

2021 - 2022

Vascular and Endovascular Surgery Residency Program



Our mission:

To Serve.
To Heal.
To Educate.

 **Cooper**
University Health Care

 **Cooper Medical School**
of Rowan University

Welcome



Joseph V. Lombardi, MD, FACS

Thank you for your interest in our ACGME-accredited Vascular and Endovascular Surgery Residency Program at Cooper Medical School of Rowan University and Cooper University Hospital. This program offers an integrated 0+5 residency designed to guide trainees through all essential areas of vascular care following the completion of their medical school education. Cooper University Health Care is the largest academic medical center and the only Level I Trauma Center in southern New Jersey. The medical center serves the needs of a broad patient population consisting of primary, secondary, and tertiary medical care.

Our residency program encompasses a wide breadth of vascular practice from outpatient varicose vein procedures to a robust open aortic experience. Cooper has a strong endovascular experience and we take great pride in the open surgical experience provided by an exceptionally talented faculty.

Joseph V. Lombardi, MD, FACS

Professor and Chief, Division of Vascular and Endovascular Surgery
Program Director, Vascular Surgery Residency

Both our endovascular and open aortic outcomes have been consistently over the 90th percentile when compared with other programs.



A Note from the Department Chief



Jeffrey P. Carpenter, MD

“We provide a rich and varied training experience with a large and growing surgical volume.”

Greetings and thank you for your interest in training at Cooper.

We are southern New Jersey’s only academic, tertiary care medical center. As such, we provide a rich and varied training experience with a large and growing surgical volume.

I became Chairman in 2008, after 23 years at the University of Pennsylvania. Since then, Cooper has seen the addition of its new Cooper Medical School of Rowan University, which graduated its first class in 2016. This has deepened our academic resources and enriched the training environment.

The campus has seen a number of expansions during this time, with the addition of 25 operating rooms for a total of 38, including two robotic rooms, a room equipped with a CT scanner, a room with an O-arm, three hybrid OR/angiographic suites, and state-of-the-art laparoscopy rooms. The partnership of Cooper with the world-renowned MD Anderson Cancer Center in Houston, to create MD Anderson Cancer Center at Cooper, has dramatically increased the volume of oncologic and reconstructive surgeries, providing many opportunities for participation in advanced treatment and research protocols.

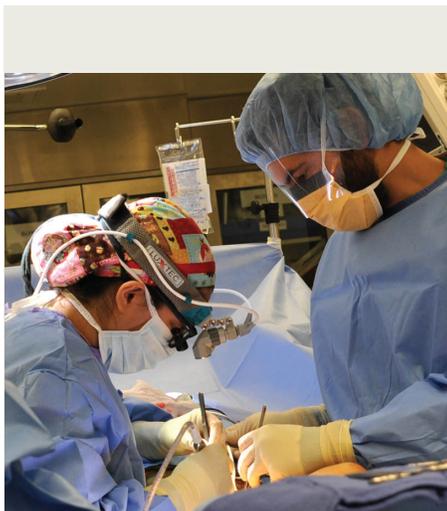
Our Level 1 Trauma Center is the region’s largest and busiest, offering surgical trainees a rich experience in management of traumatic injuries and reconstruction. Our faculty has more than doubled in size since 2008 and now numbers more than 70 surgeons. While they are clinically excellent and busy, they are also extremely academically productive and seek to collaborate with trainees to mentor them in research.

In 2018, the Department of Surgery at Cooper published more than 100 articles and book chapters. Our faculty serve on the editorial boards of many journals and are nationally and internationally recognized as leaders in their specialties. We have an active basic science research program, with emphases on regenerative medicine and epigenetics. The department maintains both a large animal and small animal vivarium with two large animal operating rooms. We are passionate about education of surgical trainees and welcome your interest in our programs.

Jeffrey P. Carpenter, MD

Chairman and Chief, Department of Surgery

About the Program



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Jose Trani, MD

Assistant Professor of
Surgery, Cooper Medical
School of Rowan University
Medical Director,
Vascular Laboratory

The overall goal of the Vascular and Endovascular Surgery Residency at Cooper is to provide a foundation for graduates of the program to develop into expert clinicians that are proficient in all aspects of the diagnosis, management, and treatment of vascular disease. These goals are fostered in an environment of progressively graded clinical, operative experience and responsibility. In doing so, the fellow will ultimately exercise mature surgical judgment and operative skills which prepare him or her to provide independent care to patients with vascular disease. Our faculty is enthusiastic, committed to teaching, and together has over 30 years of fellowship experience.

