

PRESIDENT'S MESSAGE



**Kathryn E. Glas
MD, MBA, FASE**

*President, Society
of Cardiovascular
Anesthesiologists*

**"SCA believes
in forging
meaningful
partnerships
with our
surgical
colleagues."**



Dear Colleagues,

On behalf of the Scientific Program Committee, I'm excited to invite you to join us in Toronto, Canada for the SCA 2024 Annual Meeting and Workshops, April 27-30! We're confident that this

meeting will provide countless opportunities to enhance your knowledge and celebrate our specialty with your peers. The educational programming is full of research, recent advancements, and innovative content designed to explore contemporary care and examine the best pathways to advance care for the future.

I'm thrilled at the prospect of spending time with you, exploring complex issues and opportunities that are a part of a global health care perspective. The Scientific Program Planning Committee has created a program that will stimulate ideas, questions, discussion, and friendly debate. The conference features speakers who are anesthesiologists, surgeons, cardiologists, perfusionists, research scientists, and more!

Another exciting component of the upcoming meeting is our keynote address.

I'm pleased to announce that Dr. Jerome Adams, will be our keynote speaker. Dr. Adams will speak on *Health Equity: What Is It? Why Does It Matter?* on Monday, April 29 at 11:00 AM.

The SCA firmly believes in forging meaningful partnerships with our surgical colleagues, and in 2024 our annual meeting and workshops will be held in collaboration with the American Association for Thoracic

Surgery (AATS) annual meeting. This will lend itself to many multidisciplinary sessions throughout the program which includes joint sessions on perioperative care. Our AATS colleagues will be able to attend our sessions and you will be able to attend their sessions while earning continuing education credits.

As we prepare for this collaborative meeting with the AATS in Toronto, we are aware that it partially coincides with Passover, a major religious holiday period observed by many of the Jewish faith. Securing available housing and meeting space is always a challenge, and a joint annual meeting — especially one held outside the U.S. — provides an increased set of logistical challenges. While research shows that only about 1/3 of the days in a year are holiday free, and about 27% of conference meetings necessarily overlap with religious holidays, we will make every effort going forward to be mindful of the importance and significant of these dates to many in our membership. To the extent possible, we will try to avoid these dates as we plan future SCA meetings.

We hope that you will plan to join us in Toronto to expand your knowledge and network with the field's leading professionals.

I look forward to seeing you in Toronto!

Kathryn E. Glas MD

Kathryn E. Glas, MD, MBA, FASE
SCA President, 2023-2025

**SCA ANNUAL MEETING
& WORKSHOPS | 2024**
APRIL 27 - 30 *Toronto, Canada*



Register for SCA Echo 2024!



SCA ECHO 2024

February 15 - 18 • Atlanta, Georgia

Loews Atlanta Hotel



The SCA Echo four-day conference will showcase multidisciplinary panels delving into the pivotal role of echocardiography in surgical decision-making concerning valvular disease and mechanical circulatory support.

SESSION HIGHLIGHT: STRUCTURAL HEART DISEASE I

Moderators: Richard Sheu, MD, FASE and Candice Morrissey, MD, MSPH, FASE

Nuts and Bolts for A2-P2 TEER

Kiran Belani, MD

Tips and Tricks for Left Atrial Appendage Occlusion

Laebe C. Lester, MD

Learn from My Mistakes

Richard Sheu, MD, FASE

Lost in Translation: Co-Registration

Charles B. Nyman, MBBCh

SESSION HIGHLIGHT: DECISION MAKING IN AORTIC VALVE SURGERY

Moderators: Samhati Mondal, MD and Douglas C. Shook, MD, FASE

Solving Data Discordance in Aortic Stenosis

Candice Morrissey, MD, MSPH, FASE

The Role of Echo in Aortic Valve Repair

Emily Mackay, MD

Assessment and Decision Making in Multivalvular Disease

Alina Nicoara, MD, FASE

Aortic Valve Replacement: Not So Fast with that Test Dose

Angela Li Pollak, MD

Join Us at
SCA Echo
in 2024!

