



ANESTHESIOLOGY

UNIVERSITY OF MICHIGAN HEALTH SYSTEM

RESIDENCY PROGRAM



TRAINING THE NEXT GENERATION OF LEADERS

OUR VISION is to create the future of health care through discovery and to become the national leader in health care, health care reform, biomedical innovation and education.



UNIVERSITY OF MICHIGAN HEALTH SYSTEM

The University of Michigan Health System, based in Ann Arbor, Michigan, is part of one of the world's leading universities. UMHS is a premier, highly ranked academic medical center and award-winning health care system with state-of-the-art facilities.

UMHS includes the U-M Hospitals and Health Centers; the U-M Medical School and its Faculty Group Practice; one of the nation's largest biomedical research communities; and education programs that train thousands of future health professionals and scientists each year. We also include the clinical programs of the U-M School of Nursing and the activities of the Michigan Health Corporation, which enables us to form partnerships outside of our University.



UMHS FACTS & FIGURES

 **26,000+**
faculty and staff
patient care, education
and research

 **120+** clinic
locations and offices
throughout Michigan and
northern Ohio

 **45,000+**
inpatient hospital stays

2.1 MILLION
outpatient visits
and surgeries 

\$466 MILLION 
in research funding

 **TOP 10**
U.S. medical school

DEPARTMENT OF ANESTHESIOLOGY

VISION

The U-M Department of Anesthesiology will be pre-eminent in teaching and research, known for excellence in patient care and the employer of choice.

MISSION

Our mission is to meet the University's objectives in providing the highest quality of patient care, education and research. We seek to:

- Provide an atmosphere and opportunity for house officers to become consultants and practitioners in anesthesiology by encompassing a balance between clinical and educational needs and the provision of tools for continuing medical education.
- Contribute to the U-M research mission by offering an environment in which the acquisition and dissemination of knowledge associated with the principles and practices of anesthesiology can be vigorously pursued through basic and clinical experimentation.
- Provide the highest quality patient care in a cost-effective manner, while supporting the mission of the U-M Health System to provide high-quality clinical care, through the recruitment and retention of skilled practitioners and the creation of a learning environment that continuously improves the services with which we meet the needs of our patients.



A TRADITION OF EXCELLENCE

The U-M Medical School advanced anesthesiology from a section of surgery to departmental status in 1949, making it one of the earliest academic departments for anesthesiology in the nation. We have a long tradition of excellence in clinical care, one of the largest and most advanced education programs in the country and an internationally-renowned research program.

We provide exceptional training through our residency program. Our residents receive in-depth training in all facets of anesthesiology from world-renowned faculty who are committed to providing a top-notch residency experience. Under their guidance, our residents develop skills that equip them to both meet and exceed the highest standards of patient care and research.

BY THE NUMBERS

170 FACULTY

120 RESIDENTS

34 FELLOWS

80,000 ANESTHETICS

4 INTENSIVE CARE UNITS

A HISTORY OF PROGRESS

- **1949** Anesthesiology advances to departmental status
- **1955** Residency program begins
- **1962** Ann Arbor V.A. physician anesthesia service begins
- **1966** First phase-II ketamine study published by U-M Dr. Ed Domino
- **1969** C.S. Mott Children's Hospital opens
- **1981** Pain fellowship initiated
- **1983** Pediatric fellowship initiated
- **1986** New University Hospital opens
- **1990** Obstetric fellowship initiated
- **1992** Cardiac fellowship initiated
- **1995** Critical care fellowship initiated
- **2007** Neuroanesthesia fellowship initiated
- **2007** Frankel Cardiovascular Center opens
- **2008** Anesthesia Clinical Research Committee formed
- **2008** Multicenter Perioperative Outcomes Group formed
- **2011** New C.S. Mott Children's Hospital and Von Voigtlander Women's Hospital open
- **2013** Regional fellowship initiated
- **2013** Michigan highlighted as pioneer in research in December issue of *Anesthesiology*
- **2014** Head and neck fellowship initiated
- **2014** T-32 research fellowship initiated

CLINICAL TRAINING

4-YEAR CLINICAL TRAINING PROGRAM

Our program offers a balance between clinical training and didactic instruction, beginning with our comprehensive clinical base year or internship program. Training is divided into twelve, one-month blocks during the first year and thirteen, four-week blocks during the remaining three years.

