

## SURGERY

|                               |  |
|-------------------------------|--|
| <b>Course Number:</b>         | MED 409.8  |
| <b>Credit Units:</b>          | 8  |
| <b>Sponsoring Department:</b> | Department of Surgery<br>Dr. Trustin Domes (Saskatoon) |
| <b>Program Directors:</b>     | Dr. S. Pooler (Regina)                                 |

### Program Director Contact and Communication Information

|                         | Saskatoon  | Regina   | Prince Albert  |
|-------------------------|--|--|--|
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| <b>Office Hours:</b>    | By appointment only  |  |  |
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| <b>Phone Number:</b>    | 966-5678   | 766-3705   | 765-6787   |

### General Rotation Information

#### **INTRODUCTION**

The University of Saskatchewan, Department of Surgery would like to welcome you. We hope that you find your 8 weeks of Surgery Clerkship a valued learning experience that aids you in your career development. I hope that the following information will be of value to you in helping you get the most from your surgical experience.

#### **SASKATOON**

There will be an orientation session the 1st day of your Surg. 1 rotation. It is mandatory that you attend this orientation session.

#### **Surgical Education Team:**

|                                     |                |          |
|-------------------------------------|----------------|----------|
| Department Chairman                 | Dr. I. Mendez  | 966-8641 |
| Director of Education               | Dr. T. Domes   | 966-5678 |
| Director of Undergraduate Education | Dr. T. Domes   | 966-5678 |
| Surgical Education Office Secretary | Marilyn Baniak | 966-5678 |
| Site & Subspecialty Coordinators    | see below      |          |

## **REGINA**

### **Surgical Education Team:**

|                                     |                 |          |
|-------------------------------------|-----------------|----------|
| Teaching Coordinator                | Dr. S. Pooler   | 766-6911 |
| Undergraduate Education Coordinator | Dr. S. Pooler   | 766-6911 |
| Surgical Education Office Secretary | Jennifer Chobot | 766-4282 |

## **REGINA SURGERY SELECTIVES**

Please contact Ms. Jennifer Chobot, 766-4282, for the appropriate specialty specific contact person.

## **GOAL**

The goal of the surgical clerkship is to assist the student in developing their competency in those tasks within the range of problems addressed by the field of surgery. The level of competency to be achieved is that which is needed for the student to carry on in postgraduate training in any discipline, including family medicine and other specialty training programs.

This goal will be realized through 8 weeks of clerkship in surgery split into 2 separate components:

### **Surg I: General Surgery (6 weeks)**

You will be assigned to one of 4 sites:

| <b>Site</b>               | <b>Coordinator</b> | <b>Phone no.</b> |
|---------------------------|--------------------|------------------|
| Regina General Hospital   | Dr. G. Kaban       | 766-6911         |
| Pasqua Hospital           | Dr. G. Kaban       | 766-6911         |
| Royal University Hospital |                    |                  |
| St. Paul's Hospital       |                    |                  |

### **Surg II: Surgery Selective (2 weeks)**

You may select a rotation from one of the following subspecialties (depending on availability):

| <b>Subspecialty</b> | <b>Coordinator</b> | <b>Phone no.</b> |
|---------------------|--------------------|------------------|
| Otolaryngology      | Dr. P. Spafford    | 244-7865         |
| Orthopedic Surgery  | Dr. A. Dzus        | 844-1114         |
| Neurosurgery        | Dr. M. Kelly       | 844-1104         |
| Urology             | Dr. P. Weckworth   | 653-3255         |
| Plastic Surgery     | Dr. C. Thomson     | 653-7766         |
| Pediatric Surgery   | Dr. G. Miller      | 844-1090         |
| Intensive Care Unit | Dr. J. Reid        | 966-8274         |
| Vascular Surgery    | Dr. B. Ulmer       | 653-3366         |
| Cardiac Surgery     | Dr. G. Dalshaug    | 844-1382         |

Other surgery selectives may be arranged but must meet the following criteria:

- A traditional surgery specialty or subspecialty (this does not include: anesthesia, gynecology, ophthalmology, etc.) approved by the University of Saskatchewan Department of Surgery
- Supervised by a surgeon with a University of Saskatchewan faculty appointment
- Written objectives approved by the University of Saskatchewan Department of Surgery
- The supervising surgeon must be willing to complete a Departmental approved student performance evaluation form

During the clerkship students are expected to achieve a basic degree of competence in diagnosis and management of surgical problems. As the clerkship experience progresses the students diagnostic skills will be further enhanced and their competence in management deepened, and the range of problems and illnesses dealt with broadened. This will be achieved through a combination of In-patient Ward and Outpatient Clinic/Office practical patient care experience and teaching.