[VIEW AGENDA](#)

[REGISTER NOW](#)

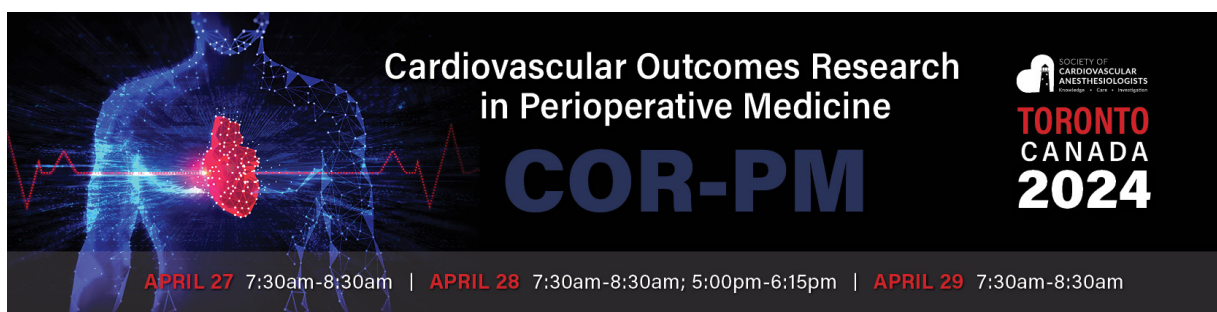
[SECURE HOUSING](#)

TAS Registration is Now Open!

[VIEW AGENDA](#)
[REGISTER NOW](#)


The Thoracic Anesthesia Symposium (TAS) Planning Committee invites you to join the world of non-cardiac anesthesiologists from around the world for the 2024 TAS meeting on April 26, 2024, in Toronto, Canada.

COR-PM in Toronto

[VIEW AGENDA](#)
[REGISTER NOW](#)


Message from the COR-PM Scientific Program Chairs

Dear Colleagues,

The Scientific Program Committee is thrilled to announce the third Cardiovascular Outcomes Research in Perioperative Medicine (COR-PM) conference will be held in person April 27-29, 2024, in conjunction with the SCA 46th Annual Meeting and Workshops in Toronto, Canada.

We have three days packed with high-yield practical content:

- 1) **Saturday, April 27:** How to Run a Trial with Your Surgeon
- 2) **Sunday, April 28:** Methods: Omics, Biobanking / AI and Big Data / Late Breaking Science / Keynote Lecture with Dr. Beverly Orser
- 3) **Monday, April 29:** How to Jump-start Your Academic Career

We are thrilled to welcome you to Toronto in 2024!

Jochen Steppan, MD and Kimberly Howard-Quijano, MD
Co-Chairs, COR-PM 2024 Scientific Program

**Don't Delay!
Register
Today!**

[VIEW SCHEDULE
AT A GLANCE](#)

[VIEW PBLDS](#)

[VIEW WORKSHOPS](#)

[VIEW
FULL PROGRAM](#)

SCA 2024 Annual Meeting & Workshop in Collaboration with AATS

REGISTRATION IS NOW OPEN!

Early Bird Registration Closes February 9, 2024

Join your fellow members in Toronto, Canada for the latest cardiothoracic anesthesia information through fantastic plenary sessions, controversial panel discussions, pro-con debates, hands-on workshops, mentoring sessions, and problem-based learning sessions.

Look forward to:

- Amazing content delivered by experts in cardiothoracic anesthesiology, interventional cardiology, and cardiothoracic surgery
- Experts will provide didactics, small group breakout teaching, and high yield discussions
- Problem based learning discussions, scientific abstracts, and workshops are planned to optimize attendee learning and connection on critical cardiothoracic anesthesiology topics
- Attendee networking, idea-sharing, and exhibits

This year, in-person you can:

- Attend live discussion sessions to help you discover up to date practice pathways and innovations in the field
- Register for Workshops and PBLDs tailored for YOUR educational needs
- Network with 1,200 other professionals in anesthesiology as well as thoracic surgeons to help you gain insight into your practice and career
- Connect with industry and exhibiting companies to learn about new products and programs

Hotel Information and Meeting Venue

Hotel Information:

Hilton Toronto

\$329.00 CAD

Cut-off date: April 1, 2024

[Reserve Your Room](#)

Hyatt Regency Toronto

\$329.00 CAD

Cut-off date: April 2, 2024

[Reserve Your Room](#)

Sheraton Toronto

\$354.00 CAD

Cut-off date: April 2, 2024

[Reserve Your Room](#)

Westin Harbor Castle

\$354.00 CAD

Cut-off date: April 2, 2024

[Reserve Your Room](#)

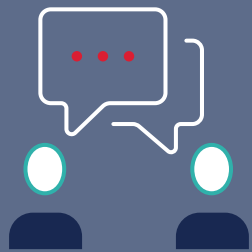
Meeting Venue:

Metro Toronto Convention Centre

South Building
222 Bremner Boulevard
Toronto, Ontario
M5V 3L9, Canada

[Click Here](#)

for more information



SCA Welcomes New Executive Director



The SCA is proud to introduce Courtney L. White, PhD, MLS, CAE, as its recently appointed executive director. Dr. White is a certified association executive who brings over two decades of trade association and professional society leadership with him.

