

IT	
Anaesthesia	Page 2
Emergency Medicine	Page 4
General Surgery RUH Orange Team	Page 6
General Surgery RUH Yellow Team	Page 7
General Surgery SPH	Page 8
General Surgery Regina	Page 10
Intensive Care Unit	Page 11
Internal Medicine	Page 14
Medical Imaging	Page 17
Neurology	Page 19
Neurosurgery	Page 22
Orthopedic Surgery	Page 25
Pathology	Page 28
Plastic Surgery	Page 30
Rehab Medicine	Page 33
Rheumatology	Page 35
Thoracic Surgery	Page 37
Urology	Page 38
Vascular Surgery	Page 41

Rotation Specific Objectives - Surgical Foundations



These objectives are applicable to all Surgical Foundations residents for their Anesthesia rotation. The resident will achieve these objectives by taking advantage of all educational opportunities available in the Emergency Department, Operating Room, Inpatient Wards, and Outpatient Clinics. They will attend all scheduled rounds, seminars, and tutorials with the exception of the General Surgery Residents who are expected to attend the General Surgery Rounds. They will design a study program to achieve these objectives.

Medical Expert/Clinical Decision Maker

Knowledge: Basic Science/Anatomy

- 1. The resident will acquire an understanding of upper airway anatomy, axillary and neck anatomy pertinent to regional anesthetic technique.
- 2. The resident will acquire an understanding of basic fluid and electrolyte management including blood product replacement.

Knowledge: General Clinical

- 1. The resident will acquire an understanding of acute and chronic pain management.
- 2. The resident will acquire an understanding of the assessment of operative risk.
- 3. The resident will acquire an understanding of the general cardiorespiratory physiology applicable to a patient under anesthetic.
- 4. The resident will acquire an understanding of airway management.

Knowledge: Specific Clinical

- 1. The resident will be able to perform a general history and physical examination pertinent to an anesthetic assessment.
- 2. The resident will have an understanding of common local and general anesthetic agents, their indications, uses, and potential complications.
- 3. The resident will have a general understanding of regional and general anesthetic techniques.

Knowledge: Specific Technical

- 1. The resident will be able to perform an assessment of the anesthetic risk.
- 2. The resident will be able to perform endotracheal intubation.
- 3. The resident will be able to perform IV catheter insertion.
- 4. The resident will be able to perform arterial cannulation.

Communicator

- 1. The resident will be proficient in documenting history and physical findings on the anesthetic patient.
- 2. The resident will be able to accurately articulate the patient's history and physical findings verbally, and by written note.

Collaborator

- 1. The resident will demonstrate proficiency in collaboration with other health care professionals.
- 2. The resident will learn to effectively collaborate with other consultation services.

<u>Manager</u>

1. The resident will become proficient in the management of anesthetic patients in the operating room and in the ward setting.

Health Advocate

1. The resident will be able to recognize and advise patients and their families regarding risk factors for anesthetic conditions that can be avoided and treated for optimal care.

<u>Scholar</u>

- 1. The resident will learn to access and assess relevant anesthetic literature regarding anesthesia principles and practice.
- 2. The resident will design a tutorial and study program to achieve rotational objectives.

Professional

1. The resident will display honorable and ethical behavior in interaction with family,
patients, consultants, and colleagues.Revised April 22, 2008



These objectives are applicable to all Surgical Foundations residents for their Emergency Medicine rotation. The resident will achieve these objectives by taking advantage of all educational opportunities available in the Emergency Department, Operating Room, Inpatient Wards, and Outpatient Clinics. They will attend all scheduled rounds, seminars, and tutorials. They will design a study program to achieve these objectives.

Medical Expert/Clinical Decision Maker

Knowledge: Basic Science/Anatomy

1. The resident will acquire an understanding of basic pathophysiology and anatomy as it applies to patients presenting to the Emergency Room with medical/surgical problems, pediatric problems, psychiatric problems, and drug overdoses.

Knowledge: General Clinical

- 1. The resident will acquire knowledge in the general emergency recognition and management of surgical and medical emergencies presenting to the Emergency Department.
- 2. The resident will acquire an ability to perform a focused history and physical examination in the Emergency Department.

Knowledge: Specific Clinical

- 1. The resident will acquire skills in general CPR and ATLS management.
- 2. The resident will understand and perform proper triage of emergency patients.
- 3. The residents will acquire knowledge of the recognition and management of Emergency Room patients.

Knowledge: Specific Technical

1. The resident will be able to perform intravenous line access, nasogastric intubation, simple splints and cast applications, simple incision and drainage and laceration repair.

Communicator

- 1. The resident will be proficient documenting history and physical findings on Emergency Room patients.
- 2. The resident will be able to accurately articulate patient's history and physical findings verbally, and in a written fashion.

Collaborator

- 1. The resident will demonstrate proficiency in collaboration with other health care personnel including other nurses, colleagues and consultant services.
- 2. The resident will learn to effectively collaborate with other consultant services including the indications for effective patient care and resident education.

<u>Manager</u>

- 1. The resident will become proficient in the management of Emergency Room patients.
- 2. The resident will assist in the management of other rotating residents and students from the service.

Health Advocate

1. The resident will be able to recognize and advise patients and their family regarding risk factors for Emergency Room medical/surgical conditions that can be avoided and treated for optimal patient care.

<u>Scholar</u>

- 1. The resident will learn to access and assess relevant medical literature regarding Emergency Room principles and practice.
- 2. The resident will design a tutorial study program to achieve rotational objectives.

