

# VASCULAR MEDICINE FELLOWSHIP CORE CURRICULUM

## PERIPHERAL ARTERY DISEASE

### Chronic occlusive disease

- [2024 ACC/AHA/AACVPR/APMA/ABC/SCAI/SVM/SVN/SVS/SIR/VESS Guideline for the Management of Lower Extremity Peripheral Artery Disease](#)
- [2017 ESC Guidelines on the Diagnosis and Treatment of Peripheral Arterial Diseases: Document covering atherosclerotic disease of extracranial carotid and vertebral, mesenteric, renal, upper and lower extremity arteries.](#)
- [Lower Extremity Peripheral Artery Disease: Contemporary Epidemiology, Management Gaps, and Future Directions: A Scientific Statement From the American Heart Association](#)
- [Contemporary Medical Management of Peripheral Artery Disease - PubMed \(nih.gov\)](#)
- [ACC/AHA/SCAI/SIR/SVM 2018 Appropriate Use Criteria for Peripheral Artery Intervention: A Report of the American College of Cardiology Appropriate Use Criteria Task Force, American Heart Association, Society for Cardiovascular Angiography and Interventions, Society of Interventional Radiology, and Society for Vascular Medicine - PubMed \(nih.gov\)](#)
- [Optimal Exercise Programs for Patients With Peripheral Artery Disease: A Scientific Statement From the American Heart Association - PubMed \(nih.gov\)](#)
- [The Society for Vascular Medicine – Peripheral Artery Disease \(PAD\) \(myperipheralarterydisease.com\)](#)

### Chronic limb threatening ischemia

- [Farber A. Chronic Limb-Threatening Ischemia. N Engl J Med. 2018;379:171-180.](#)
- [Global vascular guidelines on the management of chronic limb-threatening ischemia - PubMed \(nih.gov\)](#)
- [Medical therapy for cardiovascular and limb-related risk reduction in critical limb ischemia - PubMed \(nih.gov\)](#)

### Acute limb ischemia

- [European Society for Vascular Surgery \(ESVS\) 2020 Clinical Practice Guidelines on the Management of Acute Limb Ischaemia](#)

### Upper limb artery disease

- [2017 ESC Guidelines on the Diagnosis and Treatment of Peripheral Arterial Diseases: Document covering atherosclerotic disease of extracranial carotid and vertebral, mesenteric, renal, upper and lower extremity arteries.](#)

## CEREBROVASCULAR DISEASE

- [2011 ASA/ACCF/AHA/AANN/AANS/ACR/ASNR/CNS/SAIP/SCAI/SIR/SNIS/SVM/SVS Guideline on the Management of Patients with Extracranial Carotid and Vertebral Artery Disease](#)
- [2017 ESC Guidelines on the Diagnosis and Treatment of Peripheral Arterial Diseases](#)
- [Management of atherosclerotic extracranial carotid artery stenosis - PubMed \(nih.gov\)](#)
- [Intracranial aneurysms: Review of current science and management - PubMed \(nih.gov\)](#)
- [Guidelines for the Early Management of Patients With Acute Ischemic Stroke: 2019 Update to the 2018 Guidelines for the Early Management of Acute Ischemic Stroke: A Guideline for Healthcare Professionals From the American Heart Association/American Stroke Association - PubMed \(nih.gov\)](#)

## VISCERAL ARTERY DISEASE

### Renal and Mesenteric artery disease

- [ACC/AHA 2005 Practice Guidelines for the Management of Patients With Peripheral Arterial Disease \(Lower Extremity, Renal, Mesenteric, and Abdominal Aortic\)](#)
- [Current Concepts in the Treatment of Renovascular Hypertension | American Journal of Hypertension | Oxford Academic \(oup.com\)](#)
- [2017 ESC Guidelines on the Diagnosis and Treatment of Peripheral Arterial Diseases: Document covering atherosclerotic disease of extracranial carotid and vertebral, mesenteric, renal, upper and lower extremity arteries.](#)
- [Acute mesenteric ischemia: updated guidelines of the World Society of Emergency Surgery | World Journal of Emergency Surgery | Full Text \(biomedcentral.com\)](#)
- [Chronic mesenteric ischemia: Clinical practice guidelines from the Society for Vascular Surgery - Journal of Vascular Surgery \(jvascsurg.org\)](#)
- [Renovascular Disease and Mesenteric Vascular Disease - ScienceDirect](#)
- [The Society for Vascular Surgery clinical practice guidelines on the management of visceral aneurysms - PubMed \(nih.gov\)](#)

