

# SURGICAL CLERKSHIP



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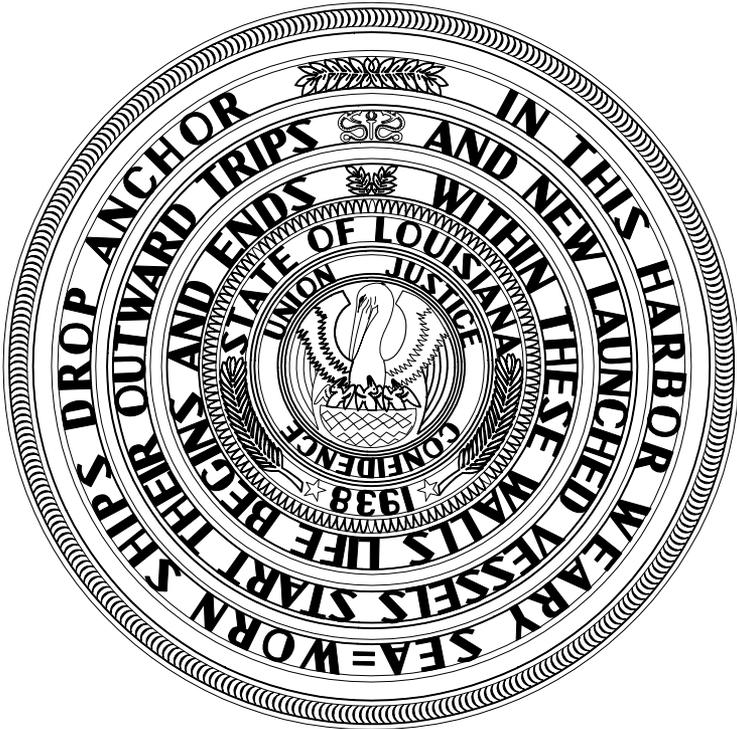
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“In this harbor weary, sea-worn ships drop anchor  
And new-launched vessels start their outward trips

Within these walls, life begins

and ends”

*Words on the great seal at the entrance to Charity Hospital, New Orleans*



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# Overview

## Goals

The educational goals of the surgery clerkship are to provide the third year medical student with an exposure to common surgical problems, develop basic clinical decision-making skills in this patient population applicable to future practice, provide technical skills appropriate for a third year student, and provide students an experience that allows them to evaluate surgery as a future career choice.

## Learning Objectives

1. Upon completion of the surgery clerkship all students are expected to have seen patients undergoing:
  - a. Evaluation of abdominal pain
  - b. Gastrointestinal surgery
  - c. Cancer surgery
  - d. Hernia repair
  - e. Resuscitation from shock
  
2. Upon completion of the surgery clerkship all medical students should be able to:
  - a. Recognize common surgical problems and construct appropriate diagnostic management and referral algorithms for each condition.
  - b. Recognize the most common surgical emergencies that require urgent surgical consultation.
  - c. Apply the principles of resuscitation to a patient in shock.
  - d. Demonstrate professional attitudes and values towards colleagues and patients.

- e. Perform as an effective member of a surgical team at a third year student level.
- f. Elicit and present a history and physical in a format appropriate for surgical patients.

## Curriculum

The surgical curriculum will be taught by a combination of didactic and clinical teaching. However, the greatest opportunities for learning surgery will take place in the operating room, the clinic and at the bedside. We would strongly encourage you to consider these clinical activities a priority. Important learning opportunities include morning rounds, Mortality and Morbidity Conference and Surgery Grand Rounds. There are also many rotation specific conferences and you should obtain a schedule of these from the chief at the beginning of each rotation. The curriculum details are summarized by clinical rotation on the following pages.

### Online Modules: Ethics and Nutrition:

These were created so that you could learn on your own time and at your own pace. They should be taken seriously, even though there is no grade associated with them. Faculty and residents expect you to be familiar with these concepts as you care for your patients

- The **Nutrition Module** is very thorough (long). Take your time with it, take notes. Although much of the detail will not be required for you to know at this time, it is an excellent module designed by Stanford and is a valuable resource.
- Make sure you take the quizzes after each module
- The **Ethics Module** is undergoing an overhaul. The content available on the LSU webpage, however, is still very relevant and important.
- [http://www.medschool.lsuhscc.edu/medical\\_education/undergraduate/JrSrResources.asp](http://www.medschool.lsuhscc.edu/medical_education/undergraduate/JrSrResources.asp)

## Suture Skills Lab

A portion of the final grade (10%) will be calculated from successful completion of the Suture Skills Lab.

- On the day of orientation, students will be given a pre-test evaluating their suturing skills.
- After the pre-test, students will be given instructions and watch demonstrations on how to suture.
- Students will be given a numbered Suture Skills kit that includes:
  - A knot tying board
  - A suturing kit
  - Practice log and Clinical Encounter log
- Student **MUST** return the Suture Skills kit (knot tying board and suturing kit) to Dr. Vladimir Kiselov. **If the kit is not returned, a grade of an Incomplete will be given in the course until the kit is returned.**
- Students may request their own free knot tying board from Ethicon by visiting <https://www.ethiconliterature.net/ethicon/jsp/mfcontactus.jsp>
- Throughout the 12 week Clerkship, students are required to view demonstration videos on the Clerkship website, practice to proficiency and maintain a practice log.
- The practice log will consist of how often practice occurred, how long the knot tying took and if there were errors during practice.
- Students will also be required to document clinical encounters in which they completed a suture.
- These logs (practice log and clinical encounter log) are due the last Thursday of the rotation to Medical Student Coordinator, Alisha Richardson. Students will be required to take a posttest.
- Post tests will be scheduled with Dr. Vladimir Kiselov ([vkisel@lsuhsc.edu](mailto:vkisel@lsuhsc.edu)), by the Medical Student Coordinator, as well as training. Training is not required, however,

highly recommended. There will be no post testing the last week of the Clerkship.

- If you are doing your suture skills in Baton Rouge or Lafayette, please forward a copy of your certificate/test to Surgery Clerkship Coordinator so that you will receive credit for taking the suture test.

The types of knots included in the Suture Skills Lab are:

1. 2 handed knot – surgeon
2. 2 handed knot –slip
3. 1 handed knot – slip
4. Simple suture w/ instrument tie
5. Vertical mattress w/ instrument tie
6. Horizontal mattress w/ instrument tie

The Suture Skills Lab grade will be calculated according to completion of pretest, documentation of practicing to proficiency and completion of posttest.

## Assessment

Students will be evaluated by faculty and residents with whom they have had sufficient contact to allow a valid assessment. Final grades will be calculated as follows:

	<b>Percentage towards final grade</b>
Shelf Exam	35%
General Surgery Evaluations/Soap Note	35%
Subspecialty Evaluation	20%
Suture Skills Lab	10%
<b>Total</b>	<b>100%</b>

Student performance in the clerkship is directly related to the level of participation and enthusiasm shown for clinical responsibilities. Do not be afraid to ask questions, or request guidance in identifying useful resources. In addition please ask the chief resident to provide you with feedback at least once during each rotation.

### **Soap Note**

Students will now be required to have an attending review and give feedback on atleast one Soap Note. A Progress Note is given to each student during orientation and they are to have the attending sign the Progress Note and return it to the Surgery Clerkship Coordinator. You may email, fax or hand deliver it. The soap note will be included in your General Surgery portion of your grade.

### **Evaluations**

Subspecialty rotations and the General Surgery rotation, the student will select an evaluator. Some rotations, however, may have a preselect person. Please request the evaluation, and your are also welcome to request any other faculty member you would like as well.

#### Notes about evaluations:

- Please select the evaluation questionnaire carefully (general surgery or subspecialty evaluation form)
- You must have one evaluation from an attending on the rotation. You may also include more attendings and residents, but one attending is mandatory.
- You must request your evaluation before the last day of the clerkship. ***If you wait until after the last day, you will not be able to access the clerkship in New Innovations.***
- Please do not send an evaluation twice; The Clerkship Directors or Coordinator will remind evaluators to

complete evaluations.