Professional

1. The resident will display honorable and ethical behavior in interaction with families of patients, consultants, and colleagues.



General Surgery RUH Orange Team

ROTATION SPECIFIC OBJECTIVES

- 1. Recognize the patient with an acute / surgical abdomen.
- 2. Recognize and manage the critically ill or unstable patient.
- 3. Prepare a patient for surgery, including fasting, preoperative investigations and consultations, patient positioning, and perioperative prophylaxis.
- 4. Be comfortable with hand and instrument ties.
- 5. Open the abdomen and perform routine systematic laparotomy.
- 6. Appropriately and safely insert laparoscopic ports and insufflate the abdomen.
- 7. Become a good assistant, which includes understanding the steps in common surgical procedures, and being able to anticipate steps in advance.
- 8. Close abdominal incisions and suture drains in place.
- 9. Medically manage a patient postoperatively. Become skilled at the management of medical complications such as fluid and electrolyte problems, myocardial infarction, atrial fibrillation, pulmonary embolism, pulmonary edema, and aspiration.
- 10. Be able to recognize, work up, and manage the septic patient.
- 11. Become comfortable with initial level 1 trauma management.
- 12. Be familiar with the workup of hepatic, biliary, and pancreatic malignancies.
- 13. Be able to work up the patient with jaundice.

Updated: December 2011



ROTATION SPECIFIC OBJECTIVES

- 1. Recognize the patient with an acute / surgical abdomen.
- 2. Recognize and manage the critically ill or unstable patient.
- 3. Prepare a patient for surgery, including fasting, preoperative investigations and consultations, patient positioning, and perioperative prophylaxis.
- 4. Be comfortable with hand and instrument ties.
- 5. Open the abdomen and perform routine systematic laparotomy.
- 6. Appropriately and safely insert laparoscopic ports and insufflate the abdomen.
- 7. Become a good assistant, which includes understanding the steps in common surgical procedures, and being able to anticipate steps in advance.
- 8. Close abdominal incisions and suture drains in place.
- 9. Medically manage a patient postoperatively. Become skilled at the management of medical complications such as fluid and electrolyte problems, myocardial infarction, atrial fibrillation, pulmonary embolism, pulmonary edema, and aspiration.
- 10. Know the anatomy of the pelvis.
- 11. Gain an understanding of benign perianal disease (hemorrhoids, abscesses, fistulas, fissures) and its basic management.
- 12. Gain an understanding of inflammatory bowel disease: its pathophysiology, endoscopic features, complications, and medical and surgical treatments.
- 13. Gain an understanding of colorectal cancer, its screening, diagnosis, management, and prognosis.

Updated: December 2011



ROTATION SPECIFIC OBJECTIVES

- 1. Recognize the patient with an acute / surgical abdomen.
- 2. Recognize and manage the critically ill or unstable patient.
- 3. Prepare a patient for surgery, including fasting, preoperative investigations and consultations, patient positioning, and perioperative prophylaxis.
- 4. Be comfortable with hand and instrument ties.
- 5. Open the abdomen and perform routine systematic laparotomy.
- 6. Appropriately and safely insert laparoscopic ports and insufflate the abdomen.
- 7. Become a good assistant, which includes understanding the steps in common surgical procedures, and being able to anticipate steps in advance.
- 8. Close abdominal incisions and suture drains in place.
- 9. Perform uncomplicated laparoscopic and open appendectomy.
- 10. Perform straightforward laparoscopic cholecystectomy.
- 11. Know the anatomy of the inguinal region and surgery for inguinal, umbilical, and incisional hernias.
- 12. Gain an understanding of the scope of head and neck malignancies, their risk factors, and the oncologic principles involved in their management.
- 13. Gain an understanding of breast malignancies, their risk factors, and the oncologic principles involved in their management.
- 14. Know the anatomy of head, neck, salivary gland, thyroid gland.
- 15. Know the anatomy of axillary.
- 16. Be able to evaluate and diagnose a patient with a breast mass or neck mass.

- 17. Be able to perform breast biopsy or segmental resection.
- 18. Be able to evaluate and diagnose a patient with common GI complications.

Updated: February 22, 2013



ROTATION SPECIFIC OBJECTIVES

- 1. Recognize the patient with an acute / surgical abdomen.
- 2. Recognize and manage the critically ill or unstable patient.
- 3. Prepare a patient for surgery, including fasting, preoperative investigations and consultations, patient positioning, and perioperative prophylaxis.
- 4. Be comfortable with hand and instrument ties.
- 5. Open the abdomen and perform routine systematic laparotomy.
- 6. Appropriately and safely insert laparoscopic ports and insufflate the abdomen.
- 7. Become a good assistant, which includes understanding the steps in common surgical procedures, and being able to anticipate steps in advance.
- 8. Close abdominal incisions and suture drains in place.
- 9. Be able to perform simple excisions and be comfortable with the use of local anesthetic.
- 10. Know the anatomy of the inguinal region and surgery for inguinal and umbilical hernias.
- 11. Perform uncomplicated laparoscopic and open appendectomy.
- 12. Perform straightforward laparoscopic cholecystectomy.

Updated: December 2011



These objectives are applicable to all Surgical Foundations residents for their ICU rotation. The resident will achieve these objectives by taking advantage of all educational opportunities available in the Emergency Department, Operating Room, Inpatient Wards, and Outpatient Clinics. They will attend all scheduled rounds, seminars, and tutorials. They will design a study program to achieve these objectives.