## AORTIC DISEASES

### Aneurysms

- [2022 ACC/AHA Guideline for the Diagnosis and Management of Aortic Disease: A Report of the American Heart Association/American College of Cardiology Joint Committee on Clinical Practice Guidelines](#)
- [Management of Abdominal Aortic Aneurysms - PubMed \(nih.gov\)](#)
- [Thoracic aortic aneurysm: Optimal surveillance and treatment - PubMed \(nih.gov\)](#)

### Dissection and other acute aortic syndromes

- [2022 ACC/AHA Guideline for the Diagnosis and Management of Aortic Disease: A Report of the American Heart Association/American College of Cardiology Joint Committee on Clinical Practice Guidelines](#)

### Inherited aortopathies

- [Inherited Thoracic Aortic Disease: New Insights and Translational Targets - PubMed \(nih.gov\)](#)
- [Diagnostic approach and management of genetic aortopathies - PubMed \(nih.gov\)](#)

## ARTERIOPATHIES

### FMD

- [First International Consensus on the diagnosis and management of fibromuscular dysplasia - PubMed \(nih.gov\)](#)

### SCAD

- [Spontaneous Coronary-Artery Dissection | NEJM](#)

### Marfan syndrome

- [Marfan syndrome - PubMed \(nih.gov\)](#)

### Carotid Dissection

- [Treatment and Outcomes of Cervical Artery Dissection in Adults: A Scientific Statement From the American Heart Association | Stroke \(ahajournals.org\)](#)

### SAM

- [Segmental arterial mediolysis \(SAM\): Systematic review and analysis of 143 cases - PubMed \(nih.gov\)](#)

### LDS/ vEDS

- [Loeys-Dietz syndrome: a primer for diagnosis and management - PubMed \(nih.gov\)](#)
- [Contemporary management of vascular Ehlers-Danlos syndrome - PubMed \(nih.gov\)](#)

## ACUTE AND CHRONIC VENOUS DISEASES

### Acute venous thromboembolic disease

- [American Society of Hematology 2020 Guidelines for Management of Venous Thromboembolism: Treatment of Deep Vein Thrombosis and Pulmonary Embolism](#)
- [2019 ESC Guidelines for the diagnosis and management of acute pulmonary embolism developed in collaboration with the European Respiratory Society \(ERS\)](#)
- [Executive Summary: Antithrombotic Therapy for VTE Disease: Second Update of the CHEST Guideline and Expert Panel Report - PubMed \(nih.gov\)](#)
- [Catheter-directed thrombolysis for deep vein thrombosis: 2021 update - PubMed \(nih.gov\)](#)
- [Diagnosis, Treatment and Follow Up of Acute Pulmonary Embolism: Consensus Practice from the PERT Consortium - PubMed \(nih.gov\)](#)
- [Advanced Management of Intermediate- and High-Risk Pulmonary Embolism: JACC Focus Seminar - PubMed \(nih.gov\)](#)
- [Management of suspected and confirmed recurrent venous thrombosis while on anticoagulant therapy. What next? - PubMed \(nih.gov\)](#)

### Chronic venous disease

- [The 2022 Society for Vascular Surgery, American Venous Forum, and American Vein and Lymphatic Society clinical practice guidelines for the management of varicose veins of the lower extremities. Part I: Duplex Scanning and Treatment of Superficial Truncal Reflux](#)
- [The 2023 Society for Vascular Surgery, American Venous Forum, and American Vein and Lymphatic Society clinical practice guidelines for the management of varicose veins of the lower extremities. Part II: Endorsed by the Society of Interventional Radiology and the Society for Vascular Medicine](#)
- [Chronic venous insufficiency - PubMed \(nih.gov\)](#)
- [Chronic thromboembolic pulmonary hypertension and the post-pulmonary embolism \(PE\) syndrome - PubMed \(nih.gov\)](#)