Dr. White joined us after 15 years at the American Thoracic Society, where he worked closely with the executive committee and board of directors on implementation and administration of the society's strategic initiatives. He also served in leadership roles at several other associations over the course of his career and is a career association executive. Dr. White also holds a PhD in educational leadership. He may be reached at cwhite@veritasamc.com.

2024 SCA Research Grants – Apply Now!

SCA supports cardiothoracic and vascular research projects. This is the basis for the creation of the SCA Starter Grant, SCA Diversity and Inclusion Grant, SCA Mid-Career Grant, and the In-Training Grant.

GRANTS INFORMATION

Four types of grants will be awarded in 2024 to SCA members ONLY:

- **SCA Starter Grant** – up to \$25,000 per year for two years
- **SCA Diversity and Inclusion Grant** – up to \$25,000 per year for two years
- **SCA Mid-Career Grant** – up to \$50,000 per year for two years
- **SCA In-Training Grant** – \$15,000 for one year

**Deadline for
submissions
is Jan 24th**

The Starter Grant and the Diversity and Inclusion Grant request the same application information and formatting. ***At the time of application, the PI should identify if they are eligible for, and wish to be considered for, both the Diversity and Inclusion Grant and the Starter Grant or for one or the other only. Please use the research grant title page to identify which grant or both.***

The awards will be announced during the 2024 SCA Annual Meeting & Workshops in Toronto, Canada. The grant period of 24 months can begin any time from July 1 to December 31 of the year granted. Grant recipients are required to present their work at a subsequent SCA Annual Meeting. **Application submission period will close on January 24, 2024.**

START APPLICATION

[Click Here](#) 2024 SCA Research Grants requirements and instructions

[Click Here](#) Research Grants Checklist

[Click Here](#) Research Grants Title Page *(Please submit with your application)*

The SCA is committed to promoting the representation of women and underrepresented minority investigators. Diversity is vitally important to advance scientific discovery. Starting with this year's funding cycle, the SCA is especially encouraging individuals from all racial, ethnic or gender groups to apply.

START APPLICATION



You Can Make a Difference by Supporting the SCA Endowment!

December 31st is approaching — donate to SCA to take advantage of tax deductions!

By donating to the SCA Endowment, you help SCA achieve its mission and assist cardiovascular anesthesiologists in furthering their education, research, and professional development.

Making an online donation is quick, easy, and secure. Access the SCA Endowment Fund donation page by visiting [SCA Endowment](#)

For more details on the endowment, please email donation@scahq.org.

2024 Kaplan Leadership Development Award is NOW Accepting Applications!

Applications for the 2024 Kaplan Leadership Development Award will be accepted through January 15, 2024. The award is designed to assist cardiothoracic and vascular anesthesiologists in their career by granting funding to further their leadership development through coursework and leadership-specific studies.

The Kaplan Leadership Award will be adjusted accordingly to offer an aggregate of \$5,000 to either one recipient or divided among two.

- **\$5,000/\$2,500 from the SCA Endowment, with a \$5,000/\$2,500 match from the applicant's institution to fund a leadership education strategy.**

The deadline to submit your application is January 15, 2024.

Click here [Kaplan Leadership Development Award](#) for more information on this award and how to apply.

Questions about the grant and grant application should be emailed to operations@scahq.org, or via telephone at 855.658.2828.





Announcing the 2024 SCA DEI Jr. Resident Scholarship Program

The Society of Cardiovascular Anesthesiologists Diversity, Equity and Inclusion Committee (DEI) Junior Resident Scholar Program provides selected underrepresented minority (URM) anesthesiology residents (CA1) an opportunity to attend the SCA annual meeting. Applications will be accepted through January 15, 2024.

The goals of this scholarship are:

- To expose URM residents to the clinical practice of cardiothoracic anesthesiology by attending the SCA annual meeting.
- To give URM resident scholars early involvement in the SCA through interactions with and mentorship by leaders of the sub-specialty and other cardiothoracic anesthesiologists.

