  
**Date:** October 7, 2023  
**Title:** A Little Something about Pediatrics  
**Location:** Children's Hospital of the Kings Daughters – Brickhouse Auditorium, 601 Children's Lane, Norfolk, VA 23507  
**Contact:** Lisa Day, 540-422-9471, ldayc-sfa@gmail.com  
**CE Credits:** 6 Live

#### WEST VIRGINIA STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** November 11, 2023  
**Title:** WVAST Fall Workshop and Business Meeting  
**Location:** Southern West Virginia Community & Technical Center, 100 College Dr, Logan, WV 25601  
**Contact:** Meloney McRoberts, 106 Hidden Valley Road, Chapmanville, WV 25508, 304-784-2772, meloney.mcroberts@southernwv.edu  
**CE Credits:** 6

#### WISCONSIN STATE ASSEMBLY

**Program Type:** Annual Meeting/Elections  
**Date:** October 7, 2023  
**Title:** Fall into Surgery 2023  
**Location:** Froedtert Treiber Conference Center, W180 N8085 Town Hall Road, Menomonee Falls, WI 53051  
**Contact:** Jessica Jacobson, 11901 W Bender Road, Milwaukee, WI 53225, 262-957-6595  
**CE Credits:** 6 Live

## STATE ASSEMBLY ANNUAL BUSINESS MEETINGS

Members interested in the election of officers & the business issues of their state assembly should ensure their attendance at the following meetings.

### ARKANSAS

Fort Smith  
October 21, 2023  
Annual Meeting  
2023 BOD Elections  
& 2024 Delegate Elections

### MAINE

Portland  
October 21, 2023  
Annual Meeting  
2023 BOD Elections  
& 2024 Delegate Elections

### NEW YORK

Verona  
October 14-15, 2023  
Annual Meeting  
2023 BOD Elections  
& 2024 Delegate Elections

### WEST VIRGINIA

Logan  
November 11, 2023  
Annual Meeting  
2023 BOD Elections  
& 2024 Delegate Elections

### CALIFORNIA

Santa Monica  
November 4, 2023  
Annual Meeting  
2023 BOD Elections  
& 2024 Delegate Elections

### MARYLAND/DELAWARE

Baltimore  
October 21, 2023  
Annual Meeting  
2023 BOD Elections  
& 2024 Delegate Elections

### NORTH DAKOTA

Fargo  
October 7, 2023  
Annual Meeting  
2023 BOD Elections  
& 2024 Delegate Elections

### WISCONSIN

Menomonee Falls  
October 7, 2023  
Annual Meeting  
2023 BOD Elections  
& 2024 Delegate Elections

### GEORGIA

Gainesville  
March 9, 2024  
Annual Meeting  
2024 BOD Elections  
& 2024 Delegate Elections

### MINNESOTA

Brooklyn Park  
October 14, 2023  
Annual Meeting  
2023 BOD Elections  
& 2024 Delegate Elections

### SOUTH CAROLINA

Myrtle Beach  
October 28-29, 2023  
Annual Meeting  
2022-2023 BOD Elections  
& 2024 Delegate Elections

### IOWA

Des Moines  
October 14, 2023  
Annual Meeting  
2023 BOD Elections  
& 2024 Delegate Elections

### NEW HAMPSHIRE/VERMONT

Nashua  
October 7, 2023  
Annual Meeting  
2023 BOD Elections  
& 2024 Delegate Elections

### SOUTH DAKOTA

Rapid City  
October 6-7, 2023  
Annual Meeting  
2023 BOD Elections  
& 2024 Delegate Elections

**Program Approvals:** Submit the *State Assembly Program Date Request Form A1* no less than 120 days prior to the date(s) of the program for AST approval. The form must be received prior to first (1st) of the current month for program publication in the next month of the AST monthly journal *The Surgical Technologist*. The *Application for State Assembly CE Program Approval A2* must be received at least thirty (30) days prior to the date(s) of the program for continuing education credit approval. An application submitted post-program will not be accepted; no program is granted approval retroactively.

Contact [stateassembly@ast.org](mailto:stateassembly@ast.org) or 800.637.7433, ext. 2547.



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1 CE



**#364**

Radiostereometric Analysis in Orthopaedic Surgery

1 CE



**#340**

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**Disc Battery Ingestion in Pediatric Patients**



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