2017-2018
Surgical Critical Care Fellowship Program

To serve, to heal, to educate

serve heal educate
Thank you for your interest in our ACGME accredited Surgical Critical Care Fellowship at Cooper University Hospital/Cooper Medical School of Rowan University (CMSRW). This program offers a one year ACGME fully accredited fellowship in Surgical Critical Care. The section of Surgical Critical Care is a component of the Division of Trauma in the Department of Surgery at Cooper University Hospital Medical Center.

Cooper University Hospital is the largest academic medical center and the only Level I Trauma Center in Southern New Jersey. The medical center serves the needs of a broad patient population consisting of primary, secondary and tertiary medical care. There are 73 critical care beds divided among Medical/ICU (30), Trauma/Surgical ICU (16), Cardiac Care Unit (12), Trauma Step Down Unit (9), Stroke Unit (4) and pediatric ICU (6).

As a busy Level I Trauma Center the emphasis of our Surgical Critical Care fellowship is on the evaluation, resuscitation and management of the acute trauma patient and its related critical care. However, each Fellow may tailor his or her fellowship to individual goals and clinical needs. Our fellows have the added benefit of working with academic critical care intensivists in many disciplines during their medical/surgical ICU rotations.

The Critical care faculty are primarily a group of board certified critical care surgeons extremely dedicated and committed to the delivery and education of Critical Care. In addition, Critical Care physicians from the departments of medicine, pediatrics, and anesthesia are members of the faculty. The following pages will provide specific information about our program, including program description objectives, curriculum and conferences. If you have any questions, we encourage you to call us at 856-342-3341.
Greetings and thank you for your interest in training at Cooper! We are Southern New Jersey’s only academic, tertiary care medical center. As such, we provide a rich and varied training experience with a large and growing surgical volume. I became Chairman in 2008 after 23 years at the University of Pennsylvania. Since then, Cooper has seen the addition of its new Cooper Medical School of Rowan University, with our first class scheduled to graduate in 2016. This has deepened the academic resources and enriched the training environment. The campus has seen a number of expansions during this time, with the addition of 12 operating rooms, including a room equipped with a CT scanner, a room with an O-arm and a hybrid angiographic suite as well as state of the art laparoscopy rooms. We are in the midst of another OR expansion, adding another 5 rooms, including two dedicated robotic rooms for our busy robotic surgery programs.

The affiliation of Cooper with the world renowned MD Anderson Cancer Center, to create the Cooper-MD Anderson Cancer Center has dramatically increased the volume of oncologic and reconstructive surgeries and provided many opportunities for participation in advanced treatment and research protocols.

Our Level 1 Trauma Center is the region’s largest and busiest, offering surgical trainees a rich experience in management of traumatic injuries and reconstruction. Our faculty has doubled in size since 2008. While they are clinically excellent and busy, they are also extremely academically productive and seek to collaborate with trainees to mentor them in research.

Cooper Surgery published over 80 articles and book chapters in 2015. Our faculty serves on the editorial boards of many journals and are recognized leaders nationally and internationally in their specialties. We have an active basic science research program, with a focus on regenerative medicine. The Department maintains both a large animal and small animal vivarium with two large animal operating rooms. We are passionate about education of surgical trainees and welcome your interest in our programs.

Jeffrey P. Carpenter, MD
Chief, Department of Surgery
The surgical critical care fellowship is based at Cooper University Hospital Medical Center teaching hospital of CMSRU. Cooper is a 554-licensed bed not for profit academic center, dedicated to the treatment of the critically ill and critically injured patient.

The duration of the surgical critical care fellowship is one year. The surgical critical care Fellow will be required to spend 9 months in the Trauma/Surgical ICU and 1 month rotating through Medical ICU. Two months will be spent on elective rotations which may include, but are not limited to, Anesthesia, Pediatric ICU, Cardiovascular ICU, EMS, or further rotations in the medical/surgical ICU, Trauma, or a surgical subspecialty.