Medical Expert/Clinical Decision Maker

Knowledge: Basic Science/Anatomy

1. The resident will acquire a basic understanding of pertinent anatomy and pathophysiology of medical and surgical conditions presenting in the ICU including shock, sepsis, cardiorespiratory failure, multi-organ failure, endocrine crisis, intoxications, and hematologic conditions.

Knowledge: General Clinical

1. The resident will acquire knowledge in the management of patients in the ICU. This will include overall management of multiple systems of the patient's care in the ICU.

Knowledge: Specific Clinical

- 1. The resident will be able to perform a thorough and complete history and physical examination on the critically ill patient.
- 2. The resident will be able to manage pain.
- 3. The resident will be able to transport and understand the principles of transport of the critically ill patient.
- 4. The resident will understand the general principles of drug usage in the critically ill patient.
- 5. The resident will acquire a knowledge of ventilator management of the ICU patient.
- 6. The resident will acquire management skills of the critically ill patient including management of multisystem organ failure, cardiac arrest, fluid and electrolyte disturbances, sepsis, shock, trauma, and intoxication

Knowledge: Specific Technical

- 1. The resident will be able to perform endotracheal intubation, peripheral and central venous access, nasogastric intubation, and arterial cannulation.
- 2. The resident will be able to diagnose brain death.
- 3. The resident will understand illness severity scoring.
- 4. The resident will be able to perform ventilator management.
- 5. The resident will be able to perform CPR and ATLS skills.
- 6. The resident will be able to use and interpret physiologic monitors.

Communicator

- 1. The resident will be proficient in documenting history and physical findings on the ICU patient.
- 2. Standardized daily progress notes will be provided on inpatients.
- 3. The resident will be able to accurately articulate patient's history and physical findings verbally, written and by dictation.

Collaborator

- 1. The resident will demonstrate proficiency in collaboration with other health care personnel including therapists, dieticians, nurses etc.
- 2. The resident will learn to effectively collaborate with other consultative services of ICU patients including indications of effective patient care and resident education.

<u>Manager</u>

- 1. The resident will become proficient in the management of the critically ill patient. Daily multi-disciplinary ward rounds will be done.
- 2. The resident will manage rotating residents and students on the service.

Health Advocate

1. The resident will be able to recognize and advise patients and their family regarding risk factors for ICU medical/surgical conditions that can be avoided and treated for optimal

patient care.

Scholar

- 1. The resident will learn to access and assess relevant medical literature regarding ICU principles and practice.
- 2. The resident will design a tutorial study program to achieve rotational objectives.
- 3. The resident will participate in the Quality Improvement Rounds for ICU.

Professional

1. The resident will display honorable and ethical behavior in interaction with families of patients, consultants, and colleagues.



UNIVERSITY OF SASKATCHEWAN

These objectives are applicable to all Surgical Foundations residents for their Internal Medicine rotation. The resident will achieve these objectives by taking advantage of all educational opportunities available in the Emergency Department, Operating Room, Inpatient Wards, and Outpatient Clinics. They will design a study program to achieve these objectives.

Medical Expert/Clinical Decision Maker

Knowledge: Basic Science/Anatomy

1. The resident will have an understanding of basic anatomy and pathophysiology as it applies to the general medical patient including the cardiorespiratory, renal, abdominal, neurologic, and endocrine systems.

Knowledge: General Clinical

- 1. The resident will acquire knowledge of the management of general medical illnesses that present to an inpatient ward. This would include but not limited to:
 - Diabetes
 - other endocrine conditions
 - renal failure
 - DVT
 - pulmonary emboli management
 - fluid and electrolyte abnormalities.

Knowledge: Specific Clinical

- 1. The resident should be able to manage both acute and chronic presentation of medical illnesses in the hospital setting.
- 2. The resident will understand the necessity for subspecialty consultation and medical management.
- 3. The resident will be able to manage:
 - simple hypertension
 - chest pain
 - cardiac arrhythmias
 - abnormal blood glucose
 - hypoxia.

Knowledge: Specific Technical

- 1. The resident will be able to perform a thorough history and physical examination pertinent to the medical problem they are presented with.
- 2. The resident will be able to understand and interpret ancillary investigations performed on the medical services including ECG interpretation, chest x-ray interpretation, blood gases, and blood work results.

Communicator

- 1. The resident will be proficient in documenting history and physical findings on the general medical patient.
- 2. Daily progress notes will be provided on inpatients and consults being followed.
- 3. The resident will be able to accurately articulate patient's history and physical findings verbally, written and by dictation.

Collaborator

- 1. The resident will demonstrate proficiency in collaboration with other health care personnel including therapists, dieticians, nurses etc.
- 2. The resident will learn to effectively collaborate with other consultative services of the general medical patients including indications of effective patient care and resident education.

<u>Manager</u>

- 1. The resident will become proficient in the management of the general medical patient.
- 2. Daily ward rounds will be done.
- 3. The resident will manage rotating residents and students on the service.

Health Advocate

1. The resident will be able to recognize and advise patients and their family regarding risk factors for the Internal Medicine medical/surgical conditions that can be avoided and treated for optimal patient care.

Scholar

- 1. The resident will learn to access and assess relevant medical literature regarding Internal Medicine principles and practice.
- 2. The resident will design a tutorial study program to achieve rotational objectives.