The case volume provides ample opportunity for residents to develop and master a large breadth of vascular interventions including both open and endovascular procedures. Recent graduates have been in the 90th percentile relative to their peers for both open and endovascular aortic procedures. During their training, residents have the opportunity to use devices only available through aortic and peripheral clinical trials in addition to newly FDA approved "next generation" devices such as fenestrated endografts for the treatment of complex aortic pathology.

The integrated Vascular and Endovascular Surgery Residency Program is designed to provide residents with a focused understanding of general surgery principles as well as a broader understanding of multidisciplinary aspects that are essential to a modern vascular specialist practice. This will be accomplished through rotations on core general surgery services in addition to the vascular surgery services. These experiences will be supplemented through the addition of rotations in critical care, radiology, cardiology, and cardiothoracic surgery.

The vascular surgery clinical service is divided into three separate components, the ambulatory service, the inpatient service, and the Virtua Voorhees service. Similar to the vascular fellows' curriculum, the inpatient and outpatient services are designed to provide a focused experience in those areas.

Vascular surgery residents at Cooper are expected to maintain and expand upon the six core competencies at the foundation of surgery until they have reached the level expected of a new practitioner. The resident will divide time between inpatient and outpatient clinical service and percutaneous service. While on the inpatient clinical service, the resident will be expected to manage the intensive care unit and flow patients from pre-operative planning and assessment through the post-operative period.

About the Program



“Teaching residents for over 25 years has proved to be a tremendously enjoyable and rewarding part of my career.”

...

Jeffrey P. Carpenter, MD

Chairman and Chief,
Department of Surgery
Vice President,
Perioperative Services,
Professor of Surgery,
Cooper Medical School of
Rowan University

The outpatient service focuses on ambulatory procedures including percutaneous arterial and venous therapies. The outpatient resident will also have ample time to see and evaluate patients in Cooper’s many outpatient clinics and to develop familiarity with clinical ultrasonography. Residents are expected to participate in ongoing research with one or several faculty members during their training. Adequate time is allotted to pursue research projects, particularly during the percutaneous rotation.

The curriculum will encompass the major areas of modern vascular surgery:

- Cerebrovascular techniques include carotid artery endarterectomy, both, awake and asleep, as well as carotid stenting are both discussed in detail as well as seen in clinical practice.
- Aortic interventions, both open and endovascular, encompass both the thoracic and the abdominal aorta and clinically are frequently performed in conjunction with the cardiothoracic service.
- A full range of peripheral procedures are used from various percutaneous devices designed to cross complete lesions through retrograde approaches for recalcitrant lesions in high risk operative candidates.
- Open bypass procedures have been increasing in number for good operative risk patients as their patency is unsurpassed by current percutaneous techniques. The practice serves a growing dialysis population with many opportunities to evaluate and treat both late chronic kidney disease patients as well as patients with multiple access failures who are now advanced access patients.
- Finally, the curriculum and clinical experience are designed to provide ample opportunity to develop a deeper understanding of acute and chronic venous disease processes, a rapidly growing area of vascular surgery.

The Vascular and Endovascular Surgery Residency provides educational opportunities through both formal and informal settings. The weekly vascular surgery conference is the cornerstone of the formal educational process. The conference schedule is designed to encompass all of the major clinical topics germane to clinical vascular surgery and is based upon the Core Curriculum. Conference is conducted in a case-based format with management discussion centered around current literature. Relevant basic science topics are covered in a monthly conference. Bi-monthly ultrasound lectures are conducted to provide residents and fellows with a basic understanding of ultrasound physics and sources of imaging error. These lectures, combined with weekly hourly side by side imaging interpretation with a senior vascular ultrasound technologist, provide a solid knowledge base in preparation for the Physician Vascular Interpretation examination. Less formal learning goes on consistently through the interactions between residents and faculty in the form of walk rounds, pre-operative case discussion, and discussion of patient management strategies for patients who present to the consult service.

About the Program *continued*



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Social Media

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Journal Club

A monthly Journal Club is designed to familiarize residents with the current vascular surgical literature. Each conference will cover two or three articles and/or clinical guidelines that are selected by a supervising faculty member. Copies of each article should be distributed to all residents, and pertinent faculty one week prior to the Journal Club. The vascular resident should be able to concisely present the purpose and methods of the study as well as review of the figures and results presented in the paper. A vascular surgery faculty member will act as moderator. The goal is to be able to evaluate current literature based upon the data presented, the scientific validity of their observations, and the overall applicability of this information to current practice.