SCHOLARSHIP INFORMATION

Ten scholarships will be awarded in 2024!

REQUIREMENTS

- Nomination of URM resident by the program director or cardiothoracic faculty.
- The nominee must be an academically promising URM CA1 resident in good standing in an ACGME-accredited residency program.
- Each nominee must submit an essay addressing the following (maximum 500 words):
 - Diverse background of the nominee
 - Nominee's understanding of the issues of DEI in Cardiovascular medicine
 - Nominee's interest in CV anesthesia
- A letter of support from the program director and one additional letter of recommendation from a faculty member.
- The CV of the nominee.
- Recipients must be members of the SCA, or agree to become one, to accept the scholarship. Non-members will receive a complimentary, one-year resident/fellow membership to meet this requirement.

FUNDING

\$1,000 travel stipend; complimentary basic registration to the 2024 SCA Annual Meeting.

EVALUATION AND SELECTION

Scholarship applications will be reviewed and selected by the Scholarship Review & Selection Sub-Group of the DEI Committee at the SCA. Up to 10 scholarships will be awarded yearly.

Questions? Please write to us at dei-cmte@scahq.org.

**CLICK HERE
TO APPLY**



2025 SF Match Fellowship Exception Agreements Submission Window NOW Open!

In-order to provide more consistency and predictability to the ACTA fellowship application process, the ACTA programs participate in a common application and match process provided by SF Match for recruitment. The schedule for the 2025 training year is as follows:

November 6, 2023	Applicant Registration Began
March 6, 2024	Central Application Service Target / Deadline Date
June 5, 2024	Program Rank List Submission Deadline (12 PM PT)
June 5, 2024	Application Rank List Submission Deadline (12 PM PT)
June 5, 2024	Application Rank List Submission Deadline (12 PM PT)
June 19, 2024	Match Results
July 2025	Training Position Starts



Applicants and programs participate by registering with SF Match and applicants applying to the programs of their choice. Both programs and applicants submit a rank list based on their preferences. Notably, only programs where an applicant has interviewed can be ranked in the match.

Critical to the match process, programs and applicants can make an Exception Agreement prior to submitting their rank list to SF Match. Exception Agreements allow an applicant and program to agree to match each other prior to submitting their respective rank lists. Importantly, all ACTA positions must be included in the match, including all Exception Agreement positions.

Exceptions to the standard match process have been agreed upon by the ACTA Fellowship Program Directors Council in the following situations:

1. Applicants who are in active military service at the time of application.
2. Internal candidates, i.e., applicants who are currently in the anesthesiology residency program at the same institution as the ACTA fellowship.
3. Applicants who are making a commitment to come to the institution of the ACTA fellowship for more than one year.
4. Applicants who are enrolled in an anesthesiology residency outside of the USA at the time of application.
5. Applicants who reside outside the USA at the time of application or who are not eligible for ABA certification due to non-US training.
6. Applicants whose spouse or partner is applying for a GME-approved post graduate training program in a medical specialty in the same region as the ACTA fellowship.

Please Note: Eligible applicants and programs who wish to take advantage of an exception rule are still required to participate in the match ranking process and must complete an exception agreement found on the SCA website via the link below. This year exception agreements will be posted on the SCA website for transparency to programs and applicants. Any match irregularities will be referred to the ACTA Fellowship Program Directors Council of the SCA.

Program directors complete the first part of the match exception process. **To begin, [Click Here](#).** Please note, you will need to log in with your SCA username and password. Once the program director completes this portion of the process, the applicant will receive an email with a link to the form they must complete. Any match irregularities will be referred to the ACTA Fellowship Program Directors Council of SCA.

For questions or assistance, please contact Mary Lunn at mary@veritasamc.com.



2024 Nominating Slate

The SCA Nominating Committee, chaired by Immediate Past President Dr. Andrew Shaw, MB, FCCM, FFICM, FRCA, is pleased to endorse the following candidates for the 2024 election cycle. Information about each candidate will be available in the February newsletter and through the online election system.