Professional

1. The resident will display honorable and ethical behavior in interaction with families of patients, consultants, and colleagues.

Revised April 2008



Medical Imaging

These objectives are applicable to all Surgical Foundations residents for their Medical Imaging Rotation. The resident will achieve these objectives by taking advantage of all educational opportunities available in the Medical Imaging Department. They will design a study program to achieve these objectives.

Medical Expert

- 1. To develop knowledge of the method of image production in the various musculoskeletal imaging modalities including: plain radiographs, CT scan, MRI scan, MRI arthrogram, and ultrasound
- 2. To develop knowledge of the dangers and safe use of ionizing radiation in imaging including use of the image intensifier
- 3. To develop basic technical skill at interpreting these various imaging modalities.

Communicator

1. Demonstrate an ability to communicate with medical imaging medical staff, technicians, and patients

Collaborator

1. Demonstrate an ability to work as part of the medical imaging team

<u>Manager</u>

1. Develop knowledge of efficient and cost effective investigation utilizing the various modalities offered in Medical Imaging

Health Advocate

1. Understand and minimize the risk to patients of the investigations proposed

<u>Scholar</u>

1. Be able to appraise the literature on the use of these diagnostic tests as they pertain to musculoskeletal patients

Professional

- 1. Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.
- 2. Demonstrate a commitment to delivering the highest quality care and maintenance of competence
- 3. Recognize and appropriately respond to ethical issues encountered in practice



Introduction

This rotation is located at the Royal University Hospital. Residents will participate in the care of ward patients. Initial assessment and management of patients referred to the Emergency Department with urgent neurological problems, assessment of in-patient neurology consultations, and selected elective outpatient consultations.

General Objectives for the Rotation

By the completion of the Neurology rotation, residents should be able to:

Medical Expert

- 1. Obtain a complete and accurate history relevant to neurological problems.
- 2. Perform an accurate and focused physical assessment:
 - a. Neurology screening exam
 - b. Mini-mental status exam
 - c. Glasgow Coma Score
- 3. Make an anatomical diagnosis of the patients complaints by level of the nervous system involved
- 4. Have a basic knowledge of common neurological conditions:
 - a. Clinical features
 - b. Evaluation
 - c. Treatment
- 5. Effectively manage neurologic emergencies:
 - a. Status epilepticus
 - b. Acute stroke treatment with tPA
 - c. Spinal cord compression
 - d. Guillain Barre Syndrome
- 6. Know the indications for common neurologic investigations:
 - a. CT
 - b. MRI
 - c. EEG
 - d. EMG

7. Be able to perform Lumbar puncture and interpret the results

Communicator

- 1. Discuss clinical cases in an organized and logical manner with the attending Neurologist.
- 2. Communicate effectively with family and referring physicians by phone and letter.
- 3. Complete well-structured discharge summaries in a timely manner.
- 4. Prepare and present an effective Neurosciences Grand Rounds presentation.

Collaborator

- 1. Work effectively as a member of the ward team (attending physicians, Senior and Junior residents and medical students), sharing clinical and academic responsibilities
- 2. Work effectively with paramedical staff (Speech, Occupational and Physical Therapy, Social Workers) to implement interventions targeted to the patient's health needs.
- 3. Contribute effectively in Multidisciplinary rounds
- 4. Understand the role of and indications for ancillary services

Scholar

- 1. Demonstrate active learning by reading about cases that have been encountered on service
- 2. Present clinical cases at ward rounds in a logical and thoughtful manner
- 3. Participate actively in weekly seminars, demonstrating interest and growth of knowledge:
 - a. Radiology rounds
 - b. Seminars

Health Advocate

- 1. Understand the impact of neurological disease on patients and their families
- 2. Assist patients in accessing appropriate support services

Manager

- 1. Effectively manage time balancing the needs of ward based care and clinic responsibilities
 - a. Be on time for scheduled clinic appointments
 - b. Effectively triage multiple responsibilities
 - c. Complete dictations in a timely manner
- 2. Plan and monitor the evaluation of patients in an efficient and cost effective manner.

Professional

- 1. Recognize and discuss ethical issues at rounds. Demonstrate an organized and rational approach to ethical dilemmas.
- 2. Accurately assess his or her own level of ability and seek help when appropriate
- 3. Demonstrate respect for patient confidentiality.
- 4. Identify neurological conditions that disqualify patients from driving and fulfill responsibilities for mandatory reporting.



UNIVERSITY OF SASKATCHEWAN

Neurosurgery

These objectives are applicable to all Surgical Foundations residents for their Neurosurgery rotation. The resident will achieve these objectives by taking advantage of all educational opportunities available in the Emergency Department, Operating Room, Inpatient Wards, and Outpatient Clinics. They will attend all scheduled rounds, seminars, and tutorials. They will design a study program to achieve these objectives.

Medical Expert/Clinical Decision Maker

Knowledge: Basic Science/Anatomy

- 1. The resident will acquire an understanding of neurogenic shock, head trauma, C-spine injury, lumbar thoracic spinal injuries, cerebrovascular problems, and CNS tumors.
- 2. The resident will have an understanding of normal anatomy and pathophysiology of the central nervous system and the peripheral nervous system.
- 3. The resident will understand the principles of neurophysiological studies

Knowledge: General Clinical

- 1. The resident will understand the principles of and recognition and management of Neurosurgical Emergencies.
- 2. The resident will understand the investigation and treatment of the patient with reduced level of consciousness.
- 3. The resident will understand the principles of neurosurgical management of peripheral nerve compressions and treatment.
- 4. The resident will be exposed to pediatric neurosurgical conditions.