The educational philosophy of this surgical critical care fellowship program is to provide a strong foundation of advanced Surgical Critical Care knowledge and skills upon which a scientifically sound systematic approach to the management of critically ill patients can be developed. This program provides trainees with an advanced level of specialized skills required to attain a mastery of all aspects of surgical critical care for patients of all age groups. Trainees will be afforded the opportunity to become specialists in the clinical management of critically ill patients, in teaching Surgical Critical Care, in critical care research, and in the administration of surgical critical care units.

The Surgical Critical Care Fellow will take in house call. While on trauma, the fellow will take approximately 7 calls/month. The fellow will only have operative responsibility oncall in order to assure compliance with the RRC guidelines. Except for post-call hours, the Fellow will be required to attend morning report, trauma ICU rounds and conferences Monday-Friday.

While on the medical-surgical ICU rotation, a shift system is in place. The fellow will take call on Trauma with the Trauma/SCC team. Both trauma and medical/surgical ICU rotation working hours adhere to ACGME compliance with no greater than 80-hr/week duty hours.

A log of the hours, procedures and patients cared for will be kept by the fellow and submitted monthly to the program director.
Fellows are allowed 4 weeks of vacation per year. In addition, one week of educational leave may be approved. The Surgical Critical Care Fellowship goal is to train surgeons in the subspecialty of Surgical Critical Care. This fellowship will prepare the graduating fellows to function in either an academic center or in a community hospital environment. This will be accomplished by exposing the Surgical Critical Care Fellow to a multitude of clinical aspects of critical care, teaching, administration and research. The specific educational objectives of this fellowship program in Surgical Critical Care are to enable fellows to investigate and evaluate, teach, and apply clinically the fundamental principles of critical care.

Upon completion of the Surgical Critical Care Fellowship, every physician will have developed:

- The ability to perform and teach critical care skills
- A strong foundation of knowledge related to surgical critical care
- The ability to demonstrate advanced decision making capability
- The ability to become the leader of the multidisciplinary critical care team (i.e., administer the critical care unit)
- The ability to disseminate the appropriate information to patients and to their families.
- The ability to analyze, evaluate and perform critical care research

Clinically the Fellow will be able to:

- Identify the indications for critical care admission and discharge
- Perform and provide appropriate resuscitation, utilizing advanced techniques to any patient sustaining a life threatening event
- Identify indications for mechanical ventilation, manage and wean patients from mechanical ventilation utilizing various techniques and ventilator modes
- Perform, instruct the theory and techniques of CPR
- Treat all forms of shock utilizing conventional and state of the art techniques
- Identify, treat and prevent multiple organ system failure
- Identify, treat and prevent all life threatening electrolyte acid-base disturbances
Clinically the Fellow will be able to:

- Identify, treat and prevent malnutrition utilizing advanced nutritional supplement methodologies
- Perform and provide appropriate conscious sedation
- Perform, instruct the theory and techniques for appropriate pain management and advanced sedation strategies
- Perform, recognize the indications, contraindications and theories for invasive and noninvasive hemodynamic monitoring
- Titrate inotropic and vasopressor drips based on hemodynamic monitoring
- Initiate appropriate consultations with other specialists and construct a clinical plan for complex critical care problems
- Utilize medications safely and determine cost effectiveness of various therapeutic interventions
- Educate the health professional team, as well as, patients and patient families regarding critical care ethical issues
- Educate and communicate to patients and their families all treatment options, outcomes and patient prognosis
- Support emotionally, mentally, patients and their families through the trauma of critical illness
- Recognize, manage, and instruct the theories of acute and chronic renal failure
- Recognize, manage, and instruct the theories of coagulation disorders (acquired and congenital)
- Recognize, manage, and instruct the theories of acute and chronic neurologic disease and injury
- Recognize, manage, and instruct the theories of acute and chronic anemia
- Recognize, manage, and instruct the theories of GI disturbances such as GI hemorrhage, pancreatitis, diverticulitis and cholecystitis.
- Recognize, treat and monitor hypertension
- Recognize, treat and monitor the theories on endocrine dysfunction related to DM, DI, adrenal and thyroid dysfunction
- Recognize, treat and monitor the theories on infectious disease, especially as it relates to critical illness
- Recognize, treat and monitor abdominal compartment syndrome
Clinically the Fellow will be able to:

- Triage critically ill patients appropriately
- Participate in quality assurance processes such as mortality and morbidity conference, performance improvement conference
- Develop patient safety monitoring and error restriction progress.