At all times remember you are involved in the treating of diseases, but in the care of the patient. The patients in your care represent a unique opportunity to learn not only about their surgical disorders but to get to know them as fellow human beings with their own hopes, fears, uncertainties and unique stories. This is the essence of the doctor-patient relationship and constitutes one of the most rewarding aspects of the practice of medicine.

Please note the following 3 RECOMMENDED TEXTBOOKS:

- Lawrence PF: Essentials of General Surgery (5<sup>th</sup> ed). Baltimore, MD, Lippincott Williams & Wilkins, 2012
- Lawrence PF: Essentials of Surgical Specialties (3<sup>rd</sup> ed). Baltimore, MD, Lippincott Williams and Wilkins, 2007
- Lefor AT, Gomella LG: Surgery On Call (4th ed). New York, NY, Lange Medical Books, 2006

## **THE IN-PATIENT WARD EXPERIENCE**

The student will be a full member of a surgical team involved in the care of patients. The team will include an attending surgeon and in some cases one or more residents at varying levels of postgraduate training and other students.

At the start of the rotation the supervising faculty and residents will orient the student to the team and the ward. The elements of being a full team member include the following tasks:

- Performing admission history and physical examination on an appropriate number of patients.
- Developing a differential and provisional diagnosis and a plan for the presenting problems.
- Documenting the history, physical examination, impression and plan in the medical record.

- Presenting (orally) the findings to the resident &/or attending surgeon.
- Following patients first encountered in the emergency room, after admission
- Assessing the team's patient's clinical progress daily and when problems occur.
- Documenting patient events with regular progress notes in the medical record.
- Communicating with others involved in the care of the team's patients:
  - Attending physicians and residents
  - Consultants
  - Family doctors
  - Family members
  - Nurses
  - Other allied health care professionals
- Gathering and reviewing relevant data, including laboratory and radiological data.
- Facilitating patient discharges, including writing prescriptions and Dear Dr. or discharge letters (co-signed by qualified MD)
- Informing the team and the clerkship coordinator at least one month prior to starting the rotation of any expected absences

### **Number of Assigned In-Patients**

Students need to see a certain minimum number of patients but they must not become so busy in looking after patients that they have no time to reflect on what they are doing. A reasonable maximum number of in-hospital patients assigned to the student are 10. The assigned patients should represent a good variety of presenting problems and diagnoses. It is expected that the student will know these patients and their conditions better than anyone on the team.

### **On-call duties**

Being on-call is an essential component of learning in surgery. This is when acutely ill patients are often first encountered. Also, this is often when in-patients develop problems that require prompt attention. Being the first one to assess these patients is a valuable learning experience. This is often a time when you get specific and timely feedback from supervising residents and surgeons.

- Student's call is limited to a maximum of every fourth night
- Students should contact the resident or attending on call to discuss expectations
- Students should see patients in the ER before or in conjunction with residents or attending surgeons.
- Students should attend all seminars, even if you are post-call
- Students should be excused from duty by noon the day following call once they've had a chance to ensure follow-up care for their assigned patients. (The student may, however, stay on after 12 noon at his/her discretion)
- Students will not be on call the night before an examination
- Students will receive specific and timely feedback from residents and attending surgeons about their assessment of patients, their formulation of the patient's problems and the management plan

## **THE OUTPATIENT CLINIC/OFFICE EXPERIENCE**

You will be expected to attend the outpatient surgical clinic on a regular basis. In all surgical disciplines the outpatient clinic/office experience is a very valuable component of the learning experience. Students must become familiar with assessing surgical patients in the ambulatory setting and then developing management plans for them. This is important because:

- Many surgical patients are dealt with in the ambulatory setting (both pre-op and post-op)
- The ambulatory setting requires a different approach to patient assessment and management than the in-patient setting
- Many surgical diagnoses and presenting problems are likely to be encountered by students only in the ambulatory context.
- Attending surgeons often have more time available to teach students and residents in an outpatient setting.

