

## Our Physicians

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### Edith Tzeng, MD

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### Theodore Yuo, MD

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**UPMC** LIFE  
CHANGING  
MEDICINE

## DIVISION OF VASCULAR SURGERY



### Vascular Surgery Independent 5+2 Fellowship Vascular Surgery Integrated 0-5 Residency

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#### UPMC Division of Vascular Surgery

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[www.UPMC.com/vascularsurgerytraining](http://www.UPMC.com/vascularsurgerytraining)

## Welcome to Pittsburgh

We invite you to visit and see for yourself what makes Pittsburgh so great, from our hometown spirit, lots of fun things for families to do, great restaurants and places to stay...oh yes, and then there's our sports teams. What more can we say?



### Live

Pittsburgh is a city of neighborhoods—90 of them, each with its own character and history. By national standards, rental housing here is affordable and plentiful.



### Play

From A (award-winning amusement parks and art museums) to Z (the world-class Pittsburgh Zoo and PPG Aquarium), there are plenty of opportunities to play in Pittsburgh.



### Study

Start in preschool, end with your doctorate! Pittsburgh offers an array of schooling options for you and your children.



**Our residents/fellows have the opportunity to rotate at several UPMC Hospitals in the greater Pittsburgh region.**

#### UPMC Presbyterian

UPMC Presbyterian, in the heart of Oakland, is a tertiary care referral hospital, a level I trauma center, and a site of ongoing research and graduate programs.

#### UPMC Montefiore

UPMC Montefiore, as part of UPMC Presbyterian, is near the University of Pittsburgh in Oakland and delivers a continuum of care for those specialty services offered at UPMC Presbyterian.

#### UPMC Shadyside

UPMC Shadyside located in the Pittsburgh neighborhood of Shadyside, is a tertiary-care hospital offering primary medical care, as well as physician and nursing education.

#### UPMC St. Margaret

UPMC St. Margaret is a 249-bed acute care and teaching hospital near Aspinwall, Pa., serving the residents of northeastern Allegheny County and the Alle-Kiski Valley.

#### UPMC Passavant

Located in Pittsburgh's North Hills, UPMC Passavant is a tertiary care center with two convenient campuses in McCandless and Cranberry, Pa.

#### UPMC Mercy

UPMC Mercy is a level-I trauma center in uptown Pittsburgh, offering a broad range of services and provides compassionate care in the Catholic tradition.

#### UPMC Magee-Womens Hospital

UPMC Magee-Womens Hospital, in Pittsburgh's Oakland neighborhood, offers a full array of medical and surgical services for both women and men, in addition to obstetric, gynecologic, and neonatal care.

#### VA Pittsburgh Healthcare System

VA Pittsburgh Healthcare System is an integrated health care system that proudly serves the veteran population throughout the tri-state area. This acute care facility offers fellows the exposure to a patient population that is at high risk for vascular disease.



Our network throughout Pennsylvania includes more than

**127** hospitals and **20,000** physicians

## Recent UPMC Vascular Surgery Trainees

The division's Vascular Surgery Fellowship Program entered its 23<sup>rd</sup> year of operation in July 2020 and the five-year Vascular Surgery Integrated Residency Program began its 14<sup>th</sup> year of operation in late-June 2020. Since the inception of both programs, we have seen 56 residents and fellows complete their training and enter practice. Our recent trainees (and post-graduate institutions), since 2017 include:

- 2017 **Jon Henry, MD** (OhioHealth Heart and Vascular Surgeons)  
**Andrew Leake, MD** (Vascular Surgical Associates of Richmond, VA)  
**Joyce Lin, MD** (Surgical Associates of Richmond, VA)  
**Jun Xu, MD** (University of Iowa Hospitals and Clinics)
- 2018 **Elizabeth Genovese, MD** (Medical University of South Carolina)  
**Nathan Liang, MD** (UPMC, Pittsburgh, PA)  
**Gregory Salzler, MD** (Geisinger Medical Center)  
**Sung Yang, MD** (Univ. of Cincinnati Medical Center)
- 2019 **Kathryn Fong, MD** (Palmetto Health, Columbia, SC)  
**Lindsey Haga, MD** (UPMC, Pittsburgh, PA)  
**Natalie Sridharan, MD** (UPMC, Pittsburgh, PA)  
**Jason Wagner, MD** (Sarasota Vascular Specialists, Sarasota, FL)
- 2020 **Scott Chapman, MD** (Mt. Carmel Health System, Columbus, OH)  
**Xiaoyi Li, MD** (Banner Health, Phoenix, AZ)  
**Abhisekh Mohapatra, MD** (Harvard Medical School, Boston, MA)  
**Karim Salem, MD** (UPMC, Pittsburgh, PA)

## Vascular Surgery Cases & Procedures

Residents and fellows embark on surgical rotations across the UPMC system where they perform cases of varying size and scope, from amputations and stent placements, to complex open and endovascular surgical procedures. Below is a summary of the vascular procedures residents and fellows will perform during their training with UPMC:

Category	Minimum Required	Avg. # Performed 0-5 Residency	Avg. # Performed 5+2 Fellowship
Abdominal	30	45	40
Cerebrovascular	25	60	45
Peripheral	45	175	140
Complex	10	45	45
Endovascular Diagnostic	100	500	150
Endovascular Therapeutic	80	425	175
Endovascular Aneurysm Repair	20	65	45

\* Average determined by total experience of trainees completing program in 2019-20.

## Residency Programs

### 5+2 Fellowship Program

**FOUNDED: 1999**

**AVAILABLE FELLOWSHIP SPOTS: 2 per year**

**TOTAL # OF FELLOWS: 4**

The UPMC Division of Vascular Surgery has had a successful two-year independent residency program (fellowship) in vascular surgery since 2001 and has been able to secure ongoing ACGME accreditation since.