- ***Remember you have 2 weeks after your evaluation has been completed to speak to your resident or attending about any evaluation concerns. After the 2 week period, evaluations cannot be re-opened and NO grade changes will be made.***
- To log into New Innovations, visit this site – **[new-innov.lsuohsc.edu](http://new-innov.lsuohsc.edu)**. If you access it through our LSU specific New Innovations site, you will be able to use your LSUHSC log in and it will update every time you update your password. Once your evaluations are completed by the faculty member, you will have access to see them. Also, you will have to log on to “sign” your evals electronically for every block.

## **Feedback – Clerkship, Attendings, Residents**

We wish to make the surgery clerkship a worthwhile experience for you and to improve our teaching; therefore we will ask you to complete an evaluation after each rotation

Students will also have the opportunity to evaluate their residents and staff and the Surgery Clerkship on New Innovations. Evaluation matches for students to evaluate faculty, residents and the Clerkship will be created towards the end of the rotation.

Please feel free to provide us with any feedback or suggestions for improvement at any time. More importantly please contact us immediately if you experience problems with your rotation.

# Clerkship Evaluation Guidelines- Surgery

Descriptions of basic expectations for third year students are listed for each item in the domains of **Medical Knowledge, Patient Care, Interpersonal Relationships and Communication, and Practice Based Learning and Improvement**. Descriptions of behaviors that do not meet or exceed basic expectations are also listed for these domains. The decision whether a student sometimes or consistently exceeds expectations should be based on longitudinal observation of behaviors. A student need not meet all criteria listed under “exceeds” expectations in order to be rated in that category for a particular skill.

## **Medical Knowledge – demonstrates understanding of diseases**

- A student who does not meet basic expectations:
  - Does not demonstrate factual knowledge regarding common or simple disease processes.
  - Is unable to recall factual knowledge regarding diseases pertinent to his/her own patients.
- A student who meets basic expectations:
  - Demonstrates factual knowledge regarding common or simple disease processes.
- A student who exceeds basic expectations:
  - Is able to synthesize factual knowledge into clinical situations.

## **Medical Knowledge – participates in activities that advance knowledge and competence**

- A student who does not meet basic expectations:
  - Misses conferences and other required didactic activities.
  - Attends but does not engage in required didactic activities (e.g. is otherwise occupied).

- A student who meets basic expectations:
  - Attends and engages in required didactic activities (pays attention to discussions).
- A student who exceeds basic expectations:
  - Gives presentations on articles read or pertinent topics to his teammates.
  - Takes an active role in teaching his teammates.
  - Knows about diseases pertinent to other patients on the team (outside of own patient profile).

### **Patient Care – takes an appropriate and thorough history**

- A student who does not meet basic expectations:
  - Fails to ask basic components of the history, such as chief complaint, time course of symptoms, past medical history, medications, or allergies.
  - Is unable to organize basic data from the HPI in a coherent fashion.
- A student who meets basic expectations:
  - Collects the majority of the pertinent information.
  - Can suggest a reasonable work-up for the condition in question.
  - Displays a basic understanding of treatment options for most common surgical diseases.
- A student who exceeds basic expectations:
  - Is able to gather all of the pertinent information in an organized fashion.
  - Prioritizes patient problems and develops well- organized diagnostic and treatment algorithm for common surgical diseases.
  - Performs unsolicited literature searches for complex or uncommon issues facing his/her patients.

## **Patient Care – examines patients as thoroughly as is necessary, arranging for the patient’s comfort**

- A student who does not meet basic expectations:
  - Consistently fails to perform an appropriately thorough physical exam, or fails to address specific examination tasks pertinent to the patient’s primary complaint.
  - Fails to recognize physical examination findings related to the patient’s primary complaint.
- A student who meets basic expectations:
  - Performs an appropriate physical examination.
  - Performs most maneuvers correctly and can describe some pertinent positive or negative findings.
  - Is able to link abnormal physical exam findings to the patient’s current complaint and/or past surgical history
- A student who exceeds basic expectations:
  - Performs a thorough physical exam and identifies pertinent positive or negative findings.
  - Interprets pertinent positive or negative findings with respect to differential diagnosis (i.e. can discriminate between diseases processes based on findings).

## **Patient Care – develops appropriate plans for laboratory and radiologic testing**

- A student who does not meet basic expectations:
  - Is unable to explain the rationale for any tests that are ordered.
  - Suggests ordering a long list of tests that are impertinent, unnecessary, or potentially harmful.
- A student who meets basic expectations:
  - Can interpret basic laboratory and radiologic tests.

- Suggests tests that are pertinent to the patients' problems or issues.
- A student who exceeds basic expectations:
  - Suggests tests focused on the patient's primary complaint.
  - Understands how results of tests discriminate between different disease processes.
  - Is able to alter future plans based on test results.
  - Considers cost-effectiveness when ordering tests.

### **Patient Care – develops appropriate plans for management / treatment**

- A student who does not meet basic expectations:
  - Fails to develop a basic plan for treatment based on the patient's problems.
  - Does not understand the rationale for patients' treatment plans.
- A student who meets basic expectations:
  - Suggests plausible treatment plans for common surgical conditions or understands the rationale for treatment plans suggested.
  - Understands the preparation necessary to implement treatment plans when applicable.
- A student who exceeds basic expectations:
  - Consistently suggests the appropriate treatment plan for common surgical conditions.
  - Investigates and suggests treatment plans for uncommon or complex surgical conditions.
  - Shows initiative in preparation for applicable conditions (eg. Gathers the appropriate material for a bedside procedure without being told)
  - Displays thorough understanding of the treatment offered and expected outcomes, performs literature searches for updated

clinical guidelines.

## **Patient Care – performs procedures with appropriate technique**

- A student who does not meet basic expectations:
  - Does not know the patient's pertinent clinical information before being involved in a procedure.
  - Is unable to describe the rationale for a procedure.
  - Fails to identify basic anatomical features pertinent to the procedure.
- A student who meets basic expectations:
  - Is familiar with the patient's basic disease history and pertinent clinical information.
  - Is able to describe the rationale for a procedure.
  - Can identify basic anatomical features pertinent to the procedure.
  - Conducts themselves with professionalism in the operating room.
- A student who exceeds basic expectations:
  - Displays a thorough knowledge of the patient's disease process and specific clinical information.
  - Can perform basic suturing and knot-tying with coordination and dexterity.
  - Has independently read about and become familiar with the procedure being performed

## **Patient Care – clearly and accurately reports patient findings**

- A student who does not meet basic expectations:
  - Regularly omits important and pertinent patient information during presentations.
  - Gives a vague interpretation of clinical findings rather than specific information.
  - Does not follow the expected order of information (e.g. SOAP note, HPI before other history).
- A student who meets basic expectations:

- Includes most pertinent and accurate information in presentations.
- Reports results of laboratory tests when available.
- A student who exceeds basic expectations:
  - Includes only and all pertinent information in presentations.
  - Provides all necessary information in a concise fashion.
  - Is able to summarize a patient's clinical information so that all members of the team understand that patient's critical issues.
  - Displays in-depth knowledge of the patient and can answer questions adroitly

### **Interpersonal Relationships – demonstrates effective communication**

- A student who does not meet basic expectations:
  - Conducts him/herself unprofessionally with patients, families, nurses, or ancillary services.
  - Provides inaccurate information to patients, their families, or other team members.
- A student who meets basic expectations:
  - Is able and willing to talk with patients and families regarding the basic plan of care.
  - Communicates effectively and respectfully with nurses, consulting and ancillary services.
- A student who exceeds basic expectations:
  - Conducts themselves with honesty, integrity and is consistently reliable to patients, families, and team members
  - Is effective at helping to coordinate care by communicating and updating various team members and consulting services

### **Practice Based Learning – Shows evidence of supplemental reading**

- A student who does not meet basic expectations:
  - Displays a lack of understanding regarding

- their own patients' conditions.
- Is unfamiliar with basic terminology for common surgical conditions and procedures.
- A student who meets basic expectations:
  - Displays basic understanding of their own patients' conditions and uses appropriate terminology.
- A student who exceeds basic expectations:
  - Displays in-depth understanding of their patients' condition.
  - Uses up-to-date literature to support diagnostic and therapeutic decisions
  - Educates other team members on complex aspects of pathophysiology, management algorithms, or patient care

# Medical Student Duty Hours Policy

## The Louisiana State University Department of Surgery

The ACGME (Accreditation Council for Graduate Medical Education) mandated duty hour restrictions for all resident training programs effective July 2003. We ask that medical students respect the same rules. Problems with enforcing the rules must be brought immediately to the attention of the clerkship director or coordinator.