### **Objectives:**

During the rotation the student will:

- Gain familiarity with the conduct of surgical practice in an ambulatory setting
- Be exposed to a broad range of commonly seen patient problems in surgery and its subspecialties
- Develop an understanding for the appropriate pace and techniques for the assessment, evaluation, and management of surgical problems in the ambulatory setting
- Refine and further develop information gathering skills, generation of different diagnoses and problems lists, appropriate use and interpretation of diagnostic tests, and development and institution of management plans
- Develop effective communication skills with patients and office staff in ambulatory settings
- Demonstrate the ability to effectively communicate with referring physicians and other allied health professionals, and participate in the process by writing referral and consultation letters
- Develop and practice appropriate standards of interpersonal and professional conduct and interaction in an ambulatory based surgical office or clinic
- Gain familiarity with some of the basic principles of office structure, management, personnel and resources in an ambulatory surgical practice

### **Structure of the ambulatory clinic/office experience:**

- Site and rotation coordinators will encourage supervising surgeons to ensure that the student will attend at least 1, preferably 2, half day clinics or offices per week. Some variation will exist depending on the specialty
- At each individual clinic or office the supervising clinician will provide an initial orientation
- The clinician will provide the student an opportunity to delineate his/her objectives and expectations for the experience
- The supervising clinician will delineate his/her expectations of the student

- The supervising clinician will ensure a clinical atmosphere that includes the clinical clerk as an integral member of the patient care team
- A schedule for the clinic/office experience will be provided at the beginning of the student's rotation by the site or selective coordinator

### **Student's role in the ambulatory clinic/office:**

- Students may be assigned new patients referred for consultation or patients returning for reassessment or follow-up. They will perform appropriate history and physical examinations. This may be comprehensive or focused on a specific system or problem. Students will formulate a differential diagnosis, problem list, investigation and management plan where appropriate.
- Students will present the history, physical findings and assessment to the supervising clinician. Constructive content and process feedback about the case presentation and assessment will be offered by the supervising clinician and teaching points made relevant to the case. This may occur with each encounter or in designated time at the end of the clinic.
- An attempt will be made to maximize the opportunity for the student to play an active role in patient care
- The student will demonstrate courteous, professional behavior and appearance, and will be punctual. If the student must be late or absent or leave early from a clinic, he/she must inform the supervisor and or clinic staff well in advance.

## **TEACHING**

### **The Student as a Student**

A major aspect of the clerkship is for clerks to act as junior physicians. However it is equally important that the student be able to do what is necessary to achieve the goals and objectives of the curriculum. Students must be free to attend scheduled teaching sessions (seminars, bedside teaching, etc.) without any perception on the part of attending surgeons or residents that the student is somehow shirking their duties. Students are responsible for informing their team members ahead of time when they will be away at teaching sessions. Students must be able to sign out to another team member so that they will not be disturbed during their teaching sessions.

### **Scheduled Teaching Activities**

These will be dependent on the site and/or rotation. Schedules will be provided at the beginning of your rotation. The type of teaching session will vary and may include:

- Ward teaching rounds with an attending surgeon
- Outpatient teaching
- Seminars
- Divisional educational rounds
- Informal bedside and operating room teaching

### **Feedback**

In order for education to be meaningful, student must receive timely, specific feedback from their attending physicians, resident supervisors, and site/selective coordinator.

Attending physicians will provide structured feedback at both the halfway point and at the end of the rotation, based on information from both the attending physicians and residents.

Students will be given specific comments on areas of strength and areas where they require improvement regularly throughout their rotation, and this should come from both their resident and attending physicians. They should receive feedback after virtually every new case presentation, and about once per week for patients already admitted. Feedback should be given with respect to how the students are progressing in terms of the objectives for the rotation.

## **PROFESSIONALISM**

As a student doctor, it is expected that you hold yourself to standards of conduct expected of all members of our profession. It is well to remember that you are “not learning a trade, but entering a profession”.

As you rotate through surgery disciplines, in addition to assessing your knowledge and skills, we will also be judging your professionalism.

In essence, the basics of professionalism are quite easy to articulate. In return for professional autonomy, self-regulation and a recognition of their unique place in society, the public demands of physicians, accountability, ethical standards and an altruistic (altruism = putting the interests of the patient ahead of one’s own) manner of delivering care. The Canadian Association of General Surgeons position statement of professionalism can be found here: [https://www.cags-accg.ca/docs/Professionalism\\_CJS.pdf](https://www.cags-accg.ca/docs/Professionalism_CJS.pdf).

## **SPECIFIC SUGGESTIONS**

- Be on time
- Your appearance should be clean, neat and professional
- Clean white lab coat, business or business casual dress when seeing patients in clinics or offices
- When wearing scrubs out of the OR, a clean white lab coat MUST be worn
- Be prepared
- Respect patient confidentiality
- Polite, respectful behavior at all times
- Appropriate language
- Attend lectures, seminars, rounds, etc.

Please refer to the professionalism section of the Phase D Syllabus for more specific details regarding this important topic.