Morbidity and Mortality

A discussion of deaths and complications of patients either on the vascular service or on another service who underwent a vascular procedure will be performed on a bi-monthly basis. Residents are assigned to present case synopses for which they were involved in patient care. Residents are expected to concisely present patients for discussion, including the indication for the procedure, the complication, and outcome. Literature supporting management decisions should also be presented. The vascular faculty will moderate the presentations as well as lead discussions regarding alternative treatment options and the risks and benefits of differing treatment strategies.

to serve

Residency Rotation Schedule (0+5)

Curriculum

GS:

General Surgery

VS:

Vascular Surgery

SICU/TSICU:

Trauma/Surgical ICU

ACS:

Acute Care Surgery

MICU/CT:

Medical Intensive Care Unit/
Cardiothoracic Surgery

NF:

Night Float

PRS:

Plastic Surgery

TR:

Trauma

Locations

CUH:

Cooper University Hospital

Integrated Program Rotation Schedule Year 1

Period	1	2	3	4	5	6	7	8	9	10	11	12
Site	CUH	CUH	CUH	CUH								
Service	VS	VS	GS	GS	ACS	PRS	GS	NF	SICU	VS	TR	VS
Inpatient / Outpatient	I/O	I	I	I/O	I	I/O						

Integrated Program Rotation Schedule Year 2

Period	1	2	3	4	5	6	7	8	9	10	11	12
Site	CUH	CUH	CUH	CUH	CUH	CUH	CUH	CUH	CUH	CUH	CUH	CUH
Service	MICU	CT	CT	VS	VS	CT	VS	VS	VS	VS	CT	VS
Inpatient / Outpatient	I	I/O										

Integrated Program Rotation Schedule Year 3

Period	1	2	3	4	5	6	7	8	9	10	11	12
Site	CUH											
Service	VS	VS	VS	CT	CT	VS	VS	VS	CT	CT	VS	VS
Inpatient / Outpatient	I/O											

Integrated Program Rotation Schedule Year 4

Period	1	2	3	4	5	6	7	8	9	10	11	12
Site	CUH											
Service	VS											
Inpatient / Outpatient	I/O											

Integrated Program Rotation Schedule Year 5

Period	1	2	3	4	5	6	7	8	9	10	11	12
Site	CUH											
Service	VS											
Inpatient / Outpatient	I/O											

to heal

How to Apply



Contact Information

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Joseph V. Lombardi, MD, FACS

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or

Sheeran-Ashley@CooperHealth.edu

Website:

CooperHealth.edu/residencies/
vascular

Twitter:

@CooperVascular

Address:

Cooper University Health Care
Division of Vascular Surgery
Three Cooper Plaza, Suite 411
Camden, NJ 08103

The Vascular Surgery Integrated (0+5) Residency Program participates in the Electronic Residency Application Service (ERAS), and all information is processed through this system without exception. Information regarding the ERAS application process and timeline is available on the website below.

Please submit the following materials by November 1.

Association of American Medical Colleges

www.aamc.org/eras

ERAS applications must contain the following information in order for your application to be considered:

- Completed ERAS Common application information.
- USMLE score(s) (all applicants must submit a USMLE Step 1 score)
- Dean's Letter from medical school (to be added later once available)
- Three (3) current letters of recommendation
- Personal statement
- Curriculum Vitae (as generated through ERAS)
- Medical School transcripts
- ECFMG certificate if graduated from a foreign school
- Any other appropriate credentials: e.g., clinical-base documentation if entering at CA-1 level
- Photo

In addition, Cooper University Health System/Cooper Medical School of Rowan University Programs is to abide by the All In Policy for categorical PGY-1 positions. Participation in the National Resident Matching Program's (NRMP) computerized match, and rules of the Match Participation Agreement will apply. More information at nrmp.org/residency/main-residency-match

The program director and two additional faculty members will review complete applicant files. Invitation for interview will be based upon their recommendations.

