



2023 Pittsburgh Vascular Symposium **Comprehensive Vascular Care**

May 4-6, 2023

Fairmont Pittsburgh Downtown
510 Market St. | Pittsburgh, Pennsylvania

SPONSORED BY

University of Pittsburgh School of Medicine
Center for Continuing Education in the Health Sciences
UPMC Heart and Vascular Institute

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VASCULAR INSTITUTE

COURSE DIRECTORS:



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OVERVIEW

This course will provide evaluation and critique of the current and future standards of care in the treatment of the vascular patient with respect to medical management, as well as endovascular and open therapies for the primary care provider, cardiologists, interventionalists, and the vascular surgeon. It continues to focus on new developments in technology, as well as surgical techniques, and will highlight the controversies as well as accepted practices.

WHO SHOULD ATTEND

This course is designed for primary care providers, cardiologists, interventionalists, vascular surgeons, and other interested healthcare professionals who provide primary care services.

LEARNING OBJECTIVES

Educational Objectives:

- Explain the current evidence base and emerging trends for management of arterial and venous pathology.
- Recognize implications of cross-specialty/multidisciplinary care in vascular surgery.
- Delineate the optimal treatment strategies for patients with extremity arterial diseases, aortic aneurysms, thoracic aortic pathology, carotid artery stenosis, and varicose veins.
- Recognize and discuss important issues regarding congenital and genetic vascular diseases.



CONTINUING EDUCATION CREDITS

In support of improving patient care, the University of Pittsburgh is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Physician (CME)

The University of Pittsburgh designates this live activity for a maximum of 15.75 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Nursing (CNE)

The maximum number of hours awarded for this Continuing Nursing Education activity is 15.75 contact hours.

Other health care professionals will receive a certificate of attendance confirming the number of contact hours commensurate with the extent of participation in this activity.

WIRELESS INTERNET CONNECTION INFORMATION

For complimentary wireless internet access during the meeting, attendees should use the **Fairmont Meeting** wireless network and use the access code **UPMC2023** when prompted.

LOCATION AND ACCOMMODATIONS

The conference will be held in the Grand Ballroom on the second floor of the **Fairmont Pittsburgh Hotel**, located at 510 Market St., Pittsburgh, PA 15222.

PARKING

Parking is on your own, and facilities are available across the street from the Fairmont Pittsburgh Hotel.

SPECIAL NEEDS

Participation by all individuals is encouraged. Advance notification of any special needs will help us provide better service. Please notify us of your needs at least two weeks in advance of the program by emailing titchworthjs@upmc.edu.

VISIT THE UPMC HEART AND VASCULAR INSTITUTE WEBSITE

The UPMC Heart and Vascular Institute invites you to visit our website at UPMC.com/HVI. Learn more about us and receive information about the conditions we treat, treatment options, specialty programs, services, research and education, our experts, patient stories, and locations.



THURSDAY, MAY 4, 2023

9 a.m. **Continental Breakfast and Registration**

9:55 a.m. **Opening Remarks**

*Michael J. Singh, MD, MBA, FACS,
DFSVS, RPVI*

Natalie Sridharan, MD, MS, FACS, RPVI

Elizabeth Andraska, MD

Session I: Vascular Care It's Much More Than Surgery

Moderators: *Ryan M. McEnaney, MD, Melissa Pearson, CRNP and Daniel Clair, MD*

10 a.m. **Healthcare literacy in vascular patients**

Amanda Lombardi, CRNP

10:08 a.m. **Confronting disparities in PAD patients**

Elizabeth Genovese, MD, MS, FACS, RPVI

10:16 a.m. **Using big data to inform patient-centered care**

Michael R. Jaff, DO

10:24 a.m. **Should statins be in the water?**

Suresh Mulukutla, MD

10:32 a.m. **Recognizing and addressing depression in our PAD patients**

Bruce Rollman, MD, MPH

10:40 a.m. **Getting supervised exercise therapy to the patients**

Jonathan Ledyard, MD, RCEP

10:48 a.m. **PM&R and the keys to amputee success**

Max Hurwitz, DO

10:56 a.m. **The CPC: An underutilized resource**

Stephen Esper, MD, MBA

11:04 a.m. **Multidisciplinary management of the DFU: Increasing quality of care**