Two positions are available for **Director-at-Large**, among the following nominees:

- Tara Brakke, MD, FASE – *University of Nebraska Medical Center*
- Abimbola (Bola) Faloye, MD, FASA, FASE – *Emory University School of Medicine*
- Natalia Ivascu Girardi, MD – *Weill Cornell Medicine*
- Alina Nicoara, MD – *Duke University*
- Charles Nyman, MBBCh – *Brigham & Women's Hospital*
- Jacob Raphael, MD, FAHA – *Thomas Jefferson University Hospital*
- Jochen Steppan, MD, DESA, FAHA, FASA – *Johns Hopkins University School of Medicine*

Two positions are available for **Early Career Director**, among the following nominees:

- Farzad Ebrahimi, MD – *Advocate Illinois Masonic Medical Center*
- Regina (Gina) Linganna, MD – *University of Pennsylvania*
- Jessica Spence, MD, PhD, FRCP – *McMaster University*
- Agnieszka Trzcinka, MD, FASE – *Tufts Medical Center*

One position is available for the **CME Committee member**, among the following nominee:

- Christos Koutentis, MB, ChB, MS – *SUNY Downstate Medical Center*

The 2024 online election for SCA leadership is scheduled to open on January 22, 2024.

Prepare for
the Board
Exam with
these FREE
Courses!



SCA UNIVERSITY
An Online Learning Management System

ARC: A Review Course for the ABA's Adult Cardiac Anesthesia Board Examination

SCA's ARC: A Review Course focuses on the Adult Cardiac Anesthesia Board Examination that will be administered by the American Board of Anesthesiology for the first time in December 2023.

Our review course embraces the intersection of technology and education and hosts a series of 36 interactive modules that will walk you through the content outline of the ACA exam. These modules contain images, videos, tables, and text from a variety of sources, but have been arranged for members in easy-to-navigate modules. Work through our modules that are rigorously cited and peer reviewed.

These courses are FREE to all SCA members within the SCA University account! If you have not created an account, you will need to do so before you can access. If log in assistance is required, please contact info@scahq.org. For non-members, you can join and have access to this compelling series.

[ACCESS COURSE](#)



Committees, Subcommittees and Task Forces – Oh My!

Have you ever wondered about a committee's mission and purpose? Or how it contributes to the Society's strategic plan and initiatives? Then look no further! Learn this and more by visiting the Committee and Task Force page of the SCA website.

[Click Here for Information](#)

Save the Date!

New WICTA Webinars

The Society of Cardiovascular Anesthesiologists Special Interest Group, WICTA and the Member Engagement Committee will be hosting these FREE webinars.



Tips for Survival as a NEW Cardiothoracic Anesthesiologists: Communicating in the OR and Beyond

Thursday, January 25, 2024
6:00 PM – 7:30 PM EST



Working Towards Collaborative Outcomes in Negotiation and Understanding Different Influencing Strategies

Thursday, February 22, 2024
7:00 PM – 8:15 PM EST



Don't Forget to Purchase Your SCA Swag for the Holidays!

Start Shopping Today!

**SCA
SWAG
STORE**



CLICK HERE

SCA branded t-shirts, sweatshirts, mugs, and more are now available for purchase!

Renew Your Membership Today!

SCA helps you stay current with clinical practice guidelines, developments in the sub-specialty, and Society activities. As a member, you are given access to important resources including:

-  **SCA University**— is a powerful NEW learning management system available exclusively to SCA members. This powerful platform allows you to access hours of learning tailored to your needs. Accessible whenever and wherever is most convenient for you, hosting such free educational materials as the **New ARC: A Review Course** for the ABA's Cardiac Anesthesia Board Examination.
-  **SCA Mobile App**— Quick, easy access to all the information and benefits of the SCA website, wherever you are.
-  **DocMatter**— is an internet-enabled and human-supported collaboration platform, built by and for physicians to provide a unique online community to access your colleagues.
-  **Education**— SCA is a global leader in comprehensive professional education that promotes the provision of safe, high-quality, cost-effective medical care for patients undergoing cardiovascular and thoracic procedures.
-  **SCA News**— an electronic newsletter, published six times per year.
-  **Committees, Subcommittees, Task Forces and Special Interest Groups**— numerous groups who work together to support the vision and the mission of the Society.
-  **Fellowship & Career Development**— helping members advance their careers and broaden their professional opportunities.
-  **Networking Opportunities**— gain access to more than 3600 members nationally and internationally. More than 1,200 attendees come together during the Annual Meeting & Workshops to discuss key issues involved in delivering care to patients undergoing cardiovascular and thoracic surgeries.

Please renew your membership today! If you have any questions about the process, please don't hesitate to contact us at (855) 658-2828, by email at info@scahq.org, or online at scahq.org/membership.

As always, thank you for your continued dedication to our mission. We look forward to continuing to serve your educational and professional development needs!



