



## **University of Illinois, Metropolitan Group Hospitals Program in General Surgery**

**Rotation Title:** General Surgery, Breast, Cardiothoracic/Vascular, and Advanced Laparoscopic Surgery

**Level of Training:** PGY I, PGY II, PGY III, PGY IV and PGY V

**Attending in Charge of Rotation:** Dr. Terrence Lerner

**Chairman of Surgery:** Dr. Rami Lutfi

**Faculty:** Dr. Rami Lutfi, Dr. Terrence Lerner, Dr. Andrew Perrott, Dr. Robert Gasior, Dr. Ken Richards, Dr. Claudia Perez, Dr. Francisco Quinteros, Dr. Colleen Hagen, Dr. Ivo Tzvetanov, Dr. Gabriel Ubatuba, Dr. Dominic Tolitano, Dr. Henry Sullivan

### **Rotation description:**

There are three distinct surgical services, the Cardiothoracic/Vascular Service and the General Surgery Service. The CVT service consists of a PGY III and PGY I while the General Surgery consists of at least a PGY V, IV, II, and two PGY I residents. The Breast service consists of a PGY II.

Mercy provides a unique exposure to advance disease pathology common to an underserved population. Given the lack of access to care patients often present to the Emergency Room in need of urgent or emergent surgery, which promotes a level of independence among intermediate residents for care of these critically ill patients.

PGY II serving on the breast service functions as a breast fellow to Dr. Perez and Dr.

Hagen. The breast rotation encompasses a multi-disciplinary approach to patient care. The resident will interact with Pathology, Radiology, Radiation Oncology, and participate in Breast Conference. The apprenticeship model allows active participation in the outpatient experience including breast ultrasound. In addition the outpatient experience facilitates continuity of care in respect to full pre-operative, intra-operative, and postoperative management.

The PGY III is assigned to the CT and Vascular service. This rotation again is modeled as an apprenticeship. The resident will function in a leadership role to manage outpatient, intraoperative, and post operative care of complex CT and Vascular patients. The outpatient experience enhances the resident's knowledge of advance cardiopulmonary testing and indications for surgery. A typical 2-month rotation would encompass major open and thoracoscopic pulmonary resections, multiple endovascular procedures, peripheral revascularization procedures, and major aortic surgery - both endovascular and open. Resident involvement in open-heart surgery is available to increase the depth of clinical experience in cardiovascular thoracic physiology. Further endovascular experience is also available in the cardiac catheterization lab, and resident participation is encouraged.

The PGY IV, in addition to covering general surgery, is assigned to the advanced laparoscopic service with Dr. Lutfi. While the primary focus of the rotation is Bariatric Surgery, the resident will be exposed to a multitude of advanced laparoscopic procedures including laparoscopic colon resections, laparoscopic hernia repairs, and laparoscopic fundoplication. Additionally the resident will be exposed to the newest minimally invasive techniques including robotic procedures, single incision, and 3-D laparoscopy.

All services participate in robust, onsite outpatient clinics. Office procedures including ultrasound, needle biopsies, FNA's, excisional biopsies, I & D's, and debridements are performed on a regular basis. In addition the outpatient experience promotes systems based practice and resource management.

The PGY IV and V residents are responsible for reviewing the next day's operative schedule and assigning a resident and medical student to each case. One of the goals of the system is to provide an operative experience commensurate with the training level of the resident to maximize the educational benefit for all residents.

Each afternoon the PGY IV and/or V resident review the entire inpatient service with the team and to call the attending-on-call with an update. This review will also serve as sign out rounds for the on-call team, as a continuity of care.

The chief resident's responsibilities are divided into academic, clinical and administrative. Academic responsibilities include preparation of the daily morning conference schedule. The chief resident will work with the program director to develop,

assign and moderate topics for discussion. The chief resident is to report all surgical morbidities and mortalities and, in conjunction with the chairman of the department, prepare and research the pertinent literature for their presentation. Some of the clinical responsibilities of the chief resident have been elucidated above; but, in addition, they are responsible for alternating home call with the senior resident on a weekly basis for the complex cases. Administratively, they are responsible for the call schedule, upholding the 80-hour workweek mandate for all residents under their direction and acting as liaison between the attending staff and residents.