The achievement of these objectives is documented in several ways.

Each resident is required to keep a log of the critically ill patients that he/she has managed. Using this document, residents maintain a record of their clinical activities during the training period, including their roles in the management of each patient, and a listing of major procedures, such as insertion of hemodynamic monitoring devices, endotracheal intubation, and tube thoracostomy, among others.

Acquisition of the critical care cognitive skills will be assessed by the Fellow’s active participation in teaching rounds, didactic lectures, journal clubs and required formal presentations. The achievement of the educational goals of this Surgical Critical Care Fellowship will be documented also by the results of the Multidisciplinary Critical Knowledge Assessment Program (MCCKAP) which the Surgical Critical Care Fellow is required to take during their training year. The detailed report received clearly identifies objectively his/her strengths and weaknesses. This information is useful in identifying areas of each Fellow’s surgical critical care curriculum, which might benefit from directed reading and specifically concentrated training.
Conference Schedule

The educational experiences included in the Surgical Critical Care Fellowship Program consist of formal and informal components. The formal components are primarily regularly scheduled conferences and daily teaching rounds. Less formal learning goes on constantly through the interactions between Fellows and faculty.

The Surgical Critical Care Conference Series is the backbone of the formal educational program. This conference will be divided between formal lecture presentation topics taken from the Core Curriculum and Journal Club topics of Surgical Critical Care interest. Pertinent clinical guidelines will also be reviewed during some of the Journal Club dates. The Critical Care Faculty will be the moderators for Journal Club sessions. Each Surgical Critical Care Fellow will also be required to present three to four of these didactic lectures. Topics will be assigned to them by the Program Director.

Morbidity and Mortality Meeting

The Morbidity and Mortality Meeting is held monthly to review cases with unexpected outcomes (death, complications, etc.). The Fellow responsible for the patient at the time of the patient’s death must submit an M&M report using standard form kept in ICU in the critical care section office within 24 hours. For cases selected for review at M&M, that Fellow will make a formal presentation.

Informal Lectures

Teaching junior house staff, medical students, and nonphysician personnel is a part of the Fellows’ responsibility. Such teaching is both formal and informal in nature.

Lectures for the critical care house staff are held following rounds three times a week. These lectures are given by the Fellows and attending on a variety of basic ICU topics, and are held monthly for each group of students and house officers rotating through the ICU. Fellows should also be available regularly to serve as a resource for more junior house staff and to supervise them in the performance of procedures. Fellows are also expected to actively participate in the educational component of daily rounds.

While on Trauma ICU rotation, the Surgical Critical Care Fellow will be responsible to facilitate medical student/resident conference upon conclusion of TICU rounds. This informal conference should be held twice weekly at the Fellow’s discretion. The topics will be repeated each month for incoming new students and residents. This conference should be interactive, lasting about 15-30 minutes. Topics to be discussed each month include ventilator management, shock, traumatic brain injury management, respiratory failure, acute renal failure, ABG analysis, electrolyte imbalances, and working in the ICU.

Surgical Grand Rounds/M&M occurs Tuesday mornings from 7:00-8:00 a.m. The fellow may be asked to present operative cases in which they have taken a lead role.
How to Apply

Effective September, 2004, the Surgical Critical Care Fellowship Program will continue to accept universal applications and to participate in the NRMP match. We require receipt of the following information in order for your application to be considered:

1. Fellowship application—available at the following website link:
   http://www.cooperhealth.edu/sites/cooper/files/site/pdfforms/GME/Fellowships/2014ApplicationFormFinal.pdf

2. Curriculum vitae

3. Three original letters of recommendation, one of which must be from your current
   or most recent training director

4. A statement describing your training goals and future career plans

5. A copy of your ECFMG certificate if you are a foreign medical graduate

6. A copy of your USMLE scores for Steps 1 and 2, as well as Step 3, if available

The Program Director and two additional faculty members will review applicant files. Invitation for interview will be based upon their recommendations.