Paying it Forward: Mentorship and SCA's Junior Scholars Program

Bantayehu Sileshi, MD

Vanderbilt University Medical Center
Associate Professor Department of Anesthesiology
Program Director Adult Cardiothoracic Anesthesiology Fellowship



Reflecting on my career, several people have played a critical role in helping me navigate the journey of medical education, residency, and early career as a cardiothoracic anesthesiologist. As the first person in my family to pursue a career in medicine, without these individuals taking a keen interest in helping me navigate different stages of my career, I would not have been successful in getting to where I am today. As a result, I have a great passion for mentoring and supporting others in similar situations. This is why I was very excited when we launched the SCA's DEI Junior Scholars Program, knowing its impact on helping junior anesthesia residents navigate the fellowship selection process and prepare for the next steps. The main goal of the Junior Scholars Program is to expose selected underrepresented minority (URM) clinical anesthesiology year one (CA-1) residents to the clinical practice of cardiothoracic anesthesiology. The selected URM resident scholars are given the opportunity to attend the SCA annual meeting where they get to present a poster, interact with, and are mentored by subspecialty leaders and other cardiothoracic anesthesiologists.

Some might wonder why we still need programs and grants specifically designed for underrepresented minorities. A review of existing literature on healthcare disparities, including cardiovascular care, has ample data to show that when the healthcare workforce is more representative of the U.S. population and our patients, it improves patient outcomes and reduces existing healthcare outcome disparities.^{1,2,3} In an upcoming article in the *Journal of the American College of Cardiology*, Milam et al. provide a comprehensive analysis of racial and ethnic disparities in perioperative healthcare among patients undergoing cardiac surgery and propose strategies to mitigate these disparities. I highly encourage everyone to read this article. Investment in diversity can help organizations like the SCA improve patient satisfaction, patient care quality, and financial results.⁴

Preparing for a cardiovascular anesthesiology workforce that reflects the diversity of our communities will better prepare us to meet the needs of all patients, especially given the projected shifts in demographics in the coming years. Therefore, initiatives that facilitate diversification through recruiting, retaining, and developing URMs in cardiovascular anesthesia are essential. The SCA's Junior Scholar Program is one initiative that does just that.



Dr. Rachel Reindorf is one of the recipients of this scholarship from last year. We sat down with her in an interview to get her insights on how the DEI Junior Residents Program shaped her career choice.

How was your experience as a SCA junior resident scholar during the annual meeting last year?

The SCA Junior Resident Scholar program allotted me the opportunity to present a medically challenging case at a conference. I also had the opportunity to speak with cardiac fellows and attendings to receive advice on fellowship applications and how to navigate the field.

Do you think your journey as a junior resident scholar helped you in your career choice as a future cardiac anesthesiologist?

Definitely. I was deciding between different specialties. Gaining early exposure to cardiac anesthesia allowed me to solidify my choice.



DEI COMMITTEE

How has your relationship been with the Junior resident scholar mentor since the annual meeting?

It has been fantastic! My mentor has truly shaped my career trajectory. Dr. Deshpande is always the first person to offer help with presentations and always willing to meet informally just to discuss...well, anything! I can't imagine where I would be now without her.

Do you think having a mentor has been helpful beyond the annual meeting?

Yes. My mentor provides a constant source of information, guidance, and ideas.

Tell us overall what you think about SCA junior resident scholar program.

It was a fantastic opportunity. It gave me a chance to gain experience presenting at a national conference. It also allowed me to meet other residents who were in the same boat. It's great to know that we were able to build relationships with people in all stages of training who are more than willing to help us navigate our careers.

How can this DEI initiative be helpful in overall creating and developing an equitable cardiac anesthesiologists' society in your opinion?

It was an opportunity to delve deeper into the field of cardiac anesthesiology and form connections that we otherwise wouldn't have the opportunity to.

References

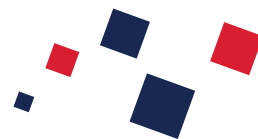
1. Schneider EC, Chin MH, Graham GN, et al. Increasing Equity While Improving the Quality of Care. *J Am Coll Cardiol.* 2021;78:2599-2611.
2. National Academies of Sciences, Engineering, and Medicine, Health and Medicine Division, Board on Population Health and Public Health Practice, Committee on Community-Based Solutions to Promote Health Equity in the United States. *Communities in Action: Pathways to Health Equity.* (Baciu A, Negussie Y, Geller A, Weinstein JN, editors.). Washington (D.C.): *National Academies Press* (U.S.), 2017.
3. Stanford FC. The Importance of Diversity and Inclusion in the Healthcare Workforce. *J Natl Med Assoc.* 2020;112:247-249.
4. Gomez, L.E. and P. Bernet, Diversity improves performance and outcomes. *J Natl Med Assoc.* 2019. 111(4): p. 383-392.