The Surgical Intermediate Resident (either PGY II or PGY III) who takes, on average, every 3rd night call, will continue to cover both surgical services when on call.

#### ASSESSMENT:

Monitoring of the accomplishment of the stated objectives will be performed using the following methods:

1. 360 degree evaluation: End of rotation evaluation of resident performance to assess the Resident's demonstration of Core Competencies with respect to the stated objectives by faculty, other team resident members, students, nursing staff, and patients using multiple tools.
2. Case Logs: Auditing of operative cases pertinent to the specialty in the Surgical Operative Log.
3. Written Examination: Performance on the annual ABSITE examination, and monthly basic science exam.

## COMPETENCY BASED GOALS AND OBJECTIVES

### MEDICAL KNOWLEDGE

#### PGY I Residents:

- Complete assigned reading in SCORE Curriculum
- Have a thorough understanding of preoperative assessment and preparations for the surgery.
- Identify the materials presented in routine surgical text about the care of simple, elective surgical problems
- Become proficient in routine bedside and Emergency department procedures

- Participate in Basic Science Reading Program and Lectures as defined by the monthly conference schedule

### **PGY II/III Residents:**

- Have a thorough understanding of the standard surgical text quite and be familiar with some of the common surgical journals as it relates to diseases and the evaluation and treatment of patients
- Complete assigned readings in SCORE Curriculum
- Participate in Basic Science Reading Program and Lectures
- Develop proficiency in routing surgical procedures and have a working knowledge about more complex surgical conditions.
- Become proficiency in the critical care management of septic patients.

### **PGY II Residents:**

- Develop a thorough understanding of Breast disease including the preoperative, operative and post operative care of a wide variety of breast complaints.
- Participate in Basic Science reading a lectures
- Complete assigned Score reading

### **PGY IV Residents:**

- Develop a thorough understanding of weight loss surgery including the various surgical and nonsurgical options.
- Have an understanding of which surgical options are indicated for a particular group of patients
- Complete Basic Science reading and participate in lecture series
- Complete the appropriate SCORE modules
- Participate in the presentation of morbidity and mortality conferences.

### **PGY V Residents:**

- Demonstrate a thorough understanding of a wide variety of basic and complex surgical conditions including the complexities of the underserved populations.
- Participate in morbidity and mortality conferences.
- Lead the educational conferences
- Complete the appropriate SCORE modules

## **PATIENT CARE**

### **PGY I Residents:**

- Perform comprehensive history and physical examination of the abdomen, especially acute abdomen. Inform and explain to patient and family the results of tests done in the hospital including laboratory tests and x-rays

- Master the technique of basic suturing and tying. Master the use of computerized information services including ability to plot trends in lab values over time
- Master the sterile technique in the operating room and on the floor while maintaining universal precautions
- Demonstrate and apply pain management procedures and methods of postoperative pain control
- Demonstrate the ability to benchmark cases: lipoma excision and open inguinal hernia repair

### **PGY II/III Residents:**

- Conduct patient care for more complicated surgical problems including the care of some patients in the critical care unit.
- Develop proficiency with routine General Surgical cases
- Manage the General surgery service at night with the assistance of support physicians who are out of the hospital
- Provide appropriate care to complex patients in the intensive care unit.

### **PGY II Residents:**

- Conduct a thorough focused history of women with breast problems including recognition of unarticulated psychological concerns
- Perform an accurate breast examination
- Recognize the personal and social problems associated with breast cancer; learn methods of lending support to patients
- Assess and apply a logical plan of management for a variety of breast lesions
- Demonstrate operative technical ability in operating on breast lesions, including localized biopsies, lumpectomy, mastectomy, and sentinel lymph node biopsy.
- Provide care for general surgery patients at night with support that is outside the hospital
- Provide proper care the septic surgical patient in the intensive care unit.