Knowledge: Specific Clinical

- 1. The resident will understand the indications and general principles of neurosurgical management of CNS Trauma, spinal injuries, and pain management.
- 2. The resident will understand the principles and interpretation of neurosurgical imaging techniques.

- 3. The resident will understand trauma spinal cord management including transportation of the patient, clearance of C-spine, interpretation of x-rays.
- 4. The resident will understand the commonly used antibiotics and drugs specific to the specialty.

Knowledge: Specific Technical

- 1. The resident will learn general surgical operative techniques and principles.
- 2. The resident will learn to perform lumbar puncture, burr holes, apply traction, manage intra cranial monitoring, manage SIADH and other fluid and electrolyte abnormalities, manage post-operative pain.
- 3. The resident will learn to surgically assist with a variety of surgical procedures.
- 4. The resident will learn to perform a thorough CNS and PNS examination.

Communicator

- 1. The resident will be proficient in documenting history and physical findings on emergency room patients, outpatient clinic patients and inpatients.
- 2. Daily progress notes will be documented on inpatients.
- 3. The resident will be able to accurately articulate the patient's history and physical findings verbally, written, and by dictation of discharge summaries.

Collaborator

- 1. The resident will demonstrate proficiency in collaboration with health care professionals including therapists, rehabilitation specialists, dieticians, nurses, etc.
- 2. The resident will learn to effectively collaborate with other consultation services of inpatients including the indications for effective patient care and resident education.

<u>Manager</u>

- 1. The resident will become proficient in the management of inpatient, emergency patient, and outpatient clinic patients.
- 2. Daily ward rounds will be done efficiently.

3. The resident will manage rotating residents and students on the service.

Health Advocate

1. The resident will be able to recognize and advise patients and their families regarding risk factors for neurosurgical diseases and trauma that can be avoided and treated for optimal patient care.

<u>Scholar</u>

1. The resident will learn to access and assess relevant medical/surgical literature regarding neurosurgical principles and practice. The resident will develop a tutorial and study program to achieve these objectives.

Professional

1. The resident will display honorable and ethical behavior in interaction with the families, patients, consultants, and colleagues.



UNIVERSITY OF SASKATCHEWAN

Orthopedic Surgery

These objectives are applicable to all Surgical Foundations residents for their Orthopedic Surgery rotation. The resident will achieve these objectives by taking advantage of all educational opportunities available in the Emergency Department, Operating Room, Inpatient Wards, and Outpatient Clinics. They will attend all scheduled rounds, seminars, and tutorials. They will design a study program to achieve these objectives.

Medical Expert/Clinical Decision Maker

Knowledge: Basic Science/Anatomy

- 1. The resident will acquire an understanding of bone and joint anatomy, embryology, physiology and pathophysiology.
- 2. The resident will acquire an understanding of congenital and acquired conditions of the bone and joints including tumors.
- 3. The resident will acquire an understanding of fracture management.

Knowledge: General Clinical

- 1. The resident will understand the principles of recognition and management of orthopedic emergencies.
- 2. The resident will understand the principles of acute and delayed fracture management.
- 3. The resident will understand orthopedic management of spine injuries and diseases.
- 4. The resident will understand the role of orthopedic surgery in the care of the multiply injured patient.
- 5. The resident will understand the pathophysiology in orthopedic management of bone infections, and neoplasms.
- 6. The resident will understand the principles of orthopedic exposures of joints and bones.

Knowledge: Specific Clinical

- 1. The resident will be able to interpret and understand the indications for orthopedic radiologic investigations.
- 2. The resident will understand the orthopedic principles of closed and open fracture management.
- 3. The resident will understand the principles of fracture and joint reduction, immobilization, and patient transfers.
- 4. The resident will understand the recognition and treatment of compartment syndrome and venous thrombosis.
- 5. The resident will understand common antibiotic and drugs used specific to the specialty.

Knowledge: Specific Technical

- 1. The resident will learn general orthopedic operative techniques and principles.
- 2. The resident will learn to surgically assist with orthopedic procedures.
- 3. The resident will learn to perform closed reduction of fractures, aspiration of joints, applications of splints and casts.
- 4. The resident will learn to interpret bone x-rays.
- 5. The resident will learn principles of orthopedic wound debridement.
- 6. The resident will learn closure of simple orthopedic wounds.
- 7. The resident will learn to immobilize and transport patients with spinal injuries.
- 8. The resident will learn to perform a thorough musculoskeletal examination.

Communicator

- 1. The resident will be proficient in documenting history and physical findings on emergency patients, outpatient clinic patients and inpatients.
- 2. Daily progress notes will be performed on inpatients.
- 3. The resident will be able to accurately articulate patient's history and physical findings

verbally, written by dictation of discharge summaries.

Collaborator

- 1. The resident will demonstrate proficiency in collaboration with health care professionals including therapists, rehabilitation specialists, dieticians, nurses, etc.
- 2. The resident will learn to effectively collaborate with other consultative services of inpatients including the indications of effective patient care and resident education.

<u>Manager</u>

- 1. The resident will become proficient in the management of inpatients, emergency patients, and outpatient clinic patients.
- 2. Daily ward rounds will be performed proficiently on inpatients.
- 3. The resident will manage rotating residents and students on the service.