The program is available to general surgery residents through the standard application and matching pathways (ERAS and NRMP).

The two-year independent vascular surgery residency after general surgery training is an ACGME-approved program for two residents per year, offering clinical experience including core service rotations, endovascular interventional experience, a venous rotation, clinical noninvasive vascular laboratory education, and clinical research.

In addition to their clinical training, the vascular surgery 5+2 residents are encouraged to participate in clinical research projects throughout their educational experience. Residents have routinely presented their work at regional and national meetings, and some of these projects have gone on to become landmark papers.

### CURRENT FELLOWS

PGY-7

**Elica Inagaki, MD**

Medical College of Wisconsin, 2012  
 Boston Medical Center (Boston, MA), 2019

**Anthony Lewis, MD**

University of Texas Medical Branch School of Medicine, 2011  
 UPMC (Pittsburgh, PA), 2019

PGY-6

**Mirnal Chaudhary, MD**

Northeast Ohio Medical University, 2012  
 Wright State University, Boonshoft School of Medicine, Dayton, OH, 2020

**Mitchell Dyer, MD**

University of Pittsburgh School of Medicine, 2012  
 UPMC (Pittsburgh, PA), 2020

## Integrated 0-5 Residency Program

**FOUNDED: 2007**

**AVAILABLE RESIDENCY SPOTS: 2 per year**

**TOTAL # OF RESIDENTS: 14**

The five-year residency program is a recent training paradigm approved by the ACGME that leads to certification in vascular surgery. We were granted two slots for the program and our first two residents started in 2007. The program is designed to train well-rounded vascular specialists with expertise in clinical and academic vascular care provides exposure to cutting edge evolving new technologies and research.

The program is available to fourth-year medical students through the standard application and matching pathways (ERAS and NRMP). The first two years of the program are devoted to core surgical training, during which time the residents complete general surgery rotations. The core years also include a body imaging radiology rotation and a cardiology rotation. The remaining three years are devoted exclusively to vascular surgery training.

The program includes an additional, mandatory two years of research under a T32 training grant. The research years start after the third clinical year and include basic science research, biomechanical engineering research, or clinical research with the possibility of obtaining an MSc degree in clinical research. As with our 5+2 program, residents have presented their work at regional and national meetings and gone on to publish landmark papers.

The core of the service rotations for both independent and integrated programs is at UPMC Presbyterian and UPMC Shadyside, where residents are challenged by a vast array of open and endovascular cases. Additionally, residents spend time at UPMC Passavant, UPMC St. Margaret, UPMC Mercy, UPMC Montefiore, UPMC Magee-Womens Hospital, and the VA Pittsburgh Healthcare System.

The vascular surgery residents manage the core vascular surgery clinical service at each hospital. General surgical residents rotate on select services and share call responsibilities. All patients admitted to our service are assigned to an attending vascular surgeon. All residents are also required to attend clinic on a weekly basis, which provides them with continuity of care and the opportunity to meet the patient both pre- and post-operatively.

The operative experience includes rich exposure to aortic diseases, aneurysms, carotid artery stenosis, peripheral arterial disease, traumatic vascular injuries, dialysis access, and venous pathology including interventional therapy for acute and chronic deep vein thrombosis (DVT). It also provides a balanced mix of endovascular and open procedures, including open and fenestrated repair of thoracoabdominal aneurysm. The vascular surgery resident will acquire operative experience in more than 300 cases per year. The residents are given a gradual increase in direct responsibility for pre- and post-operative patient care, and for the performance of surgical procedures under the direct supervision of the attending vascular surgeon.

### CURRENT RESIDENTS

PGY-5      **Catherine Go, MD**  
University of Pittsburgh, 2014

**Nandan Nath, MD**  
University of Minnesota, 2014

PGY-4      **Kathy Gonzalez, MD**  
University of Miami Leonard M. Miller School of Medicine, 2015

**Kyle Markel, MD**  
Wayne State University School of Medicine, 2015

PGY-3      **Rohan Kulkarni, MD**  
University of Illinois College of Medicine, Rockford, IL, 2018

**Bowen Xie, MD**  
University of Pittsburgh Medical School, 2018

PGY-2      **Marissa Jarosinski, MD**  
Rutgers, Robert Wood Johnson Medical School, 2019

**Edward Oh, MD**  
USF Health Morsani College of Medicine, 2019

PGY-1      **Mikayla Lowenkamp, MD**  
University of Pittsburgh Medical School, 2020

**Yash Pandya, MD**  
University of Pittsburgh Medical School, 2020

## Vascular Surgery Research

The scope of research currently available in the division includes clinical trials, device trials, outcomes research using local databases as well as administrative databases, clinical reviews, bioengineering, molecular biology, methods of inhibiting neointimal hyperplasia, aneurysms models, and other aspects of vascular biology.

The research efforts are supported by 4 full time research coordinators, as well as a full time PhD biostatistician who holds faculty appointment within the Division of Vascular Surgery.

Residents entering the integrated five-year program as interns are expected to do two additional years of research in the division of vascular surgery. This can be in one of the basic science labs devoted to vascular research, in the biomechanical engineering laboratories, or by doing clinical research.

### CURRENT RESEARCH RESIDENTS

PGY-4      **Othman Abdul-Malak, MD**  
American University of Beirut Faculty of Medicine, 2013

**Amanda Phillips, MD**  
University of Michigan Medical School, 2016

PGY-4      **Adham Abou Ali, MD**  
American University of Beirut Faculty of Medicine, 2015

**Elizabeth Andraska, MD**  
University of Michigan Medical School, 2017