Caitlin Hicks, MD

11:12 a.m. **Avoiding mistakes in early practice**

Ellen Dillavou, MD, FACS, RPVI

11:20 a.m. **Case presentation and discussion: Comprehensive vascular care**

David Loran, MD

11:30 a.m. **Special Lecture: Board, societal and institutional strategies for DEI**

Bernadette Aulivola, MD, MS, RVT, RPVI

Noon **Lunch and Exhibits**

Session II: Carotid/Upper Extremity

Moderators: *Marc Schermerhorn, MD, MBA and Edith Tzeng, MD*

1 p.m. **Carotid stenosis: TCAR should be considered first line therapy**

Caitlin Hicks, MD

1:08 p.m. **Carotid stenosis: CEA is still the gold standard**

Edith Tzeng, MD

1:16 p.m. **A multi-disciplinary approach for carotid body tumors improves outcomes**

Dittmar Böckler, MD

1:24 p.m. **Open surgical and endovascular options for management of SVC syndrome**

Manju Kalra, MBBS

1:32 p.m. **Management of the aberrant right subclavian artery: Indications and treatment options**

Grace J. Wang, MD, MSCE

1:40 p.m. **Asymptomatic carotid disease: Can we identify high risk lesions?**

Efthymios Avgerinos, MD, FACS, FEBVS

1:48 p.m. **Vertebral artery disease: The who and how of intervention**

Bradley A. Gross, MD

1:54 p.m. **Discussion**

Panel

2:14 p.m. **Case presentation and discussion**

Katherine Reitz, MD



THURSDAY, MAY 4, 2023 (CONT'D)

2:30 p.m. **Break**

Exhibits and Simulation Time

3 p.m. **Special Lecture: Deep venous interventions on the rise: Standards and appropriateness of care**

Efthymios Avgerinos, MD, FACS, FEBVS

Session III: Venous

Moderators: *William Marston, MD, Efthymios Avgerinos, MD, FACS, FEBVS, and Eric Hager, MD*

3:30 p.m. **Is there an ideal stent for ilio caval occlusions?**

William Marston, MD

3:38 p.m. **Perforator veins: Success and durability of ablation techniques**

Eric Hager, MD

3:46 p.m. **A decade of catheter interventions in acute pulmonary embolism: Who, when and how?**

Rabih Chaer, MD, MS

3:54 p.m. **Beyond Compression: What is the future of lymphedema management**

Carolyn De La Cruz, MD

4:02 p.m. **Nutcracker syndrome: Endovascular vs. open management**

Ellen Dillavou, MD, FACS, RPVI

4:10 p.m. **Newer treatments for valvular insufficiency: Implantable valves and other techniques**

William Marston, MD

4:18 p.m. **Solving the pelvic venous congestion puzzle**

Bernadette Aulivola, MD, MS, RVT, RPVI

4:26 p.m. **Discussion**

Panel

4:46 p.m. **Case presentation and discussion**

Robert Tahara, MD

5 p.m. **Thursday Adjournment**

Michael J. Singh, MD, MBA, FACS, FSVS, RPVI

Natalie Sridharan, MD, MS, FACS, RPVI

Elizabeth Andraska, MD

5 p.m. **Cocktail Reception and Poster Presentations in Ballroom Foyer**

Meet the Professors/Case Presentations by Fellows (No CME credit awarded)

Moderators: *Michel S. Makaroun, MD, Dittmar Böckler, MD, Manju Kalra, MBBS, Grace J. Wang, MD, MSCE, and Efthymios Avgerinos, MD, FACS, FEBVS*