AWEsome Woman Interview

Yafen Liang, MD

University of Texas Health Science Center at Houston
Associate Professor
Vice Chair, Clinical Research
Chief, Division of Cardiovascular Anesthesiology



MEMBER CORNER

1. What led you to become a Cardiovascular/Thoracic Anesthesiologist?

Coming from a different country as a foreign medical graduate, it was not easy for me to adjust to the new healthcare system, communication skills, and culture. I had two simple reasons to become a cardiovascular anesthesiologist: one was to be very comfortable taking care of very sick cardiac patients, and the second was to improve communication skills by working with the "toughest" surgeons in the hospital.

2. How did you hear about the SCA?

I learned about SCA during my fellowship, and I have been actively involved with SCA since then.

3. What roles have you held for the society?

I was part of the SCA guideline development committee from 2016 to 2019. In 2021, I was appointed inaugural Vice Chair of the Diversity, Equity, and Inclusion Committee.

4. What is one of your greatest achievements as a Cardiovascular/Thoracic Anesthesiologist?

As the Division Chief of Cardiovascular Anesthesia at our institution, I am really proud that I was able to lead the division through a difficult transition in both leadership and cultural change and oversaw these vital changes in all aspects, including clinical service, quality and efficiency, research, and education. I recruited and rebuilt a very diverse group of talented cardiovascular anesthesiologists through fairness and transparency and led by example.

5. Do you have any advice for fellows and residents?

I think receiving additional training, such as CV anesthesia fellowship training, is very important for career development in long term and for us to differentiate from middle-level providers.

6. Have you experienced any difficulties as a woman in the field?

I have been very lucky that I do not feel my capacity or authority has been challenged or questioned because I am a woman. Maybe because I have been in institutions with leaders focusing on equity.

7. Do you have any advice for other women in the field?

I think the biggest challenge for me as a woman in the field of CV anesthesia, and probably any profession is to find a work-life balance and avoid burnout. Finding a peer support group and good mentors are essential to navigate through these challenges.

8. How do you balance work and personal life?

It is very difficult to balance. If you want to excel in either field, you need to dedicate time and energy. I usually work very hard on work-related items during weekdays and dedicate my weekends to family (if I am not on call). There are still times that I must come to work over the weekends in order to meet certain deadlines or just to catch up, and that is not pleasant.

9. What is something you enjoy doing outside of work?

I love gardening and interior designing.

10. Would you change anything about the path you took to get to where you are now?

Yes. I would identify my niche and be more focused since the beginning of my career, and I want to give this advice to all young anesthesiologists.

11. What was the best piece of advice you received?

Find your niche earlier on in your career. I wish someone had told me years ago. Maybe they did, but I just did not have a deep understanding at that time.



Determining Sex-Specific Preoperative Haemoglobin Levels Associated with Intraoperative Red Blood Cell Transfusion in Cardiac Surgery: A Retrospective Cohort Study

Leonardo B. Cavalli, Bronwyn L. Pearse, Alison Craswell, Christopher M. Anstey, Rishendran Naidoo, Ivan L. Rapchuk, Joanne Perel, Kylie Hobson, Mingzhong Wang and Yoke-Lin Fung
British Journal of Anaesthesia, 131 (4): 653e663 (2023)

Reviewer:

Stavroula Nikolaidis MD
Clinical Associate Professor Texas A&M
Scott and White Medical Center
Baylor Scott and White Health
Division of Cardiac Anesthesiology

Background

Patients undergoing cardiac surgery are at risk of developing negative outcomes if they are anemic, experience blood loss or receive blood transfusion.¹ Preoperative anemia increases the risk of intraoperative blood transfusion. Anemia before elective cardiac surgery occurs in 16-54% of patients.^{2,3} Pre cardiac surgery anemia reduction as one of patient optimization strategies is often implemented using the anemia thresholds of 130 g/L for males and 120 g/L for non-pregnant females, as defined by the World Health Organization (WHO).^{4,5} Use of the WHO anemia thresholds for preoperative patient optimization have recently been challenged in the literature.⁶⁻¹⁰ More specifically, a female with preoperative hemoglobin 120 g/L is two times more likely to require a blood transfusion during cardiac surgery than a male with preoperative hemoglobin 130 g/L. In a 2017 international consensus statement⁶ it was proposed that the same minimum hemoglobin of 130 g/L should be used for preoperative optimization of both male and female patients. Because of the great differences found in the literature regarding the optimal preoperative hemoglobin, expert panel in the 'patient blood management consensus conference', held in Frankfurt in 2018, recommended identification of optimal hemoglobin thresholds in different patient groups.⁹