Duty hours are defined as all clinical and academic activities related to the rotation, i.e. patient care (both inpatient and outpatient), administrative duties related to patient care, the provision for transfer of patient care, time spent in-house during call activities, and scheduled academic activities such as conferences. Duty hours do not include reading and preparation time spent away from the duty site.

- a. Duty hours should be limited to 80 hours per week, averaged over a four-week period, inclusive of all in- house call activities.
- b. Students must be provided with 1 day in 7 free from all educational and clinical responsibilities, averaged over a 4-week period, inclusive of call. One day is defined as one continuous 24-hour period free from all clinical, educational, and administrative activities.
- c. Adequate time for rest and personal activities must be provided. This should consist of a 10 hour time period provided between all daily duty periods and after in-house call. Students may

occasionally choose not to do this to avail of a unique educational opportunity.

## **On-Call Activities**

The objective of on-call activities is to provide students with continuity of patient care experiences throughout a 24-hour period. In-house call is defined as those duty hours beyond the normal workday when students are required to be immediately available in the assigned institution.

- a. In-house call must occur no more frequently than every third night, averaged over a four-week period.
- b. Continuous on-site duty, including in-house call, must not exceed 24 consecutive hours.
- c. At-home call is defined as call taken from outside the assigned institution. The frequency of at-home call is not subject to the every third night limitation. However, at-home call must not be so frequent as to preclude rest and reasonable personal time. If a student is called into the hospital from home, the hours spent in-house are counted toward the 80-hour limit.

## **Monitoring of Duty hours**

Currently we do not have mandatory duty hours reporting for students. We ask that you keep a personal record and bring violations to the attention of the chief resident in the first instance. Please advise the clerkship coordinator of any difficulty encountered with this policy.

# General Surgery Rotation Information

## *General Schedule of Activities*

### Small Groups

- Held weekly, remind your staff to schedule on each week. Your active participation is essential and will be reflected in your Medical Student Performance Evaluation (MSPE).

### Simulation Labs – 2020 Gravier - 6<sup>th</sup> Floor

- An Outlook Calendar Event will be sent to each student for the time and date of the scheduled session. Everyone at all sites should be scheduled for a Session 1 & 2.
- Simulation labs are typically on Thursdays at 1 pm and 3 pm. Rural Track students will complete both sessions on a pre-scheduled date; contact Rural Track Coordinator for information.

### Departmental Conferences – Thursdays: 7am-10 am

- Location: 1542 Tulane Ave., 1<sup>st</sup> Floor Auditorium
- All students must attend except:
  - Orthopedics
  - ENT
  - Urology
  - Plastics
  - Neurosurgery

### Cohn's Conference – Thursdays: 10 am

- Case presentations from general surgery rotators – come with 3 prepared each week unless informed otherwise.
- Location: 1542 Tulane Ave, 7<sup>th</sup> Floor Lounge
- **Student's that are presenting should send in their presentation TOPIC by the Monday before conference to Dr. Mooney and Dr.**

### **Greiffenstein.**

- You may use radiographs, photos and diagrams to help explain your case.
- No more than 8-10 slides and 15 minute presentation
- Do not use more than 7 bullets per slide and please try not to be text-heavy. Slides are visual outline of what you are saying, not a replacement. Do not read from your notes. You should know every detail of the patient you are presenting.
- **These lectures are mandatory for all New Orleans Students. (Including subspecialty students!)**
- Lafayette and Baton Rouge students: Ask your residents about location/times of lectures and conferences.

**Absence policy** – located on the internet (email coordinator after clearing it with your attending on that rotation)

## ***General Surgery Procedures***

### **FLOOR**

#### **Following Patients:**

- Patient: Know your patients. This includes reading about and understanding their medical conditions and surgeries. Furthermore, the medical student should know the active problems with their patients (infections, post-op complications, etc.) along with pertinent labs, radiology, and procedures being done (and why).
- Patient Load: The medical student should generally carry around 3-6 patients. On the first day of the service the student should pick up 2-3 patients to

follow and present on rounds. After this, the student should follow and present the patients he/she has seen in surgery

- AM Rounding: Morning rounds take place between 5:00am and 6:30 am. Ask the intern or chief resident the night before to determine the exact time. You are responsible for presenting the patients you are following during rounds. The medical student should plan on arriving with ample time before morning rounds to see the patients, write down vitals and I/O's, and do a physical exam. The Surgery Progress Note should be filled out and used as the general format for presenting.
- PM Rounding: Afternoon rounds are variable in when they take place. Because the student is in clinic or the OR he/she generally does not present in the afternoon. However, you should attend if you are out of surgery or the clinic before afternoon rounds begin. The attendings often round in the afternoon as well and this is a good time to learn more about the management of the patients on the floor.

### **General Floor Duties:**

- Assist the Intern: When you are not in surgery or clinic ask if he/she needs any help with floor duties. Any help you offer can aid in the more efficient management of the patients on this busy service.
- Labs/Chart Notes: Following morning rounds and morning report, the medical student should put the morning labs for all the patients on their respective progress notes. Routine AM Labs are generally not available until after 0800 so it is imperative that you follow them up for your patient in the morning between other duties. Any abnormalities should be brought to the immediate attention of a resident
- Wounds & Dressings: All wounds need to be

inspected daily. Wounds to be changed multiple times a day must be done as directed. It is the student's responsibility to confirm that this was done and assist whenever applicable. See separate section on Wound Care (Appendix 2, pg. 22)

- Abnormal Findings: Any abnormal findings on labs, radiology, vital signs, wound changes, or the patient's appearance must be brought to the attention of the resident or intern immediately.
- Ancillary Duties: Ask the intern about helping with dressing changes, staple removal, NG tube placement, JP drain removal, etc.

## **Helpful Hints For Morning Rounds**

What to ask and record when interviewing patients on the floor:

- Is the patient having bowel movements/stoma output and how much? Is the patient passing gas?
- What was the recorded urine output?
- What diet is the patient on? And of that diet, what has the patient actually eaten/drank that day? Was there any nausea/vomiting?
  - Most patients on the service start on NPO following surgery, move to sips of clears (following passing of gas, stool, etc), move to clears, then to transitional diet, and finally to regular diet. All of these changes are made based on the patient's bowel function and how they are tolerating the current diet.
- Is the patient's pain adequately controlled and what type of pain management are they
- Has the patient been getting out of their hospital bed and ambulating the halls?
- Is the patient using their incentive spirometer?

- What is the volume?
- Is the patient's Urine output adequate?  
( $\geq 0.5$ ml/kg/hr)
- Does the patient have a Nasogastric Tube and how much output is it producing?
- Are there any drains and what is the output?  
Always check the type of fluid in these bulbs.
  - Most patients have serous or serosanguinous drainage from their drains
  - Bilious drainage would suggest a leak somewhere, so in a patient with a small bowel resection this would suggest a leak from their anastomosis.
  - Other types of drainage suggesting a potential problem include stool, frank blood, etc.
- Any other medical issues overnight? (Fever, Hypertension/Hypotension, Tachycardia, Hyperglycemia, worsening condition, etc)
- A very important aspect of the way the chiefs/attending often think is related to what is keeping the patient in the hospital. Another way to think about this is to ask yourself if the patient has improved enough clinically that their risk is low of going home and having a serious complication.
- To go home patients need to:
  - Hydrate themselves orally- they need to be drinking well and often should be tolerating some regular food (but drinking fluids is most important)
  - Have their pain controlled well with oral pills- therefore know if they are still dependent on the PCA or IV injections
  - Be mobile- Are they walking?

