

**2018-2019**

**Adult Cardiothoracic Anesthesiology  
Fellowship Program**



**Our mission:  
to serve, to heal,  
to educate.**

 **Cooper**  
University Health Care

 **Cooper Medical School  
of Rowan University**

# Adult Cardiothoracic Anesthesiology Fellowship Program



## About Us

The Adult Cardiothoracic Anesthesiology Fellowship at Cooper University Health Care is a one-year ACGME-accredited fellowship program that provides a well-balanced year of educational, academic, and clinical experience. Cooper University Health Care is a tertiary care center that boasts a growing volume of cardiothoracic cases. The cardiothoracic surgery team performs a variety of cardiac cases ranging from minimally invasive valve repairs and replacements to off-pump coronary bypass surgeries. In 2016, over 550 cardiac surgeries were performed, including approximately 200 cases without cardiopulmonary bypass. Cooper is the regional leader in Trans-catheter Aortic Valve Replacement (TAVR). Cooper is also a major aortic center. We have performed over 50 major aortic operations last year, including several open thoracic aortic aneurysm repairs. Fellows can expect to become intimately involved with advanced procedures including complex aortic surgery and minimally invasive cardiac surgery. Cooper is also seeing a rapidly growing volume of non-cardiac thoracic patients, providing fellows with significant experience in robotic and open lung resection, mediastinal surgery, esophageal resection, and interventional pulmonology procedures.

While there is a large volume of clinical cases for the fellows to gain experience, trainee education remains the cornerstone of our fellowship program. Assignments are typically based on educational need and not staffing requirements; fellows will usually participate in the most complex procedures of the day. The fellow will gain experience with both supervision of trainees and with independent practice where he/she will function as the primary house staff. Additionally, the fellow will spend a month-long rotation with consulting cardiologists, performing and reviewing transesophageal echocardiography studies.

The Department of Anesthesiology has a diverse and excellent cardiothoracic faculty who are experts in their field; they play an integral role in perioperative decision making. Our entire cardiothoracic anesthesiology faculty is extremely facile with transesophageal echocardiography. Academically, faculty members are involved in several IRB-approved projects. Nationally, they are involved with the leadership of the Society of Cardiovascular Anesthesiologists. We also have two American Board of Anesthesiology oral examiners on our staff. We enjoy significant infrastructural support of our departmental academic mission from Cooper University Health Care and Cooper Medical School of Rowan University, including two full-time research coordinators. The department currently has more than 20 IRB-approved studies ongoing.

The cardiothoracic faculty at Cooper fosters an educational and supportive environment that will help our fellows grow and mature into exceptional clinicians. With the breadth of training this program provides, we are confident in the ability of our graduating fellows to provide exceptional care anywhere they go.

[CooperHealth.edu](http://CooperHealth.edu)

# Clinical Curriculum

## Rotations months

Adult Cardiothoracic Anesthesia	6.5
Echocardiography	1
Intensive Care Unit	1
Thoracic/Vascular Anesthesia	1
Electrophysiology/ Catheterization Lab	0.5
Elective–Research, Thoracic, ICU, Echocardiography	2

## Adult Cardiothoracic Anesthesiology:

This rotation, split over six and a half months, will form the backbone of the fellow's clinical education over the course of the year. The fellow will routinely care for and manage patients with significant comorbidities. The fellow will be involved with the management of:

1. Valve repair and replacement, both open and minimally invasive.
2. Coronary artery bypass grafting, both on pump and off pump.
3. Primary and re-do sternotomies.
4. Robotic revascularizations.
5. MAZE procedures.
6. Open aortic surgery, ascending and descending, with and without deep hypothermic circulatory arrest.
7. Epicardia lead placement.
8. Descending aortic procedures requiring left atrial-femoral bypass.
9. Extracorporeal membrane oxygenation.
10. Intra-aortic balloon pump management.