In this single center 6060 cardiac surgery patient cohort the authors aimed to determine the sex specific preoperative hemoglobin, associated with decreased probability of intraoperative blood transfusions.

Methods

The study took place in the Prince Charles Hospital, Brisbane, Australia between 1/1/2012 and 12/31/2018. Adult patients who underwent elective or urgent cardiac surgery that required cardiopulmonary bypass (CPB) were included in the retrospective cohort. Emergent cases, transplantation, off pump cases and transcatheter valve implantation cases were excluded.

Logistic regression- derived odds ratio, predictive probability and conditional probability models were applied. Because of the possibility, confounding factors as surgical complications, surgical bleeding or CPB time, to mask the association of preoperative hemoglobin and intraoperative blood transfusion, two category model, either 0 RBCs or ≥ 1 RBCs was used. Data from confounding factors: age, weight, height, body mass index (BMI), body surface area (BSA), total blood volume (TBV), cardiac surgery type (CABG only, valve only, combined CABG-valve, other) and urgency (urgent, elective <30 days, elective <90 days, elective <365 days), were analyzed. In the logistic regression modelling of the above factors, probabilities were predicted for hemoglobin 120,125,130 and 135 g/L for male and female patients.

Results

Intraoperative blood transfusion was required in 28% of female and 12% of male patients. On average, preoperative hemoglobin was 15 g/L higher in males than in females. Male and female patients who received intraoperative blood transfusion were smaller and had lower preoperative hemoglobin compared to the patients that did not.

Male: 72 cm, 80 kg, 112 g/L vs 175 cm, 88 kg, 143 g/L, $p < 0.0001$.

Female: 159 cm, 69 kg, 116 g/L vs 160 cm, 74 kg, 132 g/L, $p < 0.0001$.



From the logistic regression analysis, TBV and sex were predictive of intraoperative blood transfusion. With both parameters in the model, only TBV and not sex remained predictive: for every liter increase in TBV the odds of intraoperative blood transfusion decreased by 46%.

Likewise, with every g/L increase in preoperative hemoglobin, the odds of intraoperative transfusion decreased by 8.4%.

Patients who underwent urgent surgery, were older than 45, of female sex, and those who underwent urgent, combined or other procedures were more likely to require a blood transfusion intraoperatively.

The predictive probability of intraoperative RBC transfusion decreased by nearly half with an increase of hemoglobin from 120 g/L to 130 g/L.

From application of the simplified logistic regression model and predicted probability, for a >45-year-old, having less urgent surgery, the preoperative hemoglobin required to decrease the predicted probability for intraoperative blood transfusion to $\leq 15\%$ would be 133g/L for males and 127 g/L for females. With preoperative hemoglobin 110-119 g/L 68.2% of males and only 51.4% of females did not require blood transfusion.

Discussion

Anemia and blood transfusion are associated with adverse outcomes not only in cardiac surgery but in all surgery^{1,9,11,12} as well. Anemia optimization strategies prior to surgery are recommended. As shown on this study, using the anemia thresholds as established by WHO, preoperative hemoglobin 120 g/L for females and 130 g/L for males, will result in disproportional larger number of females that will be transfused intraoperatively compared to males. The logistic regression analysis showed that the TBV also has predictive value for intraoperative blood transfusion. Females often are smaller in size and so have less TBV. The impact of hemodilution from CPB or of intraoperative blood loss will likely be greater in females resulting in a lower hemoglobin and higher incidence of transfusion. To reach a low probability of intraoperative blood transfusion ($<15\%$), the optimal preoperative hemoglobin should be 130 g/L for men and women as well.

Limitations of the study include:

The retrospective nature of the study, 756 patients were excluded due to missing or incomplete data.

The transfusion threshold used was not mentioned in the study. It is possible that it varied over the course of the study.

It was a single center study which extended over 6 years. Surgeons and practices may have changed over those years in the specific center.

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