- Be clinically stable – normal vitals, off O2 (unless on home O2), no fevers
- What to observe and elicit during the physical exam:
  - Vascular Exam- Check pulses in any extremities with trauma or that have been revascularized. Any changes need to be brought to the attention of the resident ASAP
  - Abdominal exam-
    - **Shape:** Flat – Full – Distended
    - **Sensation:** Non-tender – Appropriately tender – Focally tender – Generalized tenderness – Acute abdomen
    - **Nature:** Soft – Firm – Tender – Rigid
    - **Percussion:** Dull vs. Tympanic
  - Bedside Dressing Changes/Wound Inspection
    - Grab gloves and be ready to help undress any wound during rounds...you should be the first one on the wound if the attending says they want to look at it
    - Have gauze, tape, flushes, etc. A way to make a great impression is to squirrel away these supplies and have them in your pocket in case they are needed. Residents will appreciate the fact that it makes rounds faster and it shows you have initiative and resourcefulness
  - Ostomy/Incision Exam-
    - Examine the bandages first- Look for whether they are dry, intact, and whether there is any drainage or not.
    - Examine the incision sites- Look for drainage from the incisions along with erythema and pus. Increased drainage in the days/weeks following surgery may suggest wound dehiscence. Increased erythema and

tenderness may suggest wound infection.

- **Examine the ostomy site-** You can tell whether the person is passing gas based on whether the bag is inflated or not. Furthermore, you can assess whether the person is producing stool. Lastly, check for the same physical findings you did with the incision site.

## **Operating Room**

- **Patient-** Obviously, know the patient. Look at OR schedule the day prior and go see the patient that evening or the morning of the procedure
- **Disease Process-** Look up and know/understand the disease or condition, the etiology, work-up, prognosis, etc
- **Anatomy-** Review pertinent anatomy (you're the last person in the room to have taken gross anatomy...you are the expert. You will be asked expert-level questions
- **Surgery-** Understand what comprises the surgery being performed, indications and alternatives

## **Ancillary Duties**

- **Patient Transport-** Always assist anesthesia with bringing the patient to the OR and back to PACU. This is another good time to meet the patient if you weren't able to the night before. You can also be the eyes and ears for the intern, alerting them when the patient is being moved, if any issues come up (incomplete consents, IV access issues, questions from anesthesia, etc.)
- **General-** You can also help with moving the patient from bed to OR table, grabbing warm blankets (ask nurse where to find these), cleaning after case, etc.
- **Post Op Note-** Pull the Post-Op note from the patients chart after the case has finished and fill it out. Ask the

anesthesiologist for information such as IVF's, Urine Output, Estimated Blood Loss, etc

- Laparoscopy Cases- Always go to the Laparoscopy cases because you will be controlling the camera which allows the attending and resident to work the case together.

### Etiquette

- Introductions- ALWAYS introduce yourself to the scrub nurse and circulator. Offer to grab your gloves and gown. Ask them if you can be of assistance in any way. These people can make or break your OR experience so stay on their good side.
- The Instrument Table & Mayo stand- are the scrub nurse's domain where they rule with absolute impunity. Touch them at your own peril (be prepared to lose a finger if you do so without asking permission)
- Communication- although tempting, withhold from asking the scrub or nurses for things even if you think you know it is needed. If you ask for an instrument the scrub might be looking for it when the surgeon asks for something else...let the surgeon do all the talking. You just listen.
- Never ask to perform a procedure- You don't ask for the scalpel, you earn it. Your resident or staff will determine if you are worthy, grasshopper

### Student Role

- Purpose- you are there to learn, but a student's need to learn does not supersede all other needs in the OR. Usually, it's an unwise decision to endlessly ask questions, or discuss blood supply to the colon when a stapler has misfired. Use judgment to ask questions at appropriate times.

## Clinic

### Etiquette

- Be the 1<sup>st</sup> to clinic. Avoid strolling in after a social breakfast in the cafeteria.
- Introduce yourself to the clinic nurses and offer your assistance. Make their job easier and they can make you look good
- Pay attention to the process of filling out paperwork and preparing patients for surgery. Take the initiative to get the process rolling if you see
- If clinic is extremely behind, use your judgment about questions, etc. (same idea as the OR).

### Mechanics of Clinic

- Chart on the top rack = patient to be seen.
- Chart on bottom rack = patient to be put in an exam room (by nurse)
- H&P vs. SOAP note: An initial visit usually requires an H&P as does a pre-op visit. Additionally, if a surgery is planned, bring a consent form (you can't consent the patient, but can make clinic flow smoother if you have the consent form 'handy'. Ask the resident or staff which form to use). A post-op check or general f/u requires a brief SOAP note. The SOAPS are for dictation purposes so write them as such: dense in information, short in length. If you're unsure whether a visit requires a SOAP or H&P, ask the resident.

## Student Role

- Be aggressive. This is not a “shadowing” opportunity; it’s a chance to hone your H&P skills, efficiency, and presentations. Help clinics run efficiently, and the chiefs, residents, and/or attending may have the time to teach.

## **Trauma Service**

**Black Team, Red Team = LSU Residents and Staff**

**White Team = Tulane Residents and Staff**

*Patients should be admitted to Chief resident on call's Team*

*Patients admitted on a Trauma Fellow call night are admitted to the pre-designated team on the schedule posted in the TICU lounge*

**Call Rooms** at ILH are near Inpatient Pharmacy

Student's Call Room is #18- **Code is 5-1-4**

### **GENERAL SCHEDULE**

(Subject to change)

1. Morning rounds- every day between 0600-0700
2. Morning Sign-Out - every morning in OR lounge (*students Do Not Attend...there's no room*), except Mondays (All students **DO ATTEND**) at 0700
3. Trauma Conference- third Monday of every month, 0630 in a basement classroom
4. Afternoon rounds- variable
5. Surgery in Main OR- Tuesday, Wednesday & Friday (varies weekly)
6. Add-On Cases- Most days emergency, in-patient, TICU cases will be added on. Check the schedule daily. When an interesting case is on, or it's your patient, ask if they need a hand
7. M&M + Grand Rounds- Thursdays 0700-1000
8. Cohn's Conference & Student Presentations- in the Surgery Dept (1542 Tulane Ave, 7<sup>th</sup> floor) from 10:00-12:30 pm, every Thursday

\*This is the broad overview of monthly routine for students on Trauma/General Surgery. For further details, see Appendix 1

# Subspecialty Rotation Information

## *Vascular Surgery*

### **Learning Objectives**

Upon completion of this rotation all medical students are expected to be able to:

1. Develop a comprehensive pattern of complete care of the vascular surgical patient.
2. Understand the pathophysiology of:
  - a. Peripheral artery disease
  - b. Aortic aneurismal disease
  - c. Carotid artery disease
  - d. Venous insufficiency
  - e. And understand the algorithm of vascular access for haemodialysis
3. Understand the work-up of each major vascular disease process (2.a.-e.)
4. Understand treatment options for patients with various stages of vascular disease.
5. Develop an understanding of the importance of the multidisciplinary approach for work-up and pre-operative clearance for carotid, peripheral arterial, and aortic artery operations
6. Discuss the identification and classification of arterial stenosis based on imaging.
7. Perform a focused history and examination in a patient with symptoms of peripheral artery disease
  - a. Classify claudication
  - b. Interpret non-invasive and arterial Doppler reports

8. Recognize conditions that warrant immediate admission for work-up and possible urgent surgical intervention

All students rotating on the vascular surgery service should be able to:

1. Incorporate a thorough vascular and pulse exam into the history and physical exam.
2. Be familiar with the risk factors for atherosclerotic vascular disease.
3. Describe the diagnostic evaluation, including noninvasive vascular studies and imaging options, for and the indications for intervention for carotid stenosis, abdominal aortic aneurysm, aortic dissection and peripheral arterial occlusive disease.
4. Describe basic principles of operative and endovascular intervention for remedy of vascular surgical problems including carotid stenosis, AAA, aortic dissection and peripheral arterial occlusive disease
5. Describe the basic pathophysiology and management of thoracic outlet syndrome and venous occlusive disease (including May-Thurner and Paget-Schrotter syndromes and deep venous thrombosis).

