

PGY-6 (1st Year)
GOALS AND OBJECTIVES
VANDERBILT UNIVERSITY MEDICAL CENTER
VASCULAR SURGERY PROGRAM

OVERALL GOALS & OBJECTIVES

The overall goal of the vascular surgery fellowship at Vanderbilt University Medical Center is to produce a fully trained, competent, and independent practitioner of vascular surgery who can pursue a career in this specialty either in the private or academic setting. The educational program is 24 months in duration. The essential learning activity is interaction with patients under the guidance and supervision of faculty members. The fellow will be interacting with patients in a number of outpatient and inpatient scenarios, including outpatient clinics, hospital wards, ICUs, catheterization laboratories, and operating rooms. The clinical educational program will be supplemented by regularly scheduled didactic sessions that include a weekly multidisciplinary aortic conference, biweekly Morbidity and Mortality conferences, a quarterly journal club, and a structured series of conferences covering the basic and clinical sciences fundamental to vascular surgery.

The scope of expertise gained during the first year (PGY-6) will include proficiency in the diagnosis and treatment of diseases of the arterial, venous, and lymphatic systems (exclusive of the heart and intracranial vessels). Expertise will extend to all standard open surgical and endovascular approaches to vascular diseases. Along with developing technical expertise, the fellow will be expected to acquire a thorough understanding of non-invasive testing through hands-on technical experience in the vascular laboratory, interpretation of a series of noninvasive studies, and in-depth reading. By the end of the first year, the fellow will be expected to sit for the Registered Physician in Vascular Interpretation examination. In addition, the first-year fellow will gain experience in pre- and post-operative management of patients with vascular disease by participating in weekly outpatient clinic sessions with faculty members. In keeping with institutional expectations, the first year fellow will participate in a patient safety project and will be expected to have evidence of scholarly activity.

During the first year there will be three (3) overall educational goals:

- I. The first year fellow is expected to gain competency in the interpretation skills required to read noninvasive vascular studies performed in a Vascular Lab. The fellow will be required to read at least 500 vascular exams under the direction of faculty and certified vascular technologists. The readings will be tracked in the divisional computer system, and supervising faculty will review the individual exams read by the fellow. The fellow is expected to use self-directed study to supplement his or her knowledge of basic ultrasound physics, flow mechanics, and technical aspects of the examinations. A copy of Pellerito, J (editor) *Introduction to Vascular Ultrasonography* will be made available to the first year fellow for this purpose.

At the completion of reading 500 studies the fellow should be able to

- Demonstrate interpretation skills for multiple non-invasive tests to include:
 1. Carotid / Vertebral
 2. Transcranial Doppler
 3. Upper / Lower Extremity – Duplex and Doppler
 4. Renal / Mesenteric
 5. Venous – DVT, venous mapping, insufficiency
 6. Abdominal – aorta, EVAR follow-up
 7. Aneurysm – AAA, femoral, popliteal
 8. Pseudo-aneurysm diagnosis and treatment (compression and injection)
 9. Vascular bypass / stent follow-up imaging and velocities
 10. AV Access - followup
- Display an understanding of ultrasound physics concepts and their application to the field of vascular diagnostics
- Pass the ARDMS Registered Physician Vascular Interpretation (RPVI) Certification Exam (which is a prerequisite for the Vascular Surgery Qualifying exam).

II. Under the direction of a clinical or basic science faculty mentor, the first year vascular fellow will develop and attempt to answer at least one critical/hypothetical question about vascular surgery or related topic as a scholarly activity. The vascular fellow will:

- Demonstrate the ability to identify an appropriate research question.
- Demonstrate the ability to complete an adequate search of the literature in a defined area.
- Demonstrate critical appraisal skills.
- Demonstrate the ability to complete a research ethics board application/training module.
- Demonstrate the ability to prepare and present a research proposal in a cohesive and organized fashion.
- Demonstrate a fundamental knowledge of the subject of and the methodology utilized in the research project.
- Demonstrate the ability to describe and explain the results obtained and situate these results in the existing literature.
- Demonstrate the ability to write and present an abstract at a local, national or international meeting.
- Demonstrate the ability to participate in the preparation of a grant (may not be achievable by all trainees).
- Demonstrate a clear understanding of the structure and purpose of scientific writing.
- Demonstrate the ability to participate in the writing, revision and publication of a manuscript (>4 months of combined research elective time).

III. The Vascular Fellow will begin to assimilate the core knowledge of vascular surgery. During the course of the first year, the fellow will be exposed to weekly outpatient clinics, walk rounds at the VA hospital, vascular conferences, and a gradual ramp-up of clinical responsibilities. The Vascular fellow is expected to:

- Attend a staff member's weekly clinic.
- Attend VA walk rounds held every Wednesday 0730-0800.
- Attend VA case conference every Wednesday at 0815.
- Participate in the call rotation in cooperation with the second year fellow in a mutually beneficial and professional manner.
- Begin to demonstrate and apply knowledge regarding the clinical management and pathophysiology of vascular disorders including:
 - Atherosclerosis
 - Aneurysmal disease
 - Vessel Dissection
 - Cerebrovascular Diseases
 - Inflammatory Vascular Diseases
 - Venous Diseases
 - Renal Failure and Vascular Access
 - Mesenteric Diseases
 - Thrombosis and thrombophilia
 - Vascular Trauma
 - Acute Ischemia
 - Congenital anomalies