### **PGY IV Residents:**

- Demonstrate mastery of basic laparoscopic suturing in Lap-Band procedures
- Scrub and recognize laparoscopic anatomy as it pertains to laparoscopic colectomy
- Demonstrate understanding of laparoscopic foregut surgery
- Assure the ability to perform intracorporeal needle holding, setting and suturing with extracorporeal knot tying
- Be able to demonstrate efficiency in setting up and trouble shooting the laparoscopic tower and demonstrate what different controls on the tower are used for

### **PGY V Residents:**

- Lead the care of all general surgical patients.
- Available as a senior back to help the more junior residents on night calls.
- Supervise the care of critically ill patients
- Participate in complex operative procedures including colectomies and gastrectomies
- Demonstrate leadership and patient management skills by being a resource for complicated critical care problems.
- Facilitate a weekly morbidity and mortality conference.

## **INTERPERSONAL AND COMMUNICATION SKILLS**

### **PGY I Residents:**

- Develop and apply effective communication strategies to effectively interact with patients and their families.
- Develop and apply effective communication with senior residents.
- Educate and counsel patients on the service
- Gather essential information from patients; and accurately document patient encounters
- Interact with nurses, residents, attending surgeons, and ancillary staff to achieve the health-related goals of the patient

### **PGY II/III Resident:**

- Develop and apply effective communication strategies to effectively interact with critically ill patients and their families
- Educate and counsel patients on the service
- Gather essential information from patients; and accurately document patient encounters
- Interact with nurses, residents, attending surgeons, and ancillary staff to achieve the health-related goals of the patient
- Communicate with senior residents and attending physicians in a concise yet thorough manner.

### **PGY II Residents:**

- Develop effective communication techniques when delivering patient's and their families difficult information
- Educate and counsel patients on the treatment options for breast cancer.
- Gather essential information from patients; and accurately document patient encounters
- Interact with nurses, residents, attending surgeons, and ancillary staff to achieve the health-related goals of the patient
- Perfect the communication with senior residents and attending physicians.

### **PGY IV and V Residents:**

- Develop and apply effective communication strategies to effectively interact with critically ill patients and their families

- Educate and counsel patients on the service
- Gather essential information from patients; and accurately document patient encounters
- Interact with nurses, residents, attending surgeons, and ancillary staff to achieve the health-related goals of the patient
- Provide good leadership to the junior residents on the service
- Refine communication techniques with attending physicians as well as junior residents and medical students.

## **PROFESSIONALISM**

### **PGY I, II, III, IV and V Residents:**

- Demonstrate appropriate dress and decorum while on duty; conversations in public places to be free of patient information. Respond to criticism and correction with calm and attentive demeanor.
- Treat hospital staff members with respect.
- Treat senior or junior residents respectfully.
- At all times treat the patient's with respect and dignity.
- Arrive on time for morning conferences and have presentations prepared on the date assigned.

## **PRACTICE BASED LEARNING AND IMPROVEMENT**

### **PGY I Residents:**

- Practice the daily care of routine surgical problems and attain an understanding of the natural history of these diseases
- Understand how treatment affects change in the natural history related to complicated diseases

### **PGY II/III Residents:**

- Demonstrate improved comprehension of the natural history of more complicated disease and the emergency problems seen within the acute care facility

### **PGY II Residents:**

- Demonstrate comprehension of the natural history of breast disease
- Develop the communications skills to discuss the complexities of Breast cancer with patients and their families.

### **PGY IV, V Residents:**

- Recognize the affects that treatment has on the natural history of complicated diseases being treated in critically ill patients
- Demonstrate full progression in operative technical ability
- Master patient care practices of the critically ill patient and complicated intra-operative procedures with practice
- Demonstrate intra-operative skills to junior members of the team

- Participate in morbidity and mortality conferences in order to analyze mistakes and improve the quality of care provided.

## **SYSTEMS BASED PRACTICE**

### **PGY I Residents:**

- Interrelate with medical students and more senior residents as a team member when caring for patients with routine surgical problems

### **PGY II, III, IV Residents:**

- Be adept at being a supportive mid-level team player providing appropriate communications between the younger members and the more senior members

### **PGY V Residents:**

- Be adept at communicating succinctly the assignments for the junior members of the team
- Demonstrate proficiency at providing care for the most complicated surgical problems and supervise the care of less complicated surgical diseases and techniques
- Be a strong leader of the surgical team and be able to communicate all surgical problems to the attending surgeons
- Coordinator of the morbidity and mortality conference.