Health Advocate

1. The resident will be able to recognize and advise patients and their families regarding risk factors for orthopedic diseases and trauma that can be avoided and treated for optimal patient care.

<u>Scholar</u>

- 1. The resident will learn to access and assess relevant medical/surgical literature regarding orthopedic principles and practice.
- 2. The resident will develop a tutorial study program to achieve these objectives.

Professional

1. The resident will display honorable and ethical behavior in interaction with the families, patients, consultants, and colleagues.



Medical Expert:

- 1. Demonstrate understanding of the importance of accurate pathologic diagnosis or the lack of accurate pathologic diagnosis and development of treatment options for general surgery patients.
- 2. Demonstrate understanding of the efficiency and effectiveness of biopsy techniques and how they impact upon the ability of pathologists to provide accurate diagnosis.
- 3. Demonstrate the ability to interpret a pathologic report.
- 4. Gain an understanding of the appropriate indications for frozen section and what information can be obtained from frozen section.
- 5. Demonstrate an understanding of the "grossing" process including how margins are determined.
- 6. Understand the diagnostic dilemmas that face the pathologist (ie. Pancreatic Ca vs. pancreatitis, and cytology for thyroid nodule)
- 7. Understand the importance of special stains and immunohistochemistry (ie: M100).

Communicator:

- 1. Demonstrate consultant level competency in communicating clinical situations to pathologists to aid in accurate diagnosis.
- 2. Achieve competence in articulating the significance for treatment and prognosis of a pathological port to patients, involved medical specialities and ancillary health care professionals.

Collaborator:

- 1. Demonstrate ability to effectively facilitate the needs of pathologists in achieving an accurate pathologic diagnosis.
- 2. Achieve competence and understanding of various medical specialties, especially oncology, from information necessary for treatment decisions.

Manager:

1. Demonstrate effective and efficient use of resources achieving an accurate pathologic diagnosis and the need for additional special information required in reports.

Health Advocate:

1. Demonstrate an understanding of how efficient and accurate pathologic diagnosis impacts upon treatment decisions, prognosis for patients and advocate for the timely and judicial use of this information and appropriate treatment decisions.

Scholar:

- 1. Demonstrate application of evidence based understanding of issues related to pathologic diagnosis and its application to treatment and prognosis.
- 2. Demonstrate ability to critically appraise the relevant general surgery/pathology literature.
- 3. Understand protocols for clinical and basis science investigation of surgical pathological problems.
- 4. Demonstrate knowledge, judgment and clinical skills.
- 5. Demonstrate adequate knowledge of surgical pathology, and how such knowledge impacts upon judgment and clinical skills within the context of general surgery for safe and effective practice and success in the Royal College final examination.

Professional:

- 1. Demonstrate characteristics of medical practice becoming of the profession.
- 2. Demonstrate the understanding of ethics involved in provision of surgical treatment of how pathologic diagnosis impacts on surgical treatment of patients particularly with regards to treatment decision making and prognosis.
- 3. Demonstrate insight into the personal limitations of treatments of certain conditions which come from an understanding of surgical pathology.

Revised May 1, 2008



UNIVERSITY OF SASKATCHEWAN

These objectives are applicable to all Surgical Foundations residents for their Plastic Surgery rotation. The resident will achieve these objectives by taking advantage of all educational opportunities available in the Emergency Department, Operating Room, Inpatient Wards, and Outpatient Clinics. They will attend all scheduled rounds, seminars, and tutorials with the exception of the General Surgery Residents who are expected to attend the General Surgery Rounds. They will design a study program to achieve these objectives.

Medical Expert/Clinical Decision Maker

Knowledge: Basic Science/Anatomy

- 1. The resident should acquire an understanding of normal and abnormal wound healing as it relates to skin, bone, tendon, muscles, and nerves.
- 2. The resident should understand the normal anatomy, embryology, and physiology of skin and soft tissues.
- 3. The resident should understand the normal healing, physiology, and pathophysiology of flaps and grafts.
- 4. The resident should understand the pathophysiology of burns.
- 5. The resident should understand and differentiate benign and malignant skin lesions.

Knowledge: General Clinical

- 1. The resident should understand principles of wound closure including methods and techniques
- 2. The resident should perform comprehensive examination of the hand and upper extremity and facial trauma examination.
- 3. The resident should understand the pathophysiology and treatment of pressure ulcers and leg ulcers.
- 4. The resident should learn the usage and interpretation of x-rays and CT Scans for the upper extremity and face.

- 5. The resident should understand principles of diagnosis and management of peripheral nerve conditions including entrapment neuropathies.
- 6. The resident should understand the principles and use of local Anaesthesia including risks and complications
- 7. The resident should have an exposure to breast surgery and understand congenital and acquired deformities.

Knowledge: Specific Clinical

- 1. The resident should understand the indications and general principles of plastic surgery management of hand injuries, facial injuries, post-traumatic and extirpative reconstruction.
- 2. The resident should understand principles and techniques of management of wounds and lacerations.
- 3. The resident should understand principles of burn patient management including resuscitation, surgical treatment including grafting, and rehabilitation.
- 4. The resident should have an understanding of antibiotics and common drugs used in this specialty.

Knowledge: Specific Technical

- 1. The resident should learn technique of tissue handling and wound closure.
- 2. The resident should learn techniques of plastic surgical assistance for a variety of operative conditions including microsurgery.
- 3. The resident should learn to repair finger tip injuries, closed reduction of hand fractures, carpal tunnel release, skin lesion excision, incision and drainage of infections, application of simple skin grafts, laceration repair, manage and apply dressings, wound debridement, extensor tenon repair.