## Transesophageal Echocardiography (TEE):

The fellow will spend one month in the echocardiography lab to focus on TEE. In the echocardiography lab, the fellow will perform and interpret exams under the supervision of cardiology faculty. This rotation will provide the fellow with a unique perspective on TEE exams that is very different from the OR environment. As time allows, the fellow will also have the opportunity to perform/review TEEs that are done in the operating room. The fellow will track and record all TEE exams reviewed and performed throughout the year. Additionally, a TEE lecture series will be given by anesthesiology faculty throughout the year. The fellow will have the option of spending a second month in the echocardiography lab as an elective.

## Intensive Care Unit (ICU):

The ICU rotation is one month in duration. The fellow will have the option to use one elective month to spend another month on this rotation. The fellow will manage critically ill cardiothoracic patients on this rotation. The fellow will, as part of a multidisciplinary team, have the opportunity to manage postoperative hemodynamic issues, coagulopathy, postoperative bleeding, cardiac tamponade, cardiac arrhythmias, postoperative cardiac failure, infection, renal failure, stroke, and respiratory failure. The fellow will function on a team that includes residents, the ICU attending, the cardiac surgery attending, and the cardiac surgery advanced practice nurse. The fellow will work under the direct supervision of the ICU attending on service. The fellow will have the opportunity to supervise residents while on this rotation.

# Clinical Curriculum

Training  
physicians  
to become  
outstanding  
anesthesiologists.

CooperHealth.edu

## **Thoracic/Vascular:**

The fellow will spend one month during the course of the year involved in the care of thoracic cases or major vascular cases. Cooper University Health Care boasts an increasing number of thoracic cases that include minimally invasive resections, open thoracotomies, lobectomies, pneumonectomies, and mediastinal mass resections. We also see a fairly consistent number of descending thoracic aortic aneurysm repairs involving left atrial-femoral artery bypass. The fellow will routinely be assigned to the cases that provide the greatest educational value.

## **Research (Elective):**

The fellow may elect to spend up to two months on this rotation, if approved by the fellowship director. The purpose of this rotation will be to familiarize the fellow with scientific methodology and publication processes. The fellow will be actively mentored by Dr. Ludmil Mitrev, the Director of Clinical Research. The fellow will either initiate his/her own research project or will join a project already under way. The goal of this rotation will be to produce a piece of scientific work that can be presented at a major academic meeting.

## **Perfusion Services (Elective):**

The fellow will have the option to rotate through Perfusion Services for up to two weeks. The fellow will work with the perfusionists to prepare the cardiopulmonary bypass machine prior to pump cases. The fellow will preoperatively assess the patient, and will be responsible for the perfusion of the patient during CPB under the supervision of the perfusionist.

## **Cardiology (Elective):**

The fellow will have the option to rotate for two- to four-weeks under the supervision of cardiology faculty covering inpatient consults. During this rotation, the fellow will work with the cardiology team to provide inpatient consults on the general medical floors and intensive care units. The fellow will write notes and participate in the care of cardiology patients while on this rotation.

**serve**

# How to Apply



The Adult Cardiothoracic Anesthesia Fellowship at Cooper University Health Care is accepting applications via the San Francisco Match program at [www.sfmatch.org](http://www.sfmatch.org). Additional information on the application process can be found directly on the SF Match ACTA fellowship website by navigating to 'Specialties' and selecting 'Adult Cardiothoracic Anesthesiology'.

We will be accepting applications for the fellowship position through March 31.

## Contact Information

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# heal

# The Cooper Campus and Surrounding Area



The expansion project at Cooper is a direct reflection of the growth in services that Cooper has experienced over the past several years.



It is extraordinary to have such a high concentration of leadership at one institution, but then, Cooper is an extraordinary health care system.