## **WHAT TO DO IF THERE IS A PROBLEM**

Students must have the opportunity to resolve any perceived problems. Problems should be first addressed at the most local level (e.g., a problem with ward duties

should be take up first with the resident. If it cannot be resolved then the student should take it up with the senior resident, attending physician, and if necessary the site or selective coordinator and if necessary the Director of Undergraduate Education for the Department of Surgery).

Please contact the Department of Surgery Director of Undergraduate Education (966-5678 in Saskatoon or 766-6911 in Regina) if problems are un-resolvable or too sensitive to deal with at the local level.

## **STUDENT ASSESSMENT**

### **Evaluation of performance assessment**

- Supervising residents and attending physicians will assess your core clinical skills, problem solving/clinical reasoning, knowledge base, personal/professional conduct, and communication/interpersonal skills (see attached form)
- The evaluations are scored and comprise 50% of your final surgery grade
- A summary of these evaluations will be provided at the completion of your clerkship

Evaluation of knowledge base will be determined by a written examination comprised of multiple choice questions. This will contribute 25% to your final grade. For more information on this exam including sample questions please refer to: [http://www.nbme.org/Schools/Subject-Exams/Subjects/clinicalsci\\_surg.html](http://www.nbme.org/Schools/Subject-Exams/Subjects/clinicalsci_surg.html)

Your clinical reasoning will be assessed by an oral examination where you will be presented standardized case scenarios of surgery related problems. Your performance will contribute 25% to your final grade.

## **OBJECTIVES**

By the end of the rotation, students will be expected to:

1. Demonstrate competency (perform an appropriate history and physical examination, synthesize data to arrive at a differential diagnosis, use relevant diagnostic tests, participate in patient care) in the management and treatment of patients with surgically oriented problems (*Expert, Collaborator, Communicator, Manager, Professional*)
2. Recognize and provide the clinical conditions in a patient that result in a differential diagnosis and provide an initial treatment/management plan when possible, for the following (*Expert, Communicator*):
  - Abdominal masses
  - Abdominal pain
  - Abdominal wall and groin masses
  - Altered neurologic status
  - Asymptomatic patient with positive test
  - Elevated PSA
  - Prostate nodule
  - Gallstones
  - Carotid bruit
  - Hypercalcemia
  - Incidental mass on computer tomography



- Back pain
- Breast problems
- Chest pain & shortness of breath
- Ear & nose problems
- Fluid and electrolyte disorders
- Acid base balance disorders
- Gastrointestinal hemorrhage
- Jaundice
- Leg pain
- Lung nodule
- Neck mass
- Non-healing wounds
- Perianal problems
- Peri-operative care
- Post-operative complications
- Scrotal pain and swelling
- Shock
- Skin and soft tissue lesions
- Swallowing difficulty and pain
- Transplantation
- Trauma
- Urinary complaints
- Vomiting, diarrhea, constipation

- See Appendix A for more specific learning objectives for each condition (these will be provided to you as a separate document at the start of your surgery clerkship).
3. Present a surgical research topic (*Expert, Communicator, Scholar*)
  4. Identify the elements of informed consent (*Expert, Communicator*)
  5. Maintain clear, accurate, and appropriate records of clinical encounters (*Expert, Communicator*)
  6. Communicate in a language easily understood by patients and family members (*Communicator*)
  7. Demonstrate an awareness of cultural and socio-economic issues that impact patient and population health (*Expert, Communicator, Professional*)
  8. Demonstrate an understanding of and practice evidence-based medicine (*Expert, Scholar, Communicator*)
  9. Identify and appropriately use resources to improve knowledge base (*Scholar*)
  10. Demonstrate insight into one's own limitations and methods to improve (*Professional, Scholar*)
  11. Demonstrate application of ethical principles in the clinical decision-making process, including patient confidentiality, privacy and autonomy (*Expert, Communicator, Professional*)
  12. Participate with a team of allied health professionals, respecting individual roles, in the care and treatment of a patient (*Collaborator, Communicator*)
  13. Demonstrate appropriate professionalism skills including respect for patients and health team personnel, honesty, integrity, altruism, appropriate boundaries, responsibility, timeliness, and striving for personal balance (*Professional*)
  14. Practice the art of comforting patients and alleviating suffering (*Communicator, Professional*)
  15. Promptly identify emergency situations and respond appropriately (*Expert*)