Communicator

- 1. The resident will be proficient in documenting history and physical findings on emergency patients, outpatient clinic patients, and inpatients.
- 2. Daily progress notes will be documented on inpatients.
- 3. The resident should be able to accurately articulate patients history and physical findings

verbally, written, and by dictation of discharge summaries.

Collaborator

- 1. The resident will demonstrate proficiency in collaboration with other healthcare personnel including Occupational and Physiotherapists, Dieticians, Nurses etc.
- 2. The resident will learn to effectively collaborate with other consultation service of inpatients including the indications for effective patient care and resident education.

<u>Manager</u>

- 1. The resident will become proficient in the management of inpatients, emergency patients and outpatient clinic patients.
- 2. Daily rounds will be performed in an efficient manner.
- 3. The resident will manage rotating residents and students on the service.

Health Advocate

1. The resident will be able to recognize and advise patients and their families regarding risk factors for medical diseases including wound healing that can be avoided and treated for optimal patient care.

<u>Scholar</u>

1. The resident will learn to access and assess relevant medical/surgical literature regarding Plastic Surgery principles and practice. The resident will develop a tutorial and a study program to achieve rotational objectives.

Professional

1. The resident will display honorable and ethical behavior in interaction with families, patients, consultants and colleagues.

Revised April 22, 2008



UNIVERSITY OF SASKATCHEWAN

These objectives are applicable to all Surgical Foundations residents for their Rehabilitation Rotation. The resident will achieve these objectives by taking advantage of all educational opportunities. They will design a study program to achieve these objectives.

Medical Expert

- 1. To gain an understanding of the long term sequelae of acute spinal cord injury and the care required for these patients.
- 2. To gain an understanding of the needs of patients who have suffered an amputation.
- 3. To gain an understanding of the different amputation levels and the types of prosthesis

Communicator

1. Demonstrate an ability to communicate patients in obtaining a history as well as providing information to the patient

Collaborator

1. Demonstrate an ability to work as part of the Rehabilitation team

<u>Manager</u>

1. Develop knowledge of efficient and cost effective use of Rehabilitation Resources

Health Advocate

1. Understand the factors to minimize the risk of accident leading to spinal cord injury or amputation

<u>Scholar</u>

1. Facilitate the learning of the patient and their family about the patient's injury and prognosis

Professional

- 1. Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism
- 2. Demonstrate a commitment to delivering the highest quality care and maintenance of competence
- 3. Recognize and appropriately respond to ethical issues encountered in practice



UNIVERSITY OF SASKATCHEWAN

These objectives are applicable to all Surgical Foundations residents for their Rheumatology Rotation. The resident will achieve these objectives by taking advantage of all educational opportunities available. They will design a study program to achieve these objectives.

Medical Expert

- 1. To develop a systematic approach to undifferentiated problems including: monoarthritis; polyarthritis; back pain; muscle weakness; FUO; regional musculoskeletal pain, and recognition of extra-articular features of rheumatic disease.
- 2. To develop an approach to the diagnosis and management, including assessment for end organ involvement of rheumatoid arthritis, SLE, other connective tissue diseases (MCTD, Scleroderma, Sjogren's), osteoarthritis, polymyalgia rheumatica, HLA-B27 related arthropathies, crystal induced arthropathy, infectious arthritis, inflammatory myopathies, fibromyalgia, osteoporosis.
- 3. To develop the knowledge to recognize rheumatologic emergencies: scleroderma renal crisis, infectious arthritis, Giant Cell arteritis, pulmonary/renal syndromes, CNS lupus, rapidly progressive renal failure in SLE, neurologic compromise in RA.
- 4. To develop an approach to the use of diagnostic tests in rheumatology.
- 5. To develop an approach to therapy for Rheumatoid arthritis and to develop knowledge of the drugs used.
- 6. To develop a knowledge base in the use of nonsteroidal anti-inflammatory drugs and disease modifying drugs in the management of inflammatory arthropathies: recognition of the indications for injection of joints with corticosteroids.
- 7. To develop the technical skills related to the practice of rheumatology:
 - performance of the peripheral articular examination for joint inflammation
 - recognition of classical hand/foot deformities of rheumatoid arthritis
 - performance of the clinical assessment for fibromyalgia
 - aspiration of the knee joint
 - demonstration of techniques for injection of knee and shoulder with corticosteroids
 - demonstrate approach to the interpretations of musculoskeletal radiologic investigations

Communicator

- 1. Demonstrate ability to effectively gather historical information from patients including the features of inflammatory disease, presence of extra-articular features and the impact of disease on activities of daily living.
- 2. Demonstrate ability to effectively communicate to patients the necessary information regarding medications, particularly immunosuppressants and corticosteroids.
- 3. Demonstrate the ability to communicate treatment plans to the patient

Collaborator

1. To understand the role of allied healthcare professionals in the inpatient and outpatient management of patients with rheumatic diseases.

<u>Manager</u>

- 1. To demonstrate skill in the inpatient and outpatient management of patients including follow-up of outpatient investigations.
- 2. To demonstrate skill in the supervision of a medical team.
- 3. To develop time management skills to reflect and balance priorities for patient care, sustainable practice, and personal life.

Health Advocate

1. To be aware of current guidelines for healthy lifestyle behaviors in patients with rheumatic diseases and preventive measures where indicated.