### Arterial Thrombosis:

- [How I treat unexplained arterial thrombosis - PubMed \(nih.gov\)](#)

### Anticoagulation

- [Antithrombotic Management of Venous Thromboembolism: JACC Focus Seminar - PubMed \(nih.gov\)](#)
- [AC FORUM DOAC PLAYBOOK - https://acforum-excellence.org/Resource-Center/resource\\_files/-2021-04-06-084354.pdf](#)
- [When Direct Oral Anticoagulants Should Not Be Standard Treatment: JACC State-of-the-Art Review - PubMed \(nih.gov\)](#)

### Visceral and other venous disorders

- [Approach to thrombosis at unusual sites: Splanchnic and cerebral vein thrombosis - PubMed \(nih.gov\)](#)
- [Portal vein thrombosis: When to treat and how? - PubMed \(nih.gov\)](#)

### Cancer associated thrombosis

- [Cancer-associated venous thromboembolism - PubMed \(nih.gov\)](#)

### LV thrombus

- [An Updated Review of the Efficacy and Safety of Direct Oral Anticoagulants in Treatment of Left Ventricular Thrombus - PubMed \(nih.gov\)](#)

## HIT

- [Heparin-induced thrombocytopenia \(HIT\): Review of incidence, diagnosis, and management - PubMed \(nih.gov\)](#)

## PREGNANCY

- [American Society of Hematology 2018 guidelines for management of venous thromboembolism: venous thromboembolism in the context of pregnancy - PubMed \(nih.gov\)](#)

## THROMBOPHILIA

- [American Society of Hematology 2023 guidelines for management of venous thromboembolism: thrombophilia testing - PubMed \(nih.gov\)](#)

## VASCULITIS, VASOSPASTIC AND THERMAL-RELATED DISORDERS

- [Raynaud's phenomenon and related vasospastic disorders - Eunjung Choi, Stanislav Henkin, 2021 \(sagepub.com\)](#)
- [Vasculitis: When to Consider this Diagnosis? - PubMed \(nih.gov\)](#)
- [Erythromelalgia: A Review of Medical Management Options and Our Approach to Management - PubMed \(nih.gov\)](#)
- [Inflammatory Diseases of the Aorta: JACC Focus Seminar, Part 2 - PubMed \(nih.gov\)](#)

## LEG ULCERS AND WOUNDS

- [Management of venous ulcers - PubMed \(nih.gov\)](#)
- [DOMINATE Wounds - PubMed \(nih.gov\)](#)
- [Lower-Extremity Vascular Ulcers: Assessment and Approaches to Management - PubMed \(nih.gov\)](#)

## LYMPHATIC DISEASES AND LIPEDEMA

- [The American Venous Forum, American Vein and Lymphatic Society and the Society for Vascular Medicine expert opinion consensus on lymphedema diagnosis and treatment](#)
- [Advances in lymphedema: An under-recognized disease with a hopeful future for patients - PubMed \(nih.gov\)](#)
- [Standard of care for lipedema in the United States - PMC \(nih.gov\)](#)
- [Approach to the Patient with Non-cardiac Leg Swelling - PubMed \(nih.gov\)](#)

## RISK FACTOR AND PREVENTION

## VASCULAR LABORATORY

### Arterial physiology testing

- [Guidelines for Noninvasive Vascular Laboratory Testing: A Report from the American Society of Echocardiography and the Society of Vascular Medicine and Biology](#)
- [ACCF/ACR/AIUM/ASE/ASN/ICAVL/SCAI/SCCT/SIR/SVM/SVS/SVU \[corrected\] 2012 appropriate use criteria for peripheral vascular ultrasound and physiological testing part I: arterial ultrasound and physiological testing: a report of the American College of Cardiology Foundation appropriate use criteria task force, American College of Radiology, American Institute of Ultrasound in Medicine, American Society of Echocardiography, American Society of Nephrology, Intersocietal Commission for the Accreditation of Vascular Laboratories, Society for Cardiovascular Angiography and Interventions, Society of Cardiovascular Computed Tomography, Society for Interventional Radiology, Society for Vascular Medicine, Society for Vascular Surgery, \[corrected\] and Society for Vascular Ultrasound. \[corrected\] - PubMed \(nih.gov\)](#)
- [Interpretation of peripheral arterial and venous Doppler waveforms: A consensus statement from the Society for Vascular Medicine and Society for Vascular Ultrasound - PubMed \(nih.gov\)](#)