7 p.m. **Dinner for U.S. and International Faculty**

7 p.m. **Resident and Fellows Outing**

FRIDAY, MAY 5, 2023

7 a.m. **Continental Breakfast and Registration**

7:55 a.m. **Opening Remarks**

Michael J. Singh, MD, MBA, FACS, DFSVS, RPVI

Natalie Sridharan, MD, MS, FACS, RPVI

Elizabeth Andraska, MD

Session IV: PAD and Limb Ischemia

Moderators: *Michael S. Conte, MD, and Steven A. Leers, MD*

8 a.m. **ECMO complications: Management strategies**

Lindsey Haga, MD

8:08 a.m. **Adjuncts for SFA interventions: How to make interventions last**

Karim Salem, MD

8:16 a.m. **BEST CLI results: Where do we stand?**

Michael S. Conte, MD



FRIDAY, MAY 5, 2023 (CONT'D)

- 8:24 a.m. **Tibial disease: Endo first approach is reasonable**
Raymond Eid, MD
- 8:32 a.m. **Tibial disease: Open surgical revascularization is the best option**
Steven A. Leers, MD
- 8:40 a.m. **WIFI, GLASS, PLAN - Does it impact limb salvage?**
Michael S. Conte, MD
- 8:48 a.m. **Radial access: How far can we reach?**
Elizabeth Genovese, MD, MS, FACS, RPVI
- 8:56 a.m. **Deep venous arterialization: How I do it and who benefits?**
Daniel Clair, MD
- 9:04 a.m. **Discussion**
Panel
- 9:19 a.m. **Case presentation and discussion**
Adham Abou Ali, MD
- 9:30 a.m. **Break**
- Exhibits and Simulation Time**

Session V: Peds, congenital, and Other vascular topics of interest

Moderators: *Ulka Sachdev, MD and Michael C. Madigan, MD*

- 10 a.m. **Pediatric dialysis access considerations**
Theodore Yuo, MD
- 10:08 a.m. **Pediatric TOS: A changing paradigm**
Michael J. Singh, MD, MBA, FACS, DFSVS, RPVI
- 10:16 a.m. **Aortic related connective tissue orders: Diagnosis and management**
Arvind Hoskoppal, MD, MHS
- 10:24 a.m. **AVMs: Taking a multidisciplinary approach**
Jean-Michel Bartolji, MD

- 10:32 a.m. **Median arcuate ligament syndrome: Appropriate interventions**
Ulka Sachdev, MD
- 10:40 a.m. **Popliteal artery entrapment: Recognizing and managing vascular disease in young athletes**
Michael C. Madigan, MD
- 10:48 a.m. **Pediatric limb ischemia: Traumatic and iatrogenic**
Catherine Go, MD
- 10:54 a.m. **Discussion**
Panel
- 11:14 a.m. **Case presentation and discussion**
Jessica Mayor, MD
- 11:30 a.m. **Special Lecture: The future of mixed reality of future vascular surgery**
Dittmar Böckler, MD
- Noon **Lunch and Exhibits**

Session VI: Aorta

Moderators: *Nathan L. Liang, MD, Dittmar Böckler, MD and Virendra I. Patel, MD, MPH*

- 1 p.m. **AAA repair: How can we measure a job well done?**
Marc Schermerhorn, MD, MBA
- 1:08 p.m. **FORS technology: Reshaping guidance in complex endovascular aortic repair**
Marc Schermerhorn, MD, MBA
- 1:16 p.m. **Durability of bridging stents in FEVAR/BEVAR**
Virendra I. Patel, MD, MPH
- 1:24 p.m. **Debate: Hostile infrarenal necks should undergo open repair**
Georges E. Al-Khoury, MD
- 1:32 p.m. **Debate: Hostile necks can safely be treated by endovascular solutions**
Nathan L. Liang, MD



FRIDAY, MAY 5, 2023 (CONT'D)

- 1:40 p.m. **Sac behavior following EVAR: How important is it?**
Fanny S. Alie-Cusson, MD
- 1:48 p.m. **Medical therapies to stabilize the aortic wall**
Daniel Clair, MD
- 1:54 p.m. **Discussion**
Panel
- 2:14 p.m. **Case presentation and discussion**
Vei Shaun Siow, MD
- 2:30 p.m. **Break and exhibits**
- 3 p.m. **Keynote Lecture: Common and uncommon visceral artery aneurysms, lessons learned in 30 years**
Germano Melissano, MD