<u>Scholar</u>

1. To be able to critically appraise the literature regarding the diagnosis and treatment of the rheumatic diseases.

Professional

1. To demonstrate professional attitudes in interactions with patients and other healthcare professionals.



ROTATION SPECIFIC OBJECTIVES

- 1. Recognize the patient with an acute / surgical abdomen.
- 2. Recognize and manage the critically ill or unstable patient.
- 3. Prepare a patient for surgery, including fasting, preoperative investigations and consultations, patient positioning, and perioperative prophylaxis.
- 4. Be comfortable with hand and instrument ties.
- 5. Open the abdomen and perform routine systematic laparotomy.
- 6. Appropriately and safely insert laparoscopic ports and insufflate the abdomen.
- 7. Become a good assistant, which includes understanding the steps in common surgical procedures, and being able to anticipate steps in advance.
- 8. Close abdominal incisions and suture drains in place.
- 9. Be familiar with evaluating imaging of the chest including a chest x-ray and CT scan.
- 10. Develop an understanding of pulmonary function tests and their use in the evaluation of a patient's suitability for lung resection.
- 11. Be able to recognize serious and life-threatening situations related to GI and Thoracic Surgery patients, such as malignant pleural effusion, malignant esophageal obstruction, esophageal foreign body, spontaneous pneumothorax, dysphagia, cough, and shortness of breath.
- 12. Be able to perform a thoracentesis.
- 13. Be comfortable with the insertion, management, and follow up of a chest tube or Heimlich valve.
- 14. Be able to manage the spontaneous pneumothorax.
- 15. Be familiar with various incisions used in thoracic surgery. Updated Dec ember 2011



These objectives are applicable to all Surgical Foundations residents for their Urology rotation. The resident will achieve these objectives by taking advantage of all educational opportunities available in the Emergency Department, Operating Room, Inpatient Wards, and Outpatient Clinics. They will design a study program to achieve these objectives.

Medical Expert/Clinical Decision Maker

Knowledge: Basic Science/Anatomy

1. The resident will acquire an understanding of the anatomy, embryology, and pathophysiology of the genitourinary system.

Knowledge: General Clinical

- 1. The resident will understand the principles of recognition and management of urological emergencies including:
 - hematuria, renal and ureteric stones
 - testicular pain
- 2. The resident will understand the principles of recognition and management of:
 - GU tumors
 - masses in the scrotum
 - GU infections
 - bladder pathology

Knowledge: Specific Clinical

- 1. The resident will be able to interpret and understand the indications for urologic radiologic investigations.
- 2. The resident will understand the urologic principles of GU trauma, GU neoplasm management, hematuria, GU stones.
- 3. The resident will understand common antibiotic usage and drugs specific to the specialty.

Knowledge: Specific Technical

1. The resident will learn urologic principles of operative technique.

- 2. The resident will learn to assist with urologic procedures.
- 3. The resident will learn to perform a urologic examination.
- 4. The resident will learn to perform:
 - a. a circumcision
 - b. urinary catheter insertion
 - c. supra pubic catheterization
 - d. cystoscopy.

Communicator

- The resident will be proficient in documenting history and physical findings on emergency patients, outpatient clinic patients, and inpatients.
- > Daily progress notes will be performed on inpatients.
- The resident will be able to accurately articulate patient's history and physical findings verbally, written, by dictation of discharge summaries.

Collaborator

- 1. The resident will demonstrate proficiency in collaboration with other health care personnel including therapists, dieticians, nurses, and colleagues.
- 2. The resident will learn to effectively collaborate with other consultative services of inpatients including the indications for effective patient care and resident education.

Manager

- 1. The resident will become proficient in the management of inpatients, emergency patients, and outpatient clinic patients.
- 2. Daily ward rounds will be performed efficiently.
- 3. The resident will manage rotating residents and students on the service.

Health Advocate

1. The resident will be able to recognize, and advise patients and their families regarding risk factors for diseases including trauma to the patient population that can be avoided and treated for optimal patient care.

Scholar

- 1. The resident will learn to access and assess relevant medical/surgical literature regarding Urology principles and practice.
- 2. The resident will design a tutorial and study program to achieve rotational objectives.

Professional

1. The resident will display honorable and ethical behavior in interaction with the families, patients, consultants, and colleagues.

Revised April 2008



ROTATION SPECIFIC OBJECTIVES

- 1. Recognize and manage the critically ill or unstable patient.
- 2. Prepare a patient for surgery, including fasting, preoperative investigations and consultations, patient positioning, and perioperative prophylaxis.
- 3. Be comfortable with hand and instrument ties.
- 4. Become a good assistant, which includes understanding the steps in common surgical procedures, and being able to anticipate steps in advance.
- 5. Be familiar with dissection of the sapheno-femoral junction and dissection of the groin.
- 6. Know abdominal, upper and lower limb, and carotid relevant vascular anatomy.
- 7. Become familiar with the vascular lab profile, angiography, and CT angiography.
- 8. Be familiar with vascular medicine including claudication, ischemic ulcers, the diabetic foot, and prevention of complications.
- 9. Be familiar with the basic principles of vascular trauma.
- 10. Gain an understanding of common vascular diseases including aneurysms, carotid artery stenosis, chronic arterial insufficiency, acute limb ischemia, post DVT syndrome, and venous stasis.
- 11. Be familiar with the various techniques available to secure vascular access.

Updated: December 2011