The UCSF Division of Vascular & Endovascular Surgery is an integral part of the UCSF Heart and Vascular Center, which brings together vascular surgeons and other cardiovascular specialists to provide the most advanced and effective treatments for circulatory disorders. Faculty members in the Division have achieved national and international recognition as leaders in clinical innovation, surgical education, and research. Our mission is to provide outstanding, compassionate care for patients with vascular disease, advance the field through impactful research, and to train the next generation of leaders in vascular surgery.

UCSF Vascular Surgery, in continuous practice since 1951, has long set the standard for treatment of complex vascular diseases. This tradition of excellence and innovation continues with our development of branched endografts for the treatment of thoraco-abdominal aneurysms and the UCSF Center for Limb Preservation and the Diabetic Foot - two of our programs of distinction. Furthermore, the Division’s research program is a leader in device technology for complex aneurysms, as well as novel biologic therapies to improve the outcomes of bypass surgery, promote new blood vessel growth, and ameliorate the progression of peripheral artery disease.

Education and mentorship are core values of our division. Alumni of our training programs join a prestigious group of vascular surgeons (the Wylie Society) dating back to the Division’s founding leader, Edwin J. Wylie. The track record of our alumni speaks volumes about the commitment to excellence and leadership that characterizes UCSF Vascular Surgery’s past, present, and future.

UCSF Vascular Surgery Integrated Residency Program Description

The integrated vascular surgery residency program at the University of California, San Francisco (UCSF) is designed to provide comprehensive, integrated training including core general surgery, vascular surgery, and endovascular surgery over the course of a five-year clinical program. Consistent with our tradition of training leaders in academic vascular surgery, trainees will have 2 years of academic development time between the third and fourth clinical years, which can be spent conducting research or pursuing an advanced degree.

Clinical training includes a total of 22 months spent on core surgical rotations, and 38 months of experiences concentrated on vascular surgery, obtained at four integrated sites that provide broad exposure to diverse patient populations and varied healthcare systems. The integrated residency program complements our long-standing "5+2" fellowship program in Vascular and Endovascular Surgery, the first recognized vascular surgery program in the United States. The program accepts one candidate per year directly following medical school.
UCSF Vascular Surgery Integrated Residency Program Clinical Sites

Clinical training is obtained at four integrated sites within San Francisco, which provide a broad exposure to patient populations and healthcare systems. All of these urban clinical sites are also integrated within the UCSF general surgery residency program and they leverage the core educational infrastructure of one of the premier surgery training programs in the United States. These sites include the following:

**UCSF Medical Center**

The UCSF Medical Center is a high-volume, quaternary care academic center and teaching hospital, with more than 600 beds. The hospital has 29 total operating rooms and two hybrid operating rooms with block time reserved for vascular surgery, a venue commonly utilized to perform complex aortic and hybrid revascularizations. Total vascular procedure volumes at UCSF exceed 1,200 cases per year. The UCSF Center for Limb Preservation is a multidisciplinary program staffed by vascular surgeons and podiatrists. The limb clinic and inpatient service also hosts podiatry students, podiatry residents, and a podiatric limb salvage fellow, integrated within the vascular team. The busy inpatient and outpatient vascular surgery services at UCSF are supported by four advanced healthcare providers (AHPs) so that trainees can focus on learning vascular surgery and spending time in the operating rooms. The IAC-accredited vascular laboratory performs more than 8,000 studies annually.

**San Francisco Veterans Administration Health Care System (SFVAHCS)**

The San Francisco Veterans Affairs Hospital is a premier 124 bed teaching hospital serving Veterans living in coastal Northern California from San Francisco to Oregon. The SFVAHCS is a tertiary care facility affiliated with UCSF that offers a full cohort of medical and surgical specialty care while maintaining the largest funded research program in the Veterans Health Administration System. The hospital boasts 18 intensive care beds, 9 operating rooms, one hybrid cardiac catheterization lab. The vascular surgery service is supported by two AHPs and the hospital has a dedicated vascular laboratory.

**Zuckerberg San Francisco General Hospital (ZSFG)**

Zuckerberg San Francisco General Hospital and Trauma Center is a public safety net hospital under the purview of the city’s Department of Public Health and staffed by UCSF faculty. It serves as the only Level I Trauma Center for the 1.5 million residents of San Francisco and Northern San Mateo County and it has a service population of 120,000. The hospital has 403 general acute care beds, 14 operating rooms, a hybrid operating room and two hybrid catheterization labs. The vascular surgery case mix is similar to a large community program with advanced presentations of common conditions, in addition to a modicum of complex vascular trauma. The service is supported by one AHP and the hospital has a dedicated vascular laboratory staffed by registered vascular technologists.

