**Surgery Clerkship (SURG CL)**

SU 300, 8 weeks

The clerkship in Surgery includes eight weeks of General Surgery and Subspecialties coordinated with the OB/GYN clerkship and two weeks of Flexible Clinical Experiences.The majority of students are assigned to the University and Memorial campuses with complementary rotations at our community educational partner hospitals; at St. Vincent’s Hospital, Berkshire Medical Center, and Cape Cod Hospital. The clerkship occurs over a not necessarily continuous period of 8 weeks as it is offered in a thematic section shared with Obstetrics and Gynecology as well FCE and Interstitial Curricula.

General surgery rotations include minimally invasive surgery, colorectal surgery, acute care surgery, Haidak surgery, and surgical oncology. Elective rotations include anesthesiology, cardiac surgery, otolaryngology and head and neck surgery, neurosurgery, orthopedic surgery, pediatric surgery, plastic and reconstructive surgery, thoracic surgery, transplantation surgery, trauma surgery, urology, and vascular surgery.

All students participate in a variety of activities including skills and educational sessions, outpatient clinic duties, conferences, journal clubs, flexible clinical experiences, humanism program and mentor groups. They are also introduced to rotating in the operating room, on the wards, in the clinics and in the emergency department.

After SU-300, the MS3 will be able to:

* Identify surgical disease in a variety of settings including the outpatient clinic, the emergency ward, the inpatient ward, the intensive care unit, and the operating room through systematic and detailed but problem focused compilation of a history, systematic and detailed but problem focused physical examination, formulation of a plan of laboratory and radiological workup, formulating a differential diagnosis, and outlining a treatment plan
* Master the relevant basic science principles as applied to clinical surgery including management of fluid and electrolyte abnormalities, acid and base disorders, shock and the principles of transfusion, wound management and infection control, nutritional management including enteral and parenteral nutrition, preoperative patient preparation, postoperative management including the prevention and detection of complications, and surgical drains and their principles
* Evaluate the most common conditions seen in general surgery such as Abdominal Masses, Abdominal Pain, Abdominal Wall Defects and Groin Masses, Breast Pain, Lumps, Nipple Discharge, and Mammographic Abnormalities, GI Hemorrhage (Upper and Lower), GI Symptoms (Diarrhea, Vomiting, Constipation), Jaundice, Neck Masses (Thyroid, Parathyroid and Lymph Nodes), Perianal Problems, Scrotal Pain and Swelling, and Skin and Soft tissue Lesions
* Master the specific areas as outlined in Appendix I and demonstrate knowledge of pathogenesis, key physical exam findings, differential diagnosis, and basic management of these areas
* Master basic surgical procedures and relevant anatomical relationships for each procedure including Phlebotomy, IV Placement, Placement and Removal of Skin Staples / Sutures or Tissue Adhesives, Placement and Care of Foley Catheter, Drain Care on the floor, Placement and Removal of Nasogastric Tubes, and Dressing Changes
* Review basic skills and techniques of laparoscopic surgery including the basic principles of equipment use and troubleshooting, patient preparation, special physiologic and anesthesia considerations, indications and contraindications, use of the thirty degree camera, and proprioception in the laparoscopic environment
* Review anatomy within a surgical context by participating in a number of didactic and laboratory sessions using cadaver specimens to focus on the thorax, abdomen, pelvis, head and neck, and extremities
* Acquire a knowledge of the basic principles of pediatric surgery including pre- and post- operative fluid requirements, common causes of abdominal pain in children, the unique patterns of injury in pediatric trauma patients, identification of the most common causes and management of neonatal intestinal obstruction, GI Bleeding, and common solid tumors in children
* Recall the basic principles of transplantation surgery including the basic concepts of abdominal transplantation, the post-operative management of transplant surgical patients and concepts including immunosuppression, the post-operative care of the transplant patient, and transplant infections
* Identify the basic principles of trauma surgery using the Trauma Evaluation and Management Program of the American College of Surgeons including rapid, accurate, and physiologic assessment of the patient’s condition, resuscitation, stabilization, and monitoring of the patient, and preparation for inter-hospital transfer by describing the principles of initial assessment and management, identifying the correct sequence of priorities in the multiply injured patient, describing the guidelines and techniques used in initial resuscitation and definitive care phases of treatment, identifying how medical history and injury mechanism can contribute to diagnosis of injuries, and identifying the concepts related to teamwork in caring for the trauma patient
* Recall the basic principles of plastic surgery and relevant anatomy, pathogenesis, and management of facial lacerations, facial fractures, breast reconstruction, surgical management of lower extremity wounds, diagnosis and treatment of hand lacerations, fractures, infections, common hand problems, and skin cancers
* Summarize the basic principles of vascular surgery including pathogenesis and management of the common vascular disease entities, develop a recognition for the ill patient who urgently needs operative attention, become familiar with the expected clinical course for patients undergoing common vascular operations, and attain proficiency in the management of the vascular patient on the ward
* Apply the basic principles of human factors to surgery after spending one day with faculty of the University of Massachusetts Medical School Center for Clinical Communication and Performance Outcomes honing skills in oral presentations, surgical clinical decision making, empathy and caring including managing anxiety and delivering bad news, and understanding the role of the surgical clerk including management of time and working with the team
* Use the criteria for obtaining informed consent of a patient to consent to surgical procedures
* Demonstrate skills in the interpretation of radiologic images as applied to surgery including the common entities found in Appendix I

Student competency is assessed through clinical performance as evaluated by faculty and residents (40%), oral examination (20%), NBME written examination (20%), and the Objective Structured Clinical Examination – OSCE (20%).

**Clerkship Director**

James Carroll, MD