## **Responsibilities**

1. Participate in vascular surgery call and management of surgical and endovascular procedures.
2. Vascular Surgery Clinic:
3. Vascular Conference:

## **Trauma Intensive Care Unit (TICU)**

### **Learning Objectives**

Upon completion of this rotation all medical students should be able to:

1. Perform a focused history and examination in a critically- ill surgical patient
2. Develop a priorities list and plan of care for all critically-ill patients
3. Recognize significant changes in patient status
4. Achieve a knowledge base in basic science and clinical management appropriate to their level of training. This will include knowledge of:
  - a. Pathophysiology of injury and the immune response to infection
  - b. Diagnostic workup of a patient with signs of shock
  - c. Initial evaluation and treatment of shock
5. Be able to develop appropriate diagnostic and treatment algorithms for common ICU emergencies
6. Present a system-based summary of TICU patients for whom they had the primary responsibility.
7. Discuss the pathophysiology and associated medical problems of respiratory insufficiency.
8. Understand indications for intubation and mechanical ventilation
9. Develop an understanding of the importance of the multidisciplinary approach to patients in the TICU

### **Responsibilities**

Medical students should participate in all patient care activities. These include:

1. Providing all appropriate inpatient care for patients admitted to the service

2. Performing appropriate preoperative preparation including submitting OR room request form (“booking sheet”).
3. Being involved in the operative care of patients on the service when their on-call responsibilities do not preclude such participation. You should be completely prepared for every OR case prior to scrubbing in. This means that you have reviewed the patient's history and know the results of all laboratory, radiology and pathology studies. In addition you will be expected to read about the patient's disease process, the treatment options, and the details of the proposed surgery, including all relevant anatomy and the surgical techniques involved.
4. Seeing the same patient daily, examining every patient including wounds, reviewing appropriate laboratory and study data results.
5. Following up results of imaging, cultures, specialized labs, studies, and procedures and reporting these to the team in a timely fashion.

## ***Pediatric Service***

**Rotation Director: Evans Valerie, M.D.**

The Pediatric Surgery Service is a division of the Department of General Surgery. There are three full-time attending Pediatric Surgeons; Charles Hill MD (Professor and Chief of Division), Evans Valerie MD (Associate Professor and Rotation Director), and David Yu MD (Assistant Professor). Residents usually consists of a Categorical General Surgery Resident in his/her 2<sup>nd</sup> year and 1 intern. The 2<sup>nd</sup> year Resident is the Chief Resident of the service and rotates for a one to three- month period.

### **Learning Objectives**

Upon completion of this rotation the medical student is expected to be able to:

1. Describe the embryology, normal development, common congenital anomalies, and presentations of pediatric surgical conditions.
2. Describe the normal physiology of children of different ages.
3. Evaluate pediatric patients and begin treatment of those with surgical conditions, trauma victims, and critically ill patients. Also be able to recognize when a presenting patient does not have surgical condition, and institute appropriate treatment plan or appropriate consultation.
4. Develop and refine surgical techniques so as to be able to perform all but complex "index cases" as primary surgeon with attending assistance. All residents performing a surgical procedure are expected to review the case ahead of time, read about the relevant physiology, pathophysiology, and technical conduct of the operation.

5. Interact effectively with members of the Pediatrics teams and sub specialists in the care of children.
6. Demonstrate professional behavior in carrying out all activities responsibly, adhering to ethical principles, and remaining sensitive and respectful of all patients and colleagues.

### **Responsibilities:**

The medical student is expected to participate in all educational and patient care activities while on this service. The pediatric team is responsible for the overall management of patient care on the service. This involves but is not limited to:

1. Twice daily ward rounds for patient evaluation and management. This involves supervision of the junior residents in these functions as well. The on-call attending participates in the afternoon rounds every day for teaching and supervision purposes.
2. Evaluation of each admission and consult.
3. Participation in and performance of operative cases according to his/her abilities and always with attending presence. Attend Pediatric Surgery outpatient clinics held by each attending when not occupied in the OR or with emergencies.
4. Evaluate pre and post-operative patients in conjunction with the attending.
5. Organization of weekly teaching conference.

The Chief Resident is the key conduit of information to the attending staff and should communicate with at least the call attending each morning regarding the entire service. It is desirable that s/he also contact the other attendings to discuss their patients. It is imperative that there should be ongoing communication with the appropriate attending(s) about any new patients, active management issues, or any significant changes in patient courses. In addition, appropriate sign-outs to other residents who will be covering the Pediatric Service in his/her absence is critical.

## ***Cardio-Thoracic Service***

### **Learning Objectives**

Upon completion of the cardio-thoracic surgery rotation all medical students should be able to:

1. Describe basic cardiovascular physiology including volume management and the management of congestive heart failure.
2. Discuss cardiac electrophysiology including the rudimentary aspects of pacemaker management, arrhythmia control, and anti-arrhythmic pharmacology.
3. Describe the basic management of ventilation and oxygenation in thoracic patients, including the management of supplemental oxygen, nasal CPAP, incentive spirometry, and respiratory therapy.
4. Describe the management steps during a cardiac arrest and near arrest.
5. Describe the basis of thoracic imaging, including CT scans of the chest and vasculature as well as the interpretation of chest x-rays.
6. Discuss the medical management of acute coronary ischemia and acute valvular heart disease.
7. Discuss the basics of the management of acute aortic emergencies.

After rotating in the Post Operative ICU medical students should be able to:

1. Describe the use of intra balloon pumps as well as other cardiac assist devices including ventricular assist devices, ECMO, and right ventricular assist devices.

2. Describe the management of cardiac arrest and near arrest with both closed techniques, pharmacological techniques, and open cardiac massage and resuscitation.
3. Describe the use of advanced measures to deal with problems of the pleural space including every form of thoracic drainage.
4. Describe the management of acute respiratory insufficiency including acute pulmonary disease, management of the airway, and bronchoscopy both for diagnosis and therapy
5. Discuss the treatment of pleural space problems including pneumothoraces, hemothoraces, empyema, and malignant pleural effusions.
6. Develop an understanding of the pathophysiology of benign esophageal diseases such as achalasia, paraesophageal hernias, and gastroesophageal reflux disease, and the diagnostic studies that are used to evaluate patients as well as the surgical therapies.
7. Discuss the co-morbid conditions in patients undergoing thoracic operations and how to appropriately stratify their operative risk.
8. Discuss the interpretation of pulmonary function studies, x-rays, etc.

### **Planned Clerkship Experience**

- A. The resident will organize the student to prepare for the operation the student will participate in the next day. The student will then read up about the operation the night before, and be prepared to answer questions.
- B. Students will report/present on rounds on every such patient post-operatively.

- C. Students will go to Clinic.
- D. The student will ask the faculty for Performance Evaluations as well as a resident if they wish. Each student **must have at least one faculty evaluation** but may solicit more than one faculty or additional evaluations from residents. Faculty evaluations will result in at least 60% of the final evaluation grade.
- E. The students will learn from the Cardiac Interns the protocols/techniques for pulling pacing wires, chest tubes, central lines, etc.

## **Responsibilities**

Medical students should participate in all clinical patient and educational activities, both inpatient and outpatient, while on this rotation.

