

Vascular Surgery Residency Program

University of Wisconsin,
Madison



Our Goal-To Train the Future Leaders in Vascular Surgery

- Compassionate physicians
- Technical excellence
- Mature judgment
- Leadership skills
- Research experience

What is Special about Surgical Training at Wisconsin?

- Breadth of advanced clinical experience
- Depth of faculty experience across fields
- Commitment to resident education
 - Progressive educational opportunities
- Commitment to resident research and academic development
- Commitment to development of leadership skills

Vascular Surgery Residency

- Provide incremental, progressive training in core surgery (CS) and vascular surgery (VS) during the five year program
- Four integrated sites: UW Hospital, Wm. S. Middleton VA Hospital (connected by corridor), Meriter Hospital (5 minute drive) and Transformations (aesthetic center; 10 min drive)
- Affiliated Rotations: St Mary's Hospital, Madison.
 - Future possible site Swedish American Hospital Rockford, IL

*****Recent Change – 2 years of research now required after PGY 2 clinical year*****

MAJOR CLINICAL FACILITIES

UW Hospital - 505 beds

Meriter Hospital - 450 beds

Veteran's Hospital - 90 beds

American Family Children's Hospital - 87 beds

UW Health at The American Center - 56 beds



UW Hospital



VA Hospital



Meriter Hospital



The American Center-TAC



Required Research Years (2, after PGY 2 year)

- Division of Vascular Surgery has 6 funded faculty researchers!
 - NIH, AHA, PCORI, NPCRC, etc.
- Starting in 2019, 2 years of research time is required for the Vascular Surgery Residency
- NIH T-32 Vascular Biology Research Training Grant
 - Basic Science – AAA- Dr. Liu
 - Outcomes – WiSOR – Dr. Greenberg
- Data and Data Analysis – Dr. Bennett
- AAA- Dr. Yamanouchi, Dr. Matsumura
- Global Surgery – Dr. Tefera
- Bioethics, Studies to change clinical practice- Dr. Schwarze
- Clinical Trials - Gore Core Lab, BEST-CLI, TEVAR/EVAR, etc...

Department of Surgery - RESEARCH OPPORTUNITIES

- "Epithelial Regeneration in Burn Injury, Development and Testing of Skin Substitutes (**Angela Gibson MD, PhD**)
- Development of a Tolerance Protocol in Large Animals (**Dixon Kaufman MD, PhD**)
- Post-Treatment Surveillance in Breast Cancer (**Caprice Greenberg MD, MPH**)
- Reducing Readmissions: Human Factors & Systems Engineering Approach (**Sharon Weber, MD**)
- Intestinal Regeneration in Model of Intestinal Atresia (**Peter Nichol, MD, PhD**)
- Islet Cell Transplantation (**Luis Fernandez, MD**)
- Pancreatic Stem Cells (**Jon Odorico, MD**)
- Transplant Tolerance (**Josh Mezrich, MD**)
- Long-term Allograft Survival (**Robert Redfield, MD**)
- Pathogenesis and Treatment of Anal Cancer (**Evie Carchman, MD**)
- Abdominal Aortic Aneurysm (**Dai Yamanouchi, MD, PhD**)
- Patient Preferences Project (**Gretchen Schwarze, MD, MPP**)
- "Increasing Socioeconomically Disadvantaged Patients' Engagement in Breast Cancer Surgery Decision Making through a Shared Decision Making Intervention for Breast Cancer Diagnosis." (**Heather Neuman, MD, MS**)
- "Impact of Emotions on Treatment Decisions About Low-Risk Thyroid Cancer." (**Susan Pitt, MD**)
- National patterns of surgical care, access to surgical care and improving the quality of surgical care (**Luke Funk, MD**)
- Formation and Progression of Pancreatic Cancer (**Sean Ronnekleiv-Kelly, MD**)



Integrated Residency- Overview

- PGY 1 year - Clinical
 - 10 month Core and 2 months Vascular
- PGY 2 year – Clinical
 - 4 months Core and 8 months Vascular
- 2 Years Research
- PGY 3 year
 - 3 months Core and 9 months Vascular
- PGY 4 and PGY 5
 - All vascular, all the time!