## ED-2s

### Patient Categories

- a. Evaluate (focused history and targeted physical exam) new patients with surgically orientated problems in the inpatient/outpatient setting
- b. Evaluate (focused history and targeted physical exam) review patients with surgically orientated problems in the inpatient/outpatient setting
- c. Evaluate and manage postoperative fluid and electrolyte needs in the inpatient setting
- d. Evaluate and manage postoperative pain in the inpatient setting
- e. Evaluate patients for infectious postoperative complications in the inpatient/outpatient setting
- f. Evaluate patients for non-infectious postoperative complications in the inpatient/outpatient setting
- g. Manage a patient's postoperative wound in the inpatient/outpatient setting

### Procedures/Skills

- a. Give an oral presentation of a patient problem-oriented surgical research topic to attending faculty and other members of the patient care team
- b. Observe the process of informed consent
- c. Perform as a first or second assistant to operating surgeons
- d. Scrub, gown and glove to assist operating surgeons
- e. Write brief operative reports in the health record
- f. Write postoperative orders in the health record
- g. Write daily progress notes in the health record documenting an inpatient's hospital course

## **SURGERY CLERKSHIP: PERFORMING PATIENT PROCEDURES**

The clerkship phase of your education is all about hands-on experience with providing patient care and acquiring new skills. At times this will mean pushing your boundaries of competence in procedural skills. It is a fine line between pushing those boundaries and functioning beyond your level of competence. This is a matter of judgment on your part and you obviously must take into consideration patient safety issues. However, you must also be considerate of the concerns of other health care workers involved in the patient's care.

From time to time during your clerkship year of medical school you will be called upon to perform a patient procedure (e.g., arterial puncture, phlebotomy, Foley catheter

insertion, drain removal, tracheostomy tube change, etc.) for which you may nor may not have had experience. Irregardless, you should never feel pressured to perform a procedure that you do not feel you have had adequate experience or competence to perform without supervision. It is a sign of maturity and good professional judgment when you are able to recognize your limitations and know when to ask for help. Clerks come into their Surgery rotations with a wide variation in skills and so it is important to inform the attending surgeon or resident that you would prefer to do this supervised.

You may encounter a situation where you do feel you have the competence to independently perform a procedure but an allied health care worker (e.g. nurse) disagrees. You will be farther ahead by respecting that individual's concern than engaging in conflict. Discuss this with the resident or staff surgeon before proceeding. If conflict arises that cannot be resolved at a local level please notify in Saskatoon, Dr. Bruce DuVal, Director of Undergraduate Education for Surgery (966-5678) or Dr. Gordie Kaban, Undergraduate Education Coordinator for Regina (766-6911).

## **TEACHING ROUNDS**

A schedule of formal teaching rounds will be provided for you at the beginning of your surgery rotation. All JURSI are expected to attend all formal rounds, regardless of what rotation you are on. You should arrange for the Resident on call to cover for you while you are at formal teaching rounds. Exceptions should only be made for immediately life-threatening situations.

## **WHERE YOU WILL LEARN THE MOST**

Surveys of clerks completing surgery rotations have stated that they learned the most by (ranked by most to least useful):

- evaluating acutely ill patients in the emergency dept.
- seeing patients in the ambulatory clinic with attending surgeons
- caring for patients and doing rounds with the residents on in-hospital patients
- assisting in the operating room

You are expected to attend ambulatory clinics with the surgeons on your assigned service.

- You should try to evaluate patients in the emergency department at every opportunity.
- In the operating room your experience will be strongest if you come prepared (know the patient, their disease, and the principles of the surgical treatment) and ask questions. It may occur that your help is needed in the OR even if you had planned on being in the clinic/office.

## **HOW CAN I DO WELL ON MY SURGERY ROTATION?**

You will do well if you follow the 3 A's:

### **Available**

- be available at all times and make sure people know where you are if you aren't available
- absence is very noticeable and is a strong influence on those completing your evaluations

### **Affable**

- you are expected to work well with all members of the health care team

### **Able**

- you can't learn everything in 8 weeks so concentrate your studies on problem solving focusing on differential diagnosis, evaluation and the principles of management rather than on procedural details
- evidence of independent learning will impress your evaluators and help you pass course examinations and the LMCC examination

## **VACATION**

Allocation of vacation time during surgery rotations follows the guidelines of the College of Medicine. You may take a maximum of 5 vacation days during your 6 weeks of General Surgery and none during your 2 weeks of surgery selective. All vacation requests must be approved by application to the Surgery Teaching Office a minimum of one month in advance of starting your surgery rotation.

## **ABSENCES**

Please refer to the Syllabus for Phase D section: Instruction and Evaluation General Guidelines

## **SURGERY CLERKSHIP ENCOUNTER LOG**

You are required to document your patient encounters during your surgery I rotation. This form is to be completed accurately in One45.