Session VII: Arch/Mesenteric

Moderators: *Georges E. Al-Khoury, MD, Manju Kalra, MBBS, and Germano Melissano, MD*

- 3:30 p.m. **Acute mesenteric ischemia: Endovascular treatment options**
Rabih Chaer, MD, MS
- 3:38 p.m. **Chronic visceral ischemia: Durability and results of open and endo revascularization**
Satish Muluk, MD
- 3:46 p.m. **TAAA: How to prioritize open surgery, endovascular treatment, and what is the role of debranching**
Virendra I. Patel, MD, MPH
- 3:54 p.m. **The STABILISE technique for acute/subacute TBAD**
Germano Melissano, MD
- 4:02 p.m. **Renal malignancies with extension into the IVC**
Manju Kalra, MBBS
- 4:10 p.m. **Approach to arch dissection: Non-A, non-B**
Derek Serna-Gallegos, MD

- 4:18 p.m. **Contemporary outcomes of ABF: Is it an outdated an operation?**
Michael S. Conte, MD
- 4:26 p.m. **Discussion**
Panel
- 4:46 p.m. **Case presentation and discussion**
Amanda Phillips, MD
- 5 p.m. **Friday Adjournment**
Michael J. Singh, MD, MBA, FACS, DFSVS, RPVI
Natalie Sridharan, MD, MS, FACS, RPVI
Elizabeth Andraska, MD
- 6:35 p.m. **Pittsburgh Pirates Baseball Game**
Pittsburgh Pirates vs. Toronto Blue Jays
PNC Park
115 Federal Street (North Shore)
Pittsburgh, PA 15212

SATURDAY, MAY 6, 2023

- 7 a.m. **Continental Breakfast and Registration**
- 7:55 a.m. **Opening Remarks**
Michael J. Singh, MD, MBA, FACS, DFSVS, RPVI
Natalie Sridharan, MD, MS, FACS, RPVI
Elizabeth Andraska, MD

Session VIII: My Worst Case: What Would You Do?

Moderators: *Michel S. Makaroun, MD, and Rabih Chaer, MD, MS*

- 8 a.m. **Unique and Challenging Case**
Frank Arko, MD
- 8:15 a.m. **Unique and Challenging Case**
Michael S. Conte, MD
- 8:30 a.m. **Unique and Challenging Case**
Marc Schermerhorn, MD, MBA
- 8:45 A.M. **Unique and Challenging Case**
William Marston, MD, MBA



SATURDAY, MAY 6, 2023 (CONT'D)

9 a.m. **Unique and Challenging Case**
Daniel Clair, MD

9:15 a.m. **Unique and Challenging Case**
Manju Kalra, MBBS

9:30 a.m. **Unique and Challenging Case**
Virendra I. Patel, MD, MPH

9:30 a.m. **Break and Exhibits**

Session IX: Practice Building/Residents and Fellows Course

Moderators: *Natalie Sridharan, MD, MS, FACS, RPVI, and Elizabeth Andraska, MD*

10 a.m. **Making the final years of training count**
Michael Madigan, MD

10:08 a.m. **How to get involved:
Societies, committees, etc.**
Nathan Liang, MD

10:16 a.m. **You want to be in academics?
How to make it happen**
Ryan McEnaney, MD

10:24 a.m. **You want to join a private practice.
What to know? I know the difference**
Steven A. Leers, MD

10:32 a.m. **Grants, funding, and rejections: Oh my!**
Edith Tzeng, MD

10:40 a.m. **Coding/billing: Ways to maximize
reimbursement for the work performed**
Satish Muluk, MD

10:48 a.m. **What to prioritize in your first 3 years
of practice: How I built a reputation**
Grace J. Wang, MD, MSCE