## **READING MATERIALS:**

Educational materials, which will function as guides for resident education during this course, include but are not limited to:

1. The SCORE General Surgery Resident Curriculum Portal accessed at <https://portal.surgicalcore.org/home>
2. Schwartz's Principles of Surgery
3. Zollinger's Atlas of Surgical Operations
4. The Surgical Core Curriculum accessed via Access Surgery through the University of Illinois-Chicago website

## **OUTCOMES:**

Outcomes for the various goals and procedures in this curriculum will be assessed along the following standards:

1. Superior: the resident exhibits conceptual understanding beyond that which is described in this bulletin, and practice performance which is at a standard for a resident at a more advanced PGY year.
2. Above-Average: the resident has shown understanding and performance that is above what is expected for the rotation.
3. Competent: the resident exhibits conceptual understanding and practice based performance standards that are minimal, for the appropriate PGY year, for advancing towards general surgical practice.
4. In Need of Remediation: the resident has failed to grasp the basic concepts and practices necessary to advance past this rotation for the PGY year, and shows need of repeating or training augmentation.

## **MERCY CONFERENCE SCHEDULE:**

### **MORNING REPORT / WEEKLY SCHEDULE**

Morning report is held at 7:00 a.m., Monday-Friday. The students and residents who were on call present the cases admitted overnight. It is the responsibility of the more senior members of the call team to make sure the student does well.

The presentation and the case management are critiqued.

The differential diagnosis, the specific disease process and the treatment plan are then discussed by the attendings present. After the case presentations, the formal weekly schedule is as follows: Monday, morbidity and mortality conference; Tuesday, CVT conference; Wednesday, Basic Science; Thursday, literature review; Friday, director's conference.

### **DAILY CONFERENCES**

#### **MONDAY: MORBIDITY AND MORTALITY CONFERENCE**

The resident who operated presents all general surgical complications from the previous week. The attending of record's presence is mandatory.

After discussion of "what could have been done differently," the resident is responsible for presenting pertinent literature related to the complication.

#### TUESDAY: CARDIOVASCULAR/THORACIC CONFERENCE

This conference is the responsibility of the PGY III on the CVT service. Once a month CVT morbidities and mortalities are discussed. Once a month cardiovascular/thoracic attendings give a formal lecture. The other days are the responsibility of the PGY III resident. A specific topic or a case with x-rays can be discussed. A cardiovascular-thoracic attending is present to make comments.

#### WEDNESDAY: BASIC SCIENCE CONFERENCE

The executive program director has distributed a schedule of topics to be followed on a weekly basis. The chapter to be discussed is distributed well in advance of the conference. A junior resident presents the topic, and a senior resident provides questions to emphasize the most important points from that chapter. Once a month a test is given. Immediately following the test, the answers are reviewed with the site program director.

#### THURSDAY: LITERATURE REVIEW/INTERESTING CASES

This conference is utilized to review up to date literature and sentinel papers, which relate to designated monthly topics. The senior residents are responsible for leading discussion, and critically reviewing research methodologies. In addition, the senior residents may choose to discuss thought provoking cases.

#### FRIDAY: DIRECTOR'S CONFERENCE

The site program director or chief of surgery uses this conference to directly question the more senior residents on the indications, technique, pathologic results, complications and future treatment plans of patients on which they operated that week. Often, oral board type scenarios are presented to the residents.

#### OTHER MANDATORY CONFERENCES

**TUMOR BOARD:** The site program director runs the tumor conference, which is held every Wednesday at 8:00 a.m. All residents on the General Surgery service and any residents on the CVT service not in the O.R. attend.

#### MONTHLY MULTIDISCIPLINARY BREAST CONFERENCE

Open to all surgical services, but mandatory for the General Surgery service residents, this multidisciplinary group will review prospective breast cancer cases and recommend management.