# ***ENT Services***

## **Learning Objectives**

The otolaryngology rotation involves adult patients in the following settings:

1. Caring for patients admitted to the hospital with ENT issues, including acute, chronic and postoperative issues. Students are expected to see patients in the morning, write progress notes and perform formal presentations of the patients during rounds. They will also help with discharge planning. When appropriate, the students will be allowed to perform dressing changes, suture/drain removal and other minor procedures under supervision of the residents.
2. The students will participate in ENT clinical several days a week- Here they will learn and perform full ENT history and physical examination, including instruction on laryngoscopy and otoscopy. They will be exposed to a very wide variety of adult ENT pathology and its management.
3. Students will also participate in surgical procedures and given the opportunity to scrub in and assist on a variety of ENT cases. When appropriate, the students will be taught by the residents on proper suturing techniques and they will be allowed to practice under supervision.

By the end of their rotation, students will be expected to be proficient in performing a full ENT history and physical, be able to formulate a differential diagnosis and plan and be familiar with common ENT pathologies and their appropriate management.

# Core Topics for Attending Student Sessions

*Place emphasis on diagnosis/workup/management.  
Less on actual surgeries.*

## WEEK 1

### ➤ Abdominal 1

- **Liver** – Approach to patient with a liver mass.
  - Tumor Benign vs. malignant
  - Cirrhosis/ascities/portal HTN
  - Hepatitis
  - Abscess (bacterial/parasitic)
- **Biliary Tree** – Approach to patient with extra hepatic biliary obstruction.
  - Biliary colic/cholecystitis/cholangitis/biliary pancreatitis
  - Cholangiocarcinoma/Gallbladder adenocarcinoma
  - Choledochal cysts
- **Pancreas** – Approach to a patient with chronic pancreatitis, with and without mass.
  - Annular pancreas, pancreatic divisum
  - Acute/chronic pancreatitis
  - Pseudocysts
  - Operations for chronic
  - Neoplasms– malignant and benign
    - Adenocarcinoma, cystic neoplasm, neuroendocrine tumors
- **Spleen** – Approach to a patient with thrombocytopenia.

- ITP/TTP
- Abscess
- Neoplasms/cysts
  - lymphoma ,angiosarcoma, metastasis
  - Hemangiomas, lymphangiomas, parasitic cyst/ simple cyst

## WEEK 2

### ➤ Abdominal 2

- **GIT**
  - Approach to a patient with an ACUTE ABDOMEN
  - Approach to a patient with an hematemesis
    - PUD/Stress gastritis/Upper GI bleed
  - Approach to a patient with early satiety.
    - Neoplasms
      - Adenocarcinoma, gist, lymphoma
  - Approach to a patient with SBO.
    - Diagnosis and management
    - Crohn's dz
    - Short gut
    - Neoplasms
      - Adenocarcinoma, carcinoid, lymphoma, gist, hamartomas, metastatic
  - Approach to a patient with a large bowel obstruction
    - Large bowel obstruction
    - Diverticulitis

- Approach to a patient with bright red blood per rectum
  - Anorectum
    - Rectal bleeding
    - Fissures
    - Fistulas
    - Abscess
    - Hemorrhoids
  - Inflammatory bowel disease
  - Mesenteric ischemia
  - Ischemic colitis
  - Polyps/Polyposis syndromes
    - HNPCC, FAP
  - Neoplasm
- Approach to patient with appendicitis
  - Appendicitis – dx and management
- Approach to patient with abdominal wall hernia
  - Inguinal
  - Ventral/Incisional
  - Diaphragmatic

## WEEK 3

### ➤ Trauma care

- Initial approach to trauma patient (ABC's)
- Approach to a blunt trauma patient with decreased level of consciousness.
  - GCS (calculating, intubation indication)
  - SDH/EDH/ICH/SAH
  - Concept of secondary injury and management of ICP
- Approach to a blunt trauma patient with spine fracture and neurological deficit.
  - Evaluation of spine fractures

- SCI dx and management (considerations – DVT/respiratory compromise/decubs/neurogenic bowel/bladder)
  - Neurogenic shock
- Approach to patient with penetrating trauma to the neck.
  - Zones of the neck
- Approach to trauma patient with decreased breath sounds (PTx)
- Approach to blunt trauma patient with widened mediastinum
  - Blunt aortic injury (very basic, suspect w/ widened mediastinum, dx with cta)
  - Pericardial tamponade
- Approach to a blunt trauma patient with abdominal pain (both normotensive, then hypotensive). Now switch it to penetrating trauma.
  - How to evaluate the abdomen – exam/DPL/CT
  - Op vs. non-op management of solid organ injuries
  - Abdominal compartment syndrome?
- Approach to patient with a pelvic fracture (both stable and unstable hemodynamics)
  - Pelvic fx's and bleeding – Role of IR, pelvic binder
- Approach to patient with penetrating trauma to extremity. Now blunt trauma with decreased pulses.
  - Blood loss associated with long bone fractures

- Diagnosing vascular injuries and some common injury patterns associated w/ vascular injury
- Drowning
- Approach to a burned patient. First in outside fire, then trapped in car.
  - Rule of 9's
  - Parkland formula – importance of fluids
  - Inhalational injury – signs of and how to dx
  - Escarotomies / fasciotomies
  - Electrical injury
- Approach to patient who was found down in January and is hypothermic, now frostbite only.
  - Rewarming
  - Cardiac effects of hypothermia
- Approach to patient who was involved in a building collapse and crushed.
  - Rhabdomyolysis
- Approach to a patient with facial trauma
  - Recognize need to crich/intubate/etc.

## WEEK 4

### ➤ **Women & Children**

- **Pediatric Surgical Disease**
  - Approach to a child with PYLORIC HYPERTROPHY
  - Approach to a child with INGUINAL HERNIA
  - Approach to a child with RETROPERITONEAL MASS
  - Approach to a child with INTUSSUSCEPATIENTION
  - Approach to a child with ANAL ATRESIA

- Approach to a child with MALROTATION
  - Approach to a newborn with persistent jaundice
    - Biliary atresia
  - Approach to baby with feeding intolerance
    - TEF
  - Approach to baby who does not pass stool
    - Hirschsprung
    - Imperforate anus
    - Meconium ileus
  - Approach to a child with an abdominal mass
    - (wilms, nephroblastoma etc)
  - Approach to a premature newborn with blood per rectum.
    - NEC
  - Approach to a baby with abdominal wall defects
    - (gastroschisis, omphalocele)
  - Approach to a child with a mediastinal mass
- 
- **Breast**
    - Approach to a patient with a breast mass.
      - DCIS/LCIS
      - Carcinoma
      - Fibroadenoma
      - Fibrocystic disease
      - Gynecomastia
      - Cancer treatment

- Inflammatory breast cancer
- Approach to a patient with breast pain
  - Abscess
- Approach to a patient with nipple discharge
  - Bloody vs. non-bloody

## WEEK 5

### ➤ Thoracic surgery

- Approach to patient with long standing GERD
  - Barrett's, role of surgery in GERD
  - Para esophageal hernia
- Approach to patient with halitosis
  - Zenker's Diverticulum
- Approach to patient with difficulty swallowing
  - Carcinoma
  - Achalasia
- Approach to patient with esophageal perforation
  - Mallory-Weiss tear
  - Iatrogenic
- Approach to pr with fever and CXR findings.
  - Empyema/abscess/PNA
- Approach to patient with lung mass
  - Neoplasms
    - Small cell, non-small cell, metastasis
    - Para neoplastic syndromes
- Approach to a patient with cardiac tamponade
- Approach to a patient with MI history or A fib hx and sudden cold leg.
- Approach to a patient with valvular dz and surgical indications
- Approach to patient with endocarditis
  - When operate

- What bugs
- Approach to a patient with CAD and indications for CABG
- Approach to a patient with gluteal claudication and impotence
- Approach to a patient with mediastinal mass
- Approach to a patient with myasthenia gravis

## WEEK 6

### ➤ Uncovered Topics

- Approach to a patient with claudication
  - PVD
- Approach to a patient with carotid bruit, TIA.
  - How to work up
  - When to operate
- Approach to patient with aortic aneurysm
  - Symptomatic patient vs asymptomatic
  - Size criteria for operation
  - Open vs endovascular (general)
- Approach to patient with visceral aneurysm
  - Spleen in pregnant woman
- Approach to a patient with a NECK MASS
  - Thyroid
  - Parathyroid
  - lymphadenopathy
- Approach to a patient with a testicular mass
  - Cancer
  - hydrocele
- Approach to a Patient with scrotal pain
  - Epididymitis
  - Torsion
- Approach to a patient with flank pain
  - Kidney stone

- Approach to a patient with a skin lesion
  - SCC/BSC/Melanoma
- Approach to patient with a soft tissue mass

# The Beahm-Hogan General Surgery Medical Student Survival Guide

## Introduction

Welcome to the General Surgery rotation. We're excited to have you here and want to be sure that you have the best experience possible on the service. This booklet is filled with (hopefully) helpful tidbits to make your time on the service a little easier.