Program Eligibility

- Must be a graduate of an American or Canadian medical school accredited by the Liaison Committee on Medical Education (LCME) or the American Osteopathic Association (AOA).
- If a graduate of a foreign medical school, must be certified by the Educational Commission for Foreign Medical Graduates (ECFMG), earned through passing the Foreign Medical Graduate Examination in the Medical Sciences (FMGEMS), Part 1 and Part II examinations of the National Board of Medical Examiners (NBME), or the United States Medical Licensing Examination (USMLE); and by meeting all other requirements of the ECFMG.
- All medical school graduates must qualify for registration (PGY-1) or licensure (PGY-3 and beyond) as issued by the New Jersey State Board of Medical Examiners.

to educate

The Cooper GME Experience



Learn more about training
at Cooper and hear from
current residents at
CooperHealth.edu/GME
and
CooperHealth.edu/Diversity



Cooper University Health Care takes pride in its ability to offer a comprehensive array of diagnostic and treatment services. Cooper University Hospital serves as southern New Jersey’s major tertiary care referral hospital for specialized services. Cooper Premier Institutes, Centers of Excellence, and programs include: MD Anderson Cancer Center at Cooper, Surgical Services Institute, Adult Health Institute, Cooper Heart Institute/Cardiac Partners at Cooper and Inspira, Cooper Bone and Joint Institute, Cooper Neurological Institute, Women’s and Children’s Health Institute, Urban Health Institute, Center for Population Health, Center for Critical Care Services, Center for Urgent and Emergent Services, and the Center for Trauma Services, which includes our Level I Trauma Center, Level II Pediatric Trauma Center, and active community trauma prevention education.

Cooper has been a cornerstone in Camden for more than 130 years and has expanded its facilities and services throughout South Jersey. Cooper has been nationally recognized for its leadership in patient safety, receiving the 2019 Patient Safety Excellence Award™ from Healthgrades, placing it among the top 5% of hospitals in the nation. Cooper was also recognized as a high-performing hospital for treating heart failure and COPD by U.S. News & World Report’s 2019-2020 Best Hospital Survey.

Cooper’s commitment is to provide exceptional care to every patient, every day, in a patient-centered, family-focused environment. Every employee—including our residents and fellows—is a member of the care-giving team and has an important role in making the experience at Cooper a healing one for patients and their families.

Your training at Cooper will be academically challenging, enhanced by our top-ranked faculty and state-of-the-art equipment and facilities. We welcome the opportunity to have you as part of our team, as we provide university-quality health care in southern New Jersey.

Diversity Statement

The Graduate Medical Education programs of Cooper University Health Care is committed to providing a supportive environment that allows all members of its academic community to thrive and succeed. We work to recruit a diverse group of residents and fellows, and celebrate the multiple dimensions represented in our community, including, but not limited to race, creed, ethnicity, sexual orientation, gender identity, ability, or age. We recognize the importance of monitoring the outcomes of our diversity efforts so that we can better reflect the diversity of our patients and community. Through our GME Diversity Council, we promote on-going exploration of our own biases while also providing education on discrimination and anti-racism. We provide a safe space for residents to engage in dialogue, learn, and contribute to their fullest potential. We seek opportunities to enrich our community through volunteerism and to effect lasting change through engagement with local leaders.

We are proud. We are diverse. We are Cooper.

Off Campus Highlights



Just across the bridge from bustling Philadelphia, and less than an hour from the tranquility of the Pine Barrens and activity of the Jersey shore, Cooper University Hospital is easy to access. The academic campus is located across the street from two commuter rail lines (PATCO and NJ Transit's River Line) and within walking distance of Rutgers University and Rowan University Camden campuses.

The Cooper Health Sciences Campus is located in the heart of Camden's business district. The academic medical center campus is easily accessible by car or public transportation via the commuter high-speed line and bus terminal adjacent to the hospital.

Cooper is a short walk or drive from the exciting Camden waterfront, which includes a magnificent waterfront park and marina; the Adventure Aquarium; and the BB&T amphitheater, which hosts nationally renowned entertainment throughout the year. Nearby are the Sixers Training Complex, L3 Communications complex, Lockheed Martin, Rutgers University Camden Campus, and Camden County College.

There are expected to be \$350M in transportation and infrastructure improvements within the next four to five years to handle the influx of thousands of new employees to the area and students at nearby growing academic campuses.

Cooper is conveniently close to Philadelphia. Just a mile-long drive over the Benjamin Franklin Bridge will put you at the doorstep of Philadelphia's cultural, culinary, and historic venues. South Jersey also offers a range of living and entertainment options. Quaint towns such as Haddonfield and Collingswood are just 10 minutes away. The lights and action of Atlantic City and popular beach towns such as Cape May and Ocean City are a one-hour drive from Cooper.

Cooper Camden Campus Map



The most up-to-date directions to Cooper University Hospital are available at:
CooperHealth.org/Locations



One Cooper Plaza · Camden, NJ 08103-1489 · CooperHealth.edu

Hospital Main Number: **856.342.2000**

Graduate Medical Education: **856.342.2922**