Cooper University Hospital is the center of a growing health sciences campus that includes the hospital, Cooper Medical School of Rowan University, MD Anderson Cancer Center at Cooper, the internationally acclaimed Coriell Institute for Medical Research, Sheridan Pavilion at Three Cooper Plaza medical offices, and the Ronald McDonald House. Adjacent to the Cooper Plaza/Lanning Square neighborhood, Cooper has a long history of outreach and service efforts to its local community. Some of these initiatives include health and wellness programs for the neighborhood, development of neighborhood parks and playgrounds, and outreach to programs into local schools.

The hospital's 312,000-square-foot, 10-story Roberts Pavilion features an expansive lobby and concourse, a restaurant and coffee shop, health resource center, business center, gift shop, and chapel. State-of-the-art patient care facilities include private patient rooms, technologically advanced operating room suites with hybrid imaging capabilities, and an advanced laboratory automation facility. The Emergency Department features 25 beds, dedicated isolation suites, and autonomous CT scanning technology. Designated floors serve specific patient populations including those needing advanced surgical and heart care, along with South Jersey's only dedicated 30-bed inpatient cancer unit.

Also in the Roberts Pavilion is the 25,000-square-foot Dr. Edward D. Viner Intensive Care Unit—featuring 30 private patient rooms equipped with the latest in advanced technology, and allowing 360-degree patient access. Five patient rooms are capable of negative pressure isolation, and five rooms have chambered isolation alcoves. In addition, an enlarged room with operating room caliber lighting is outfitted to perform bedside exploratory laparotomy in patients too unstable for transport to the operating room.

MD Anderson Cancer Center at Cooper, a four-story, 103,050-square-foot center located on the Cooper Health Sciences Campus in Camden, is dedicated to cancer prevention, detection, treatment, and research. The center includes bright, spacious chemotherapy treatment areas, patient exam rooms, a conference center, and advanced diagnostic and treatment technologies.

The design incorporates an aesthetic approach to healing with abundant natural light, a rooftop Tranquility Garden, an illuminated floor-to-ceiling "Tree of Life" centerpiece, and more than 100 pieces of original art created by 71 New Jersey artists.

Cooper Medical School of Rowan University's (CMSRU) Medical Education Building is located on the Cooper Health Sciences Campus on South Broadway, between Benson and Washington Streets in Camden. The building, which opened in July 2012, was designed for CMSRU's curriculum with spaces and technologies to support faculty and students in their educational process.

## The Cooper Campus and Surrounding Area *continued*



The Cooper Health Sciences Campus is located in the heart of Camden's business district. The academic medical center campus is easily accessible by car or public transportation via the commuter high-speed line and bus terminal adjacent to the hospital.

Cooper is a short walk or drive from the exciting Camden waterfront which includes a magnificent waterfront park and marina; the Adventure Aquarium; and the BB&T amphitheater, which hosts nationally renowned entertainment throughout the year. Nearby are the Sixers Training Complex, L3 Communications complex, Lockheed Martin, Rutgers University Camden Campus, and Camden County College. There are expected to be \$350M in transportation and infrastructure improvements within the next four- to five-years to handle the influx of thousands of new employees to the area and students at nearby growing academic campuses.

Cooper is conveniently close to Philadelphia. Just a mile-long drive over the Benjamin Franklin Bridge will put you at the doorstep of Philadelphia's cultural, culinary, and historic venues. South Jersey also offers a range of living and entertainment options. Quaint towns such as Haddonfield and Collingswood are just 10 minutes away. The lights and action of Atlantic City and popular beach towns such as Cape May and Ocean City are a one-hour drive from Cooper.

# educate

# Cooper Campus Map



The most up-to-date directions to Cooper University Hospital are available at:  
[CooperHealth.org/Directions](http://CooperHealth.org/Directions)

# campus



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**Adrienne Kirby, PhD, FACHE**  
President and Chief Executive Officer  
Cooper University Health Care

One Cooper Plaza · Camden, NJ 08103-1489 · [CooperHealth.edu](http://CooperHealth.edu)

Hospital Main Number: **856-342-2000**

Graduate Medical Education: **856-342-2922**