### A Typical Day

You will start the day seeing your patients and writing SOAP notes. Residents will see the patients after you and write a note as well. After all of the patients are seen, we will quickly "card flip" round where you will be expected to give a summary of how your pt has done in the last 24h. You basically would read from your SOAP note; it is helpful to make copies of your notes so that you don't stumble.

After card flip rounds we will usually break and write any pertinent orders for the patients before surgery cases begin. 1-2 students can scrub in on any specific case. Be sure to read about the case you are planning to scrub in on the night before. You should plan to follow the patients in whose cases you were involved if they are admitted. Not all patients are admitted – many patients are "same day surgery" and will go home shortly after surgery. If you are in a surgery, you are responsible for adding that patient to the list and making the changes for that person.

Students who aren't scrubbed can help out by going to the Surgicenter (4<sup>th</sup> floor) to update H&Ps and orders for the cases to be done later in the day. The nurses will let you know what needs to be done. H&P's that are greater than 30 days old will need to be completely redone. If H&P written within 30 days of operative date you may copy and paste the H&P on file (from chart review > notes) into a new H&P for the current encounter. Make sure you label it as a copied H&P within the text of the new H&P note. At the top of the note you put your update for the day. For instance.

- Mr. Smith is a 45 yo M here for repair of right inguinal hernia.

- Prior H&P from clinic date 10/2/12 is copied below. My additions/updates to H&P are as follows.
  - No interval changes.
  - Hernia still reducible. No vomiting or fevers. Normal bowel movements.
  - ROS negative for CP, SOB, signs of infection.
  - Physical exam – 98.6, 78, 130/70, 100% on RA
  - CTA B,
  - RRR w/o MRG
  - Abd soft, R inguinal hernia that is reducible extremities without edema.
  - Assessment: R inguinal hernia
  - Plan: to OR today for repair
- INSERT COPIED H&P clearly identified as such w/ date and time of original note.

You can also look through the charts of the cases you will be scrubbing in on and talk with the patients up there. Ask the nurses for any questions.

After the cases for the day are done, we will do walk rounds where you will again present your patients. When we get to a certain floor, the students should grab all of the charts for that floor or a COW and be prepared to write orders for the patients as we round. One person should carry a bag with dressing supplies, gloves, etc. for dressing changes during rounds. After that, we finish up any loose ends and we're done for the day (sometimes!).

Before leaving, all students look at the OR schedule for the next day and decide who will be scrubbing into which cases so that there isn't any confusion the next day. Update the list with any changes that you know about and make sure that all of the patients who were operated on that day and are inpatients are on the list!

## OR

The key to success in the OR is helping out. Be sure to be familiar with your pt before the case – visit them in preop and look through the chart to find out why we are operating. Pull your gown and gloves for the scrub tech, and be ready to tie people's gowns, and move and prep the patient. After the case, stay with the patient until they are in recovery. Have gloves on and ready to help move the patient to their bed at the end of the case.

## Clinic

Gen Surg Clinic is Monday all day. These are usually new patients being worked up or evaluated for possible surgery. ALWAYS look in the pt's chart before seeing them – it will help to guide you as to why they are here today and what was done the last time they were here. You can find past notes under Chart Review and then the notes tab. Some information can also be found in CLIQ so you should check that as well. You will see the pts first, write a note in the chart, and then present the case to one of the residents who will see the pt with you and help formulate a plan.

Wednesday is post-op clinic. These are usually pts who have recently had surgery and are here for a f/u visit. Look in the chart to see what they had done. ALWAYS look up and document pathology for anything that may have been removed!

## AM Rounds

When you arrive in the morning, ask the patient's nurse if anything happened overnight. Review all nurse's and other notes in the notes section of the chart that have been entered since you last reviewed the patient's chart. The time mark function is helpful for knowing what is a new note. Review all vital signs, ins and outs, results (result review tab) and look at all current orders for that patient. Your resident can help you find where all of these items are located in epic. Look at everything in the patients room... what fluids or medications are hanging, do they have a Foley, is there an incentive spirometer in the room, are their SCDs on and functioning. When seeing your patients in the morning, change any dressings or packing that they have. If you have a question about changing bandages/packing, don't change it and ask the resident. In general, surgical dressings can be taken down on POD#1 and re-dressed with dry gauze and minimal tape. Make sure you know what they are eating, are they having bowel movements or flatus, and what their level of activity was for the day past (did they ambulate, if so how far and how frequently).

## The SOAP Note

The "SOAP" note is the standard everyday note written on patients on the floor after their initial H&P. Although it is no longer exactly as it used to be with the new EMR, ***this is the format to use in presenting your patients in the morning.***

### S = Subjective

This includes events over the last 24h and the subjective complaints of the patient. i.e. passing gas? BM? tolerating food? nausea/emesis? ambulating?

### O = Objective

What you find on physical exam of the patient. List their vitals including Tmax (maximum temperature for last 24h); ins/outs with full detail for all drains present (foley, NG tube, ostomy, chest tube); and “full” physical exam. Be sure to include parts of the exam pertinent to your patient. i.e. HEENT exam if ENT pt, comment on wounds

### A = Assessment

Summary of what is going on with the patient; all of the medical problems being addressed this hospital stay are listed here. Be sure to list post op day! (POD#x)

### P = Plan

Your recommendations (or the team’s recommendations) on what to do with the pt today. i.e. advance diet, ambulate, replace potassium

## **Tubes and Drains**

All drains – look at color of fluid in drain or canister; output should be recorded in the ins and out section of epic; be sure the 24h total is in your note!

JP – Jackson-pratt drain: a surgical drain – “grenade” attached to tube

CT – chest tube: attached to pleuravac – look for “air leak”

NG – nasogastric tube: out of nose to suction canister; used to decompress the stomach

Ostomy – colostomy, ileostomy; look at drainage, look for air in bag

Wound vac – sponge in wound to negative pressure; look for tight seal, look at pressure on machine – should be 125mm Hg

## **History and Physical**

This is the note written the first time a patient is seen that should tell us anything we need to know about the patient. H&Ps are done for surgery cases to be booked and for consults in the ER or on the floor.

Many times we will be consulted for a specific reason for a patient that is already admitted to another service in the hospital. i.e. Patient being treated for many med probs by the medicine service but has an abscess that may need to be "I&D"d (drained). In this situation our main attention is on what we are being consulted for. However; remember that you are a doctor first and be sure to know everything going on with the patient.

### **Orders**

Orders can be written by students and then are pended until the resident signs them. We encourage you to write orders as it is good practice for when you are the intern. After writing orders let your intern know they are there and ready to be signed.