**Kaiser Permanente San Francisco Medical Center (KPMC)**

Kaiser Permanente is the largest integrated healthcare in the United States, which serves more than four million patients in Northern California. The Kaiser Permanente San Francisco Medical Center serves as a Cardiovascular Regional Referral Center, with 247 beds, 12 operating rooms (including a hybrid operating room), two catheterization laboratories, and a cardiovascular intensive care unit. This center provides a wide breadth of vascular care and performs a majority of complex aortic surgery for Northern California Kaiser Permanente. The vascular surgery service has six board certified vascular surgeons, and is supported by two outpatient nurses, one nurse practitioner, and three inpatient physician assistants.

**Clinical Rotations**

- 22 months spent on core surgical rotations
  - 3 dedicated months on interventional radiology
  - 1 month on cardiology
  - 1 month on non-invasive vascular laboratory at UCSF IAC-accredited laboratory
- 38 months of vascular surgery
- 1 month of vacation each year (included in the above)

Vascular and endovascular surgery training is primarily focused at UCSF, ZSFG, and KPMC. These institutions provide trainees exposure to diverse populations (racial, ethnic, gender, and socio-economic), a wide spectrum of complexity, and distinctly unique health care systems. All site directors and vascular faculty members have extensive experience in surgical education, broad clinical expertise in vascular medicine, open and endovascular interventions, and significant academic accomplishments.

The fourth and fifth years of the integrated residency are identical to the schedule of the existing 5+2 UCSF Vascular Fellowship program, which will provide equivalent exposure of the senior residents and the fellows across all three performance sites. This allows for extensive interaction between the integrated Residents and Fellows, thereby enriching the training of both.

**Research**

Residents will have 2 years of funded academic development time between the third and fourth clinical years, which can be spent conducting research or pursuing an advanced degree. Faculty conduct a wide array of basic science, translational, clinical, and health services research, which involve trainees at all levels. Previous mentees of faculty members have been successful in applying for and receiving their own research funding, including competitive NIH research grants. The Division’s research is enriched by the world-class environment for inquiry at UCSF, the nation’s leading public institution in NIH funding.
2020-2022 Graduating Fellow's Operative Experience

- Broad open and endovascular experience; high complexity
- Independent clinical research project
- 2020 Graduating Fellow = 1,374 total cases over two years
- 2021 Graduating Fellows = 775 and 568 total cases over two years
- 2022 Graduating Fellows = 1,003 and 1,031 total cases over two years

Defined Category | RRC Minimum | 1st and 2nd Cases Performed
--- | --- | ---
| | 2020 Graduating Fellow | 2021 Graduating Fellow | 2022 Graduating Fellow*

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<th>Abdominal</th>
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*Average between 2 fellows

UCSF

UCSF is one of the world’s leading medical universities and aspires to advance health worldwide. The Medical Center, consistently ranked within the top 15 in the nation by US News and World Report, occupies seven major sites in the San Francisco Bay Area. There are a total of 28 academic departments, with 8 organized research units and 5 interdisciplinary research centers.

UCSF ranks first among public institutions and second among all United States institutions in National Institutes of Health (NIH) dollars awarded. UCSF is ranked 5th by US News & World Report in the quality of research training and in the quality of primary care training, the only medical school that is ranked in the top five in both categories. UCSF is also ranked among the top 10 in all medical school specialty programs.

UCSF Department of Surgery

The UCSF Department of Surgery is one of the largest clinical services at UCSF. Surgical training programs at UCSF are among the most competitive in the nation. Additionally, the Department has a major commitment to creative activity in bench research, clinical training, education, research and global health, ranking 3rd in NIH research funding among departments of surgery nationwide.

The Department’s General Surgery residency program is a premier surgical training program, which consists of 84 clinical residents and 16 research residents. The Department consists of nine divisions, which are all dedicated to providing superb patient care, conducting meaningful research, and educating the future generation of leaders in surgery.

San Francisco

UCSF is located in the heart of San Francisco. Home to more than 850,000 people, this is one of the most culturally diverse cities in the world. The picturesque City attracts more than 15 million visitors per year through its well-known golden gates. San Francisco is brimming with world-class music, art, culture, food, sports, and is near to wine county, the California coastline, and Lake Tahoe, which offer a wide array of outdoor activities including hiking, camping, and skiing/snowboarding.

Conferences, Symposia, and Education

- Vascular Surgery Grand Rounds (weekly)
- Morbidity, Mortality and Preoperative Case Conference (all sites, weekly)
- Small Group Vascular Teaching Sessions (every other week)
- Journal Club (monthly)
- Multidisciplinary Aortic Conference (monthly with cardiac surgery and anesthesia)
- Multidisciplinary Dialysis Access Conference (monthly with interventional radiology and nephrology)
- Cadaver lab (annually)
- Annual UCSF Vascular Symposium and Robert W Binkley Visiting Professorship
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Professor of Surgery
UCSF Clinical Site Director

WARREN GASPER, MD
Associate Professor of Surgery
SFVAMC Clinical Site Director

JADE HIRAMOTO, MD
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