SCC and ACS Fellowship Application Service (SAFAS) Now Open

The Surgical critical care and Acute care surgery Fellowship Application Service (SAFAS), sponsored by the Surgical Critical Care Program Directors Society (SCCPDS), is currently accepting applications for Appointment Year 2017. Using SAFAS, applicants may complete one standardized application form, upload supporting documents, request letters of recommendation, and submit to multiple SCC and ACS Fellowship Programs online. Applicants must still use the National Resident Matching Program (NRMP), with Rank Order List (ROL) deadline September 30, 2016.

For more information on the application service, please visit the SAFAS Website www.safas-sccpds.fluidreview.com or contact the SAFAS Administrator at webmaster@sccpds.org.

Program Eligibility

All PGY-5 surgical residents who will complete their general surgical residency by June 30th are eligible. Those surgical residents that have completed three years of surgical residency by June 30th, who are in a categorical surgical residency program expected to complete the program, are also eligible to apply.
The Cooper Campus and Surrounding Area

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

Cooper University Hospital is the center of a growing health science campus that includes the main hospital, Cooper Medical School of Rowan University, MD Anderson Cancer Center at Cooper, the internationally acclaimed Coriell Institute for Research, 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 three neighborhood parks and playground, and outreach to programs into local schools.

The Hospital’s 312,000-square-foot, 10-story Roberts Pavilion houses state-of-the-art patient care facilities, including 120 private patient rooms, a 30-bed medical/surgical intensive care unit, 12 technologically advanced operating room suites with hybrid imaging capabilities, an advanced laboratory automation facility and a 14,000-square-foot Emergency Department. The Emergency Department features 25 beds, dedicated isolation suites and autonomous CT scanning technology. Two new floors in the Roberts Pavilion, each with 30 private patient rooms, opened in August 2014. The two floors are designed to serve specific patient populations with Pavilion 8 serving a growing advanced-care surgery patient population and Pavilion 9 serving the Cooper Heart Institute for hospitalized heart patients. The Pavilion features an expansive lobby and concourse, a restaurant and coffee shop, health resource center, business center, gift shop and chapel.

The Pavilion also houses the 25,000-square-foot Dr. Edward D. Viner Intensive Care Unit. A design showcase for patient and family-centered care, the unit features 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.

In 2013 Cooper celebrated the opening of MD Anderson Cancer Center at Cooper, the $100 million, four-story, 103,050-square-foot center located on the Cooper Health Sciences Campus in Camden, dedicated to cancer prevention, detection, treatment and research. MD Anderson Cancer Center at Cooper offers South Jersey’s only dedicated inpatient, 30-bed cancer unit adjacent to the new cancer center at Cooper University Hospital. The center includes bright, spacious chemotherapy treatment areas, patient exam rooms, conference centers and advanced diagnostic and treatment technologies. The designers incorporated 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 Medical Education Building is located on the Cooper Health Sciences Campus on South Broadway, between Benson and Washington Streets in Camden. The new $139 million 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. In 2012, CMSRU welcomed the class of 2016 with 50 students.

The Cooper campus is located in the heart of the Camden's business district. The academic medical center campus is easily accessible by car or public transportation—the commuter high-speed line and bus terminal are located a half-block from the campus. Cooper is a short walk or drive from the exciting Camden waterfront where the New Jersey State Aquarium, the River Sharks stadium, the USS New Jersey and Susquehanna Bank Center are located.

Cooper is conveniently close to Philadelphia. Just a mile-long drive over the Benjamin Franklin Bridge or a ferry boat ride 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 those other popular beach towns such as Cape May and Ocean City are a one-hour drive from Cooper.
Cooper Campus Map

WELCOME TO THE
Cooper Health Sciences Campus!

The most up-to-date directions to Cooper University Hospital are available at:
CooperHealth.org/Directions