CBYs rotate in emergency medicine, general medicine, and cardiology, vascular, transplant surgery, neurosurgery and otolaryngology. Additional rotations are within the Department of Anesthesiology in the cardiovascular ICU (CV-ICU), chronic pain, as well as Research 101 and our end-of-year Bootcamp.

CA-1s are assigned mostly to the University Hospital operating rooms, where they spend six or seven months learning the anesthetics for general surgery, plastic surgery, head and neck surgery, gynecology, oncology, pain and orthopaedic surgery. CA-1s perform rotations in the SICU, pediatric anesthesia and in our ambulatory surgery facility, with additional two-week rotations in the Regional/Acute Pain Preoperative Clinic, the PACU, Obstetrics Night Float and CV-ICU Night Float. We also offer a rotation in the V.A. Ann Arbor Healthcare System.

CA-2s perform mostly subspecialty rotations, including pediatrics, obstetrics, neuroanesthesia, cardiac, thoracic, vascular and pain. Additional rotations are assigned in the University Hospital operating rooms, as well as in critical care in the SICU and CV-ICU.

CA-3s are required to rotate in cardiac, obstetrics, neuroanesthesia, pediatrics, regional and acute pain, with additional rotations in the CV-ICU and ambulatory care facility. The remaining time is spent in both the University Hospital operating rooms and the Frankel Cardiovascular Center operating rooms, with advanced training in thoracic, vascular, non-operating room anesthesia (NORA) and transesophageal echocardiography (TEE).



PROGRAM ROTATIONS

CBY

- Emergency - **1 month**
- General Medicine - **1 month**
- Cardiology - **1 month**
- Vascular Surgery – **1 month**
- Transplant Surgery – **1 month**
- Neurosurgery – **1 month**
- CV-ICU – **2 months**
- Research 101 – **1 month**
- Anesthesiology – **1 month**
- Pain – **1 month**
- ENT – **1 month**

CA-1

- PACU / Adult - **1 block**
- Adult / OB Night Float - **1 block**
- Adult - **3 blocks**
- Head & Neck – **1 block**
- VA – **1 block**
- Preop / Adult– **1 block**
- CV-ICU Night Float / Adult – **1 block**
- Pediatrics – **1 block**
- Outpatient – **1 block**
- SICU – **1 block**
- Adult – **2 blocks**
- Acute Pain Center/Adult – **1 block**

CA-2

- Adult – **3 blocks**
- Neuroanesthesia – **1 block**
- Cardiac – **1 block**
- Pediatrics – **2 blocks**
- Vascular – **1 block**
- OB – **1 block**
- Chronic Pain – **1 block**
- Thoracic – **1 block**
- CV-ICU – **1 block**
- SICU – **1 block**

CA-3

- Advanced Clinical*/ Preop – **1 block**
- Cardiac – **1 block**
- OB – **1 block**
- Neuroanesthesia – **1 block**
- Advanced Clinical* – **3 blocks**
- APS / Regional – **1 block**
- Regional / Ambulatory – **1 block**
- Pediatrics – **1 block**
- CV-ICU – **1 block**
- Advanced Clinical* – **2 blocks**

*The remaining time is spent in both the University Hospital operating rooms and the Frankel Cardiovascular Center operating rooms, with advanced training in thoracic, vascular, non-operating room anesthesia (NORA) and transesophageal echocardiography (TEE).



EDUCATIONAL OPPORTUNITIES

A resident-level specific, didactic curriculum occurs weekly at the University Hospital during a provided lunch hour.

The CA-1 lectures focus on ABA Basic Clinic Examination content, the CA-2 lectures on specialty-specific content and the CA-3 lectures include a professionalism and ethics series and ABA Advanced Clinic Examination preparation in the second half of the year.

A daily, 6:30 a.m. conference at the University Hospital includes faculty- and resident-led presentations and journal club. In addition, residents participate in weekly conferences during their specialty rotations.

RESIDENT-SPECIFIC

- In-training Examination
- Mock Oral Examinations
- Patient Safety Workshop
- Resident Simulation Course

DEPARTMENT-WIDE

- Research Symposium
- R.B. Sweet Conference
- Puerto Vallarta Conference
- Airway Management Conference
- Visiting Professor Series
- Mortality and Morbidity Conference

SCHEDULE

A typical day at the University Hospital, where you will spend most of CA-1 year, involves reviewing cases the night before with your attending, setting up your room (6 a.m.), morning teaching conference (6:30 - 7 a.m.), beginning your first case (7:30 a.m.) and finishing your day (between 5 p.m. and 7 p.m., or 3-3:30 p.m. on pre-call days).