10:56 a.m. **Social Media in Vascular Surgery**
Natalie Sridharan, MD, MS, FACS, RPVI

11:04 a.m. **Mentor/Mentee: Relationship tips**
Bernadette Aulivola, MD

11:12 a.m. **Working with industry:
Where to draw the line**
Fanny S. Alie-Cusson, MD

11:20 a.m. **Discussion**
Panel

11:30 a.m. **Conference Adjournment**

INTERNATIONAL GUEST FACULTY

Efthymios Avgerinos, MD, FACS, FEBVS

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Athens Medical Center
Greece

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University of Pennsylvania Hospital, Philadelphia, PA

ACKNOWLEDGEMENT OF COMMERCIAL SUPPORT

We gratefully acknowledge the following for their
generous support.

GRANTS

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All of the relevant financial relationships for the individuals listed below have been mitigated.

- **Frank Arko, MD**, is a consultant for Penumbra, Shockwave, Medtronic, Philips, BD, Gore, and Globus.
- **Efthymios Avgerinos, MD, FACS, FEBVS**, is a member of the CE Speakers' Bureau for BD Medical, INARI Medical, Gore Medical, Phillips, and Angiodynamics.
- **Rabih Chaer, MD**, is a speaker for Boston Scientific.
- **Daniel Clair, MD**, is a consultant for Boston Scientific, Endologix, Elastimed, Medtronic, LimFlow, Vesteck, Nectero, and Caeli Vascular.

- **Michael S. Conte, MD**, receives grant/research support from Profusa and is a consultant for Abbott Vascular, Scientific Advisory Board; Anges, and Advisor.
- **Ellen Dillavou, MD, FACS, RPVI**, receives grant/research support from 3M/KCI and BD, is a consultant for W.L. Gore & Associates and 3M/KCI, and is on the scientific advisory board of W.L. Gore & Associates and Boston Scientific.
- **Elizabeth Genovese, MD, MS, FACS, RPVI**, is a consultant for Abbott, Cook, Penumbra, Philips, Medtronic, and Shockwave.
- **Bradley A. Gross, MD**, is a consultant for Medtronic, Microvention, and Stryker.
- **Caitlin Hicks, MD**, receives grant/research support from NIH/NIDDK, American College of Surgeons, and the Society for Vascular Surgery. She is also a member of the CE Speakers' Bureau for Cook Medical LLC, W.L. Gore, and Silk Road Medical.
- **Michael R. Jaff, DO**, is a consultant for Gilde Healthcare and Nectero. He is a stockholder for Access Vascular, Embolitech, R3 Vascular, eFemoral, Tractus Vascular, Vascular Therapies and is a part time employee at Boston Scientific.
- **David Loran, MD**, is a consultant for Medtronic.
- **Michel Makaroun, MD**, receives grant/research support from Medtronic, W.L. Gore & Associates, and Cordis. He is also a consultant for Medtronic, W.L. Gore & Associates, and Cordis.
- **William Marston, MD**, receives grant/research support from Intervene, Inc. and is a consultant for Intervene, Inc., Molnlycke, and Acera Surgical.
- **Suresh Mulukutla, MD**, receives grant/research support from Boston Scientific and Amgen. He is also a consultant for CardioAlliance and Medtronic.
- **Virendra I. Patel, MD, MPH**, receives grant/research support from GORE Inc., is a consultant for Artivion, and is a speaker for COOK Medical and SHAPE Medical.



FACULTY DISCLOSURES (CONT'D)

- **Bruce L. Rollman, MD, MPH**, receives grant/research support from NHLBI, NIMH, and Helmsley Foundation.
- **Karim Salem, MD**, is a consultant for BD, Cook, and Cagent.
- **Robert Tahara, MD**, is a consultant for Phillips.
- **Grace J. Wang, MD, MSCE**, was a speaker at EVS Lunch 2023.
- **Theodore Yuo, MD**, receives grant/research support from Becton Dickinson and Merit Medical and is a consultant for Merit Medical, W.L. Gore & Associates, and Medtronic.

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