#### ADDITIONAL OPERATIVE FREEDOM

May act as a "teaching attending" to assist another resident in appropriate cases as

determined by the attending of record. Freedom to scrub on any of the three surgical services as well as the following uncovered surgical services: The urology service for nephrectomies, radical cystectomies with ileal conduct and radical prostatectomies The head and neck service for parotids and radical necks. Plastic Surgery - For flaps and breast reconstruction

## CARDIOVASCULAR THORACIC SERVICE

On the vascular service the PGY-III acts as the chief resident much like the mini-breast fellowship, this is a CVT mini-fellowship. Conference Monday is mandatory for CVT residents and CVT M&M is at least one time monthly.

## FINAL WORD

This residency is a legacy of Drs. Robert Schmitz, William Allen and William Tito. Dr. Tito brought this outline to morning report in 1996. The message: Be committed to your chosen profession from the start (PG-I). Have attainable yearly goals that you build on. Only then can you enjoy and benefit from the opportunities and responsibilities your senior and chief years will bring.

## **GETTING THROUGH A SURGICAL RESIDENCY**

### PGY I

#### Reading:

Cope's early diagnosis of the acute abdomen (master it)  
O'Leary Basic Science text

#### Shortcuts:

Washington Manual; Manual of Surgical Therapeutics

#### Atlas

Zollinger or Nora, Mastery of Surgery; Nyhus' Hernia chapter 2

#### Skills:

Lumps & bumps  
Opening/closing Plastic  
skin closures Central  
venous access Art lines,  
cut downs Intubation

Knowledge of sutures and square knot tying  
IV's

Procedures:

Tube thoracostomy  
Hernia appendectomy  
tracheostomy  
simple breast biopsy  
open g/j tubes

Pitfalls:

Not reading Schwartz Part 1  
Not reviewing anatomy preoperatively  
Not mastering basic suturing skills  
Not assisting in O.R.  
Failing to be systematic in approach to acute abdomen  
Not bringing closure to clinical ward issues, such as IV orders, antibiotics, analgesics and TPN

Behavior: Work

hard Ask  
questions  
Remember mistakes  
Get help

PGY II

READING:

Reread Cope

Master Part 1 of Schwartz and go to Part II, chapters 13, 14, then 22-36 as a minimum.

Buy Marino or Civetta in critical care, start Cameron

Shortcuts:

Join ACS candidate group and marry into SESAP

Atlas:

Nyhus hernia chapter 2, Zollinger or Nora 'til binding breaks

Skills:

Competent @ PGY I stuff / learn & earn anastomotic technique

Procedures:

Expl lap, ulcer patch, +/- lap chole, all PGY I operations

Pitfalls:

Not understanding Cope or Schwartz through chapter 36

Behavior:

"Charger" who self-starts and contributes to dialogue, show growth by (remembering and having internal agenda)

PGY III & IV

Reading:

Rutherford / Ravitch / Goligher or Gordon / Maingot / Mattox. Every recommended specialty book on specialty service! Make some new friends! If you aren't done with Schwartz, quit now! Welcome DeVita and Shackelford into your busy life.

Shortcuts:

Hamilton Bailey's emergency surgery

Behavior:

Display independent cognitive/organization skills while you seek senior counsel /support

Make every effort to present at every conference: discuss!

Pitfalls:

Acting like PGY II; entering year with major PGY I-II deficiency

PGY V +

Review relevant sections Schwartz/Maingot/Shackelford/

Goligher /Townsend/ACS textbook of surgery, etc. PRN

Comport self as if you were a junior attending surgeon

Assume responsibility for every patient on your service (night or day) Act as a role model for resident staff

Delegate authority and hold juniors responsible to you

Make people want to work for you for you, teach them! Feel really bad when something is missed or goes wrong

(esp. your fault)

Don't hide deficiencies, mistakes; present cases every conference possible

Read ACS journal; master every SESAP you can find

Save Cameron for certifying exam (after you pass qualifying exam!) Use

Norton/Steele/Eiseman as initial and final prep for oral boards

Ask good questions, debate with literature, espouse concepts over constructs, and find out what you do not know.