While at the University Hospital, residents generally take two or three overnight calls per month, with one call being a Saturday or Sunday.

- As a CA-1, a typical week involves pre-call Monday, 6 a.m. - 3 p.m.; call Tuesday, 11 a.m. through Wednesday at 7 a.m.; pre-op Thursday, 6:30 a.m. - 3 p.m.; and a regular day Friday, 6 a.m. - 5 p.m.
- As a CA-2, you will have a similar schedule during your months at the University Hospital, with calls during the week and “back-up” call from home during the weekends. During subspecialty months, you have protected time without as much call so that you may focus on your subspecialty rotations.
- As a CA-3, your call day will start at 2 p.m. and is spent supervising CA-1s in the operating room, organizing the operating rooms at the end of the day and leading emergency airways. If you are on-call on Saturday, you will get the preceding Friday off.

During the week, the call team is a CA1, CA2 and CA3. You are off on your post-call day. The day following your post-call day, you are together again as a team in the preoperative holding room, taking care of preoperative procedures for patients having surgery, such as arterial lines, epidurals, preparing for awake fiberoptic intubations and central venous access.

RESEARCH OPPORTUNITIES

The U-M Department of Anesthesiology offers ample opportunities to engage in research. A highlight of our research programs is the Clinician-Scientist Translational Anesthesiology Research (C-STAR) program. This program aims to develop the next generation of translational researchers in the fields of perioperative medicine, pain medicine and critical care.

- The C-STAR resident has up to six guaranteed months, with call responsibility, to accomplish his or her research plan. Continued call responsibility is considered important for development as a clinical anesthesiologist. Due to the diversity of research opportunities, the allocation of these months are decided on an individual basis.
- Involvement in the C-STAR program is contingent upon demonstrated clinical excellence throughout the CA-1 year. Applicants are encouraged to identify interest in the C-STAR program early in their training in order to meet with research mentors, enter into the application process and complete a research plan.

BENEFITS

Trainees receive a competitive benefits package, which includes:

- Medical, dental, hospitalization and pharmacy coverage
- Life, disability, and malpractice coverage
- Four weeks of paid vacation
- Additional pay for working holidays, including your birthday
- Annual lump sum payment for retirement savings

UMHS residents are represented by the University of Michigan House Officers Association (HOA). The HOA is authorized by the State of Michigan to negotiate contracts with UMHS. Information regarding salaries and the above-mentioned benefits are detailed in the current contract. The current contract lists the following salary schedule:

HOUSE OFFICER SALARY SCHEDULE

Year	Salary Begins 7/1/2016	Lump Sum 11/30/2016
HO I	\$54,208	\$3,795
HO II	\$57,191	\$4,003
HO III	\$60,229	\$4,216
HO IV	\$63,386	\$4,437
HO V	\$66,623	\$4,664

ADDITIONAL RESOURCES

UNIVERSITY OF MICHIGAN OFFICE OF STAFF BENEFITS

benefits.umich.edu/benefitgroups/houseo.html

HOUSE OFFICER ASSOCIATION

ho.umich.org

EXTRACURRICULAR ACTIVITIES

Residents enjoy a variety of activities throughout their training.

- Indoor Soccer Team
- Kickball Team
- Softball Team
- Tailgates
- Annual Holiday Party
- 4th of July Party at Dr. Tremper's Home
- Resident wellness events (Detroit and U-M sporting events, barbecues, happy hours)

LIVING IN ANN ARBOR

The University of Michigan is located in Ann Arbor, a small cosmopolitan city in the southeast corner of Michigan, approximately one hour west of the greater Detroit metropolitan area and a 30-minute drive from the Detroit Metropolitan International Airport. With a population of approximately 125,000, Ann Arbor combines the congenial atmosphere and ease of living in a small city with the wide range of cultural opportunities typically found in a much larger community. Intercalation of the University of Michigan campus and the city of Ann Arbor provides easy access to these activities and to an abundance of affordable and conveniently-located housing.



Above photos courtesy of VisitAnnArbor.org

LEARN MORE

CITY OF ANN ARBOR

a2gov.org/Pages/default.aspx

ANN ARBOR AREA CONVENTION AND VISITORS BUREAU

visitannarbor.org

ARBORWEB

arborweb.com

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hr.umich.edu/um





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