### **Abbreviations**

ac – before meals

ADA – American diabetic association

DP – Dorsalis pedis

bid – twice a day

BLE – bilateral lower extremity

CXR – chest xray

DP – dorsalis pedis f/u – follow up

I&D – incision and drainage

OOB – out of bed PO – by mouth PR – per rectum

PRN – as needed PT – posterior tibial qd – daily

qhs – at bedtime

SCDs – sequential compression devices

TEDS – thromboembolic deterrent stockings

tid – three times a day

# Appendix 1: Clerkship Orientation Notes

## Call Schedules:

- Students are responsible for creating the Call Schedule.
- **Kenner and Cohn's**- Students MUST take call at ILH to receive some trauma and acute care surgery experience
- General Surgery students at Kenner and Touro should send the completed call schedule to Alisha by the end of the 1<sup>st</sup> week of the rotation.
- Make UH call schedule before making Kenner and Touro call schedule. The call schedule should consist of 1 schedule with all 3 students
- Each UH student should take 2 weekday calls (M-TH) and 1 weekend (Fri/Sat) calls

## Suggested textbooks:

- **Cope's Early Diagnosis of the Acute Abdomen**
  - Cope's book will be checked out to students on a first-come-first-serve basis and must be returned by Thursday before your General Surgery rotation ends.
  - If not returned by the end of the General Surgery rotation you will receive an INCOMPLETE.
  - Cope's is an extremely well-written book on the basics of an abdominal exam. It's like a private rotation with a master surgeon. It's essential reading for students interested in a career in surgery. You will not be quizzed, but if you read it, it will be obvious.
- **General Surgery Essentials by Peter Lawrence, 4<sup>th</sup> Ed.)**

- A great reference for students, useful when studying for USMLE steps 1, 2 & 3

### **Other Recommendations:**

- **NMS Case Files in General Surgery**
  - A student favorite, a good study guide
- **Surgical Recall**
  - Standard ammo in a student's pocket, good daily pocket review
  - Advanced Surgical Recall (written for junior surgical residents, or students gunning for a surgical career)
- **Pre-Test for General Surgery**
  - By all accounts a difficult read, but if you expect to do very well on the shelf, you should be running at this speed
- **Kaplan Review for General Surgery**
  - Contains the famous Pestana review, a favorite for high-yield facts. A good review, not a great reference
- **Mont Reid Handbook**
  - A great pocket-reference with extensive content in bullet form if you like that sort of thing
- **The Washington University Handbook**
  - Like the Mont Reid but more paragraphs than bullets, if you prefer this sort of thing

# Appendix 2: Wound Care Notes

Wounds are a common aspect of care in all surgical specialty practice. However, there are a wide variety of different wounds based on the initial type, patient condition, and surgical goals. This is a broad overview of routine care of most types of commonly-found wounds

## Post-Operative Incisions

These are generally clean, sharp-edged wounds with little or no surrounding tissue trauma. These can be stapled or sutured closed with internal (absorbable) or external (non-absorbable) sutures.

- Post-operative dressings should generally be removed POD#2 and left open to air. Slight serous drainage is common, new dry gauze can be left in place until it is completely dry
- Staples and Non-absorbable sutures should be removed POD#7-14. The exception is fine cosmetic suture (on the face, eg.) or occasionally neck incisions. These should be removed within 5 days
- Copious serous or purulent drainage, redness, increasing tenderness are all signs of underlying infection and/or fascial dehiscence. The wound should be re-opened and left to heal by secondary intention

## Infected Wounds

These are the result of a primary infection such as an abscess, infected ulcer or secondary to post-operative wound infection

- Purulent drainage needs to be thoroughly evacuated several times per day

- Sometimes a strip of gauze, drain, or other material is left in to promote external drainage
- Dry gauze overlying the drain or open wound needs to be changed several times per day.
- A saturated dressing on a wound is a nice culture medium...a great way to prolong an infection
- Warm, red, shiny, tender skin surrounding a wound is cellulitis, which warrants systemic antibiotics.

### **Complex Reconstructive Wounds**

Sometimes wounds cannot be closed due to lack of epithelialized skin/tissue to cover the defect and/or because there is an underlying connection to intestinal, urologic, gynecologic structures that produce significant flow of fluid into the wound. These are called fistulas and make wound care a significant challenge for everyone, including the patient.

Negative Pressure Wound Therapy (NPWT) or Wound Vacuum Assisted Closure (Wound VAC) are devices used to assist in management of these wounds. These are typically placed first in the OR, then eventually at the bedside when it becomes less traumatic for the patient

- Dressings are changed every 2-4 days
- Wound Care Nurses often perform these dressing changes. Assist them whenever possible to learn how and to keep an eye on the wound for them team

## DRESSING TYPES

Dressing	Cyto toxic	Debriding	Use
<b>Wet-to-Dry</b>	No	Yes	Moist gauze on wound and lots of dry gauze on top. Good for debriding
<b>Dry-to-Dry</b>	No	Yes	Dry gauze for use on wounds that weep or ooze and do
<b>Iodoform Packing</b>	Yes	No	Iodine-compound impregnated strips. Good for
<b>Plain Packing</b>	No	No	Same as iodoform strip but without the iodine
<b>Calcium Alginate</b>	No	No	Sold as <b>Aquacel Ag</b> or <b>Restore</b> Silver-impregnated or plain this alginate product looks like felt but becomes jelly-like
<b>Xeroform Gauze</b>	Yes	No	Petroleum & Iodide compound dressing. Antibacterial but also cytotoxic.
<b>Telfa</b>	No	No	Non-adherent dry dressing Keeps wound
<b>Adaptek</b>	No	No	Non-adherent petroleum-soaked mesh. Allows fluid to pull through into the

## Topical Solutions:

- **Chlorhexadine** prep is good against MRSA but is very cytotoxic. It should never be used inside a wound of any sort
- **Dakin's Solution:** (1% or 2% Chlorine bleach in water) is a powerful antibacterial very good against pseudomonas. Any infected wound with blue-green discoloration in the gauze that smells like rotten fruit might benefit from this use. It is, however, also very cytotoxic. Not to be used in clean, healing wounds with good granulation tissue
- **Hydrogen Peroxide:** Is a moderately strong antibacterial but also very cytotoxic. Only for use in frankly infected/contaminated abscess cavities. How cytotoxic is it? Try gargling with it.
- **Silvedene Ointment:** Is a Silver Sulfadiazene paste useful on 1<sup>st</sup> and 2<sup>nd</sup> degree burns or significant abrasion injuries. Antibacterial and cytoprotective but also very expensive. ***Do not use on patients with Sulfa allergies***

# Appendix 3: Site & SS – Contacts

## Subspecialties

Subspecialty	Program Directors	Program Coordinator/Contact Person
<b>Cardiothoracic-Lafayette</b>		Shamekia White (337)261-6719
<b>ENT-Lafayette</b>		Shamekia White (337)261-6719
<b>Ortho-Lafayette</b>		Shamekia White (337)261-6719
<b>Vascular – BR</b>	London Guidry	London Guidry londonguidry@yahoo.com
<b>Surgical Oncology-BR</b>	John Lyons	John Lyons John.lyons@lolrhc.com
<b>Cardiothoracic – BR</b>	Azeem Khan Azeemk2@gmail.com 225-766-0416	Azeem Khan Azeemk2@gmail.com 225-766-0416
<b>Ortho-NO</b>	Peter Krause	Linda Flot (504)568-8533
<b>Urology -NO</b>	Tony Fuselier	Laura Tyler (504)568-2207
<b>ENT – BR &amp; NO Locations</b>	Anna Pou	Chelsea Scarpuzzi (504)568-4785
<b>Plastic Surgery -NO</b>	Charles Dupin	Callie Pearson (504)568-4748
<b>Neurosurgery -NO</b>	Gabe Tender	Brittany Copeland (504)568-6123
<b>Vascular Surgery-NO</b>	Malachi Sheahan	Callie Pearson (504)568-4748
<b>Pediatric Surgery-NO</b>	Evans Valerie	Evans Valerie Evalerie17@hotmail.com
<b>Cardiothoracic – NO</b>	Herman Heck	Tina Barcelona (504)903-2392

### **Baton Rouge Site Contact Information**

<b>Site Contact</b>	<b>Contact Information</b>
Samuel Harelson	(225)769-6400 sharel@lsuhsc.edu
John Whitaker	Jwhit816@bellsouth.net

### **Lafayette Site Contact Information**

<b>Site Contact</b>	<b>Contact Information</b>
Daniel Frey	(337)261-6158 dfrey@lsuhsc.edu
Charles Chappuis	(337)261-6179 surgcwc@lsuhsc.edu

# NOTES