### Arterial and graft duplex testing

- [Guidelines for Noninvasive Vascular Laboratory Testing: A Report from the American Society of Echocardiography and the Society of Vascular Medicine and Biology](#)
- [The Society for Vascular Surgery practice guidelines on follow-up after vascular surgery arterial procedures - PubMed \(nih.gov\)](#)

### Venous duplex and other venous testing

- [Ultrasound for Lower Extremity Deep Venous Thrombosis: Multidisciplinary Recommendations From the Society of Radiologists in Ultrasound Consensus Conference](#)
- [Duplex Ultrasound in the Diagnosis of Lower-Extremity Deep Venous Thrombosis | Circulation \(ahajournals.org\)](#)
- [ACCF/ACR/AIUM/ASE/IAC/SCAI/SCVS/SIR/SVM/SVS/SVU 2013 appropriate use criteria for peripheral vascular ultrasound and physiological testing. Part II: Testing for venous disease and evaluation of hemodialysis access - PubMed \(nih.gov\)](#)

### Cerebrovascular duplex and other testing

- [Carotid Artery Stenosis: Gray-Scale and Doppler US Diagnosis—Society of Radiologists in Ultrasound Consensus Conference](#)
- [Optimization of Duplex Velocity Criteria for Diagnosis of Internal Carotid Artery \(ICA\) Stenosis: A Report of the Intersocietal Accreditation Commission \(IAC\) Vascular Testing Division Carotid Diagnostic Criteria Committee](#)

### Aortic duplex and endograft assessment

#### Renal and mesenteric duplex testing

- [Mesenteric and renal arterial duplex ultrasound: A review - PubMed \(nih.gov\)](#)

#### Laboratory technology and operations

- [Guidelines for Noninvasive Vascular Laboratory Testing: A Report from the American Society of Echocardiography and the Society of Vascular Medicine and Biology](#)
- [Interpretation of Peripheral Arterial and Venous Doppler Waveforms: A Consensus Statement from the Society for Vascular Medicine and Society for Vascular Ultrasound](#)

## PROCEDURAL CARE

### Peri-procedural evaluation

- [2022 ESC Guidelines on Cardiovascular Assessment and Management of Patients Undergoing Non-Cardiac Surgery](#)
- [2014 ACC/AHA Guideline on Perioperative Cardiovascular Evaluation and Management of Patients Undergoing Noncardiac Surgery](#)
- [Preoperative evaluation and perioperative management of patients undergoing major vascular surgery - PubMed \(nih.gov\)](#)

### Peri-procedural management

- [Perioperative Management of Antithrombotic Therapy: An American College of Chest Physicians Clinical Practice Guideline - PubMed \(nih.gov\)](#)

### Post-procedural care and surveillance

## OTHERS

- [Part II: Cutaneous manifestations of peripheral vascular disease - ClinicalKey](#)
- [Milestones in thromboangiitis obliterans: a position paper of the VAS-European independent foundation in angiology/vascular medicine - PubMed \(nih.gov\)](#)
- [The Society for Vascular Surgery clinical practice guidelines on popliteal artery aneurysms - PubMed \(nih.gov\)](#)

## Career Development:

1. [Why Not Vascular Medicine? - PubMed \(nih.gov\)](#)
2. [From the Masters: What's past is prologue – building a future for vascular medicine \(sagepub.com\)](#)
3. [Things to consider when developing a new academic vascular medicine program - Aditya Sharma, 2018 \(sagepub.com\)](#)
4. [Presidential Address: Homecoming \(sagepub.com\)](#)
5. [From the Masters: Lessons learned about the vascular medicine history and physical examination from the past and present - PubMed \(nih.gov\)](#)
6. [From the Masters: Research lessons I've learned over a career in vascular medicine \(sagepub.com\)](#)
7. [Raise your hand—The key to a successful career in vascular medicine - Michael R Jaff, 2024 \(sagepub.com\)](#)
8. [Landscape of Mentorship and its Effects on Success in Cardiology | JACC: Basic to Translational Science](#)