Core Surgery Training PGY 1-3 Curriculum

- Provide complete “foundation of the principles and practices of surgery” ACS course
- SCORE Curriculum
- Similar training experiences as categorical general surgery residents
 - Core Surgery Technical Skills Lab
 - Instrument identification, knot-tying and suturing
 - Management and repair of central lines and enteric feeding tubes
 - Wisconsin Elements of Laparoscopic Surgery (WELS)
 - Advanced Trauma Life Support (ATLS) and ACLS
 - Laparotomy and bowel anastomosis
 - Principles of Ultrasound – FAST and line placement
 - Principles of vascular anastomosis

Integrated Vascular Surgery Curriculum

- Curriculum

- APDVS curriculum on-line with references, both Basic Science and Clinical Curricula
- Vascular SCORE (V-SCORE) coming soon!!
- Written Curriculum Goals and Educational Objectives
- UCLA/SVS Vascular Review Course in September of PGY4
- RPVI Exam in PGY3 year (Division covers cost)
- Web-based universal curricula being developed by APDVS
 - Milestone-driven
- Monthly Global (Web-ex online) and Local Journal Clubs

Core Surgery Training PGY 1-3

- Specialized core surgery conferences
 - Trauma / Critical Care
 - Scientific American Core lectures
 - General Surgery Indications
 - General Surgery M&M
 - Surgical Oncology
- Call during PGY1-3 no greater than 1:3
 - All call from home except SICU and several rotations intern year on general surgery (night float)
- Excellent working relationship with general surgery
- Resident Evaluation by core faculty

Cardiology Rotation PGY 1

A focused exposure to consultative cardiovascular medicine, echocardiography and nuclear myocardial perfusion imaging stress testing.

2 weeks with the UW Hospital Cardiology Consult Service, and spending 1 week each reading studies in the UW Hospital Echocardiography Laboratory and Nuclear Cardiology Laboratory.

Will function on each service in a role equivalent to a first year cardiovascular medicine fellow

Venous Disease Rotation PGY 3

- 1 month rotation at Meriter Hospital
- Venous clinic at Meriter, UW West Clinic and Transformations
- Office-based and hospital operating room-based interventions
- Minimally invasive techniques, and the postoperative care of patients with venous disorders
- Hands on venous imaging in the vascular labs at West and UWHC
- Also participate in vein care during Meriter Hospital core surgery rotations years 1 & 3 and when rotating on Meriter/Float rotation PGY 4 & 5 years.

Vascular Rotations PGY 2 and PGY 3

- Junior vascular resident on the Vascular team working with Gen Surg PGY 1 & 3 and Vascular PGY 4 & 5 and fellow, primarily at UW.
- Experience in endovascular and open interventions
- With the input of faculty, develop therapeutic plans, perform endovascular and open interventions and follow up the patients
- Responsible for majority of endovascular procedures in the UW Cath lab under the guidance of vascular surgery faculty when on rotation.
- Perform general vascular cases eg. CEA, femoral to popliteal bypass, CFA endarterectomy, EVAR, amputations, extra-anatomic bypass, av-access cases and assist with complex open aortic reconstructions
- Participate in weekly VA and UW clinics

Vascular Rotations PGY 4 and PGY 5

- Meriter/Float Rotation (3 months/yr)
- 1 three month block as chief each of the PGY 4 & 5 years
- Responsible for covering vascular cases at Meriter, as well as acute cases UW vascular service
- Spine exposures
- Vein care
- Endovascular and open arterial cases
- Endovascular experience in UWHC Zeego Angio Operating Room, UW “Cath lab”, Meriter “Cath Lab” and VA Zeego Room.
- Time for research, vascular lab work and additional vein care opportunities

Vascular Call

- PGY 2 & 3
 - On core rotations
 - Every third night call from home
 - Except 2 months SICU, in-house every third night
 - On vascular rotations
 - Back-up call from home for in-house night-float intern
 - Share with PGY 3 general surgery resident, with PGY 4 & 5/fellow backup
- PGY 4 & 5
 - Call is from home
 - Backup night-float intern every 4th night during week
 - Backup junior residents every fourth weekend in rotation with fellows
 - The vascular PGY 4, PGY 5 and fellows are on call and have rounding duties every fourth weekend
 - Weekend Midlevel NP support

Programs and Clinical Trials

- Limb Salvage Angioplasty Program
- Hemodialysis Access
- TOS
- Carotid Stent Program
- Thoracic Endograft Program
- Fenestrated EVAR program (>30 cases / year)
- Cook: P-branch Endovascular Graft Pivotal Study
- BEST CLI Trial
- GORE[®] TAG[®] Thoracic Branch Endoprosthesis (TBE Device)
- GORE IBE bifurcated iliac trial
- Roadster flow reversal cerebral protection carotid stent trial
- CREST 2 Trial; CEA vs CAS vs Medical Management

New Initiatives

- Global Health: Ethiopia

- Beginning in 2018
- The first vascular residency in Africa (outside South Africa)
- Faculty from the Univ. of Wisconsin and other invited institutions will rotate every other month to Addis Ababa
- Opportunity for PGY 4 Vascular resident to rotate for 1 month when UW faculty present at end of 4th year.

- Simulation Curriculum:

- Fundamentals of Vascular and Endovascular Surgery Program
 - APDVS pilot site
 - Simulation Center UWHC
 - Open skills training: low cost and high-end
 - Active faculty mentoring