### **OVERVIEW**

Welcome to the Section of Orthopedic Surgery at Health Sciences Centre. Orthopedic surgery is a hands-on specialty. In order to derive the greatest benefit from the rotation, it is imperative that the students assume an active role. Whether or not students are interested in orthopedics as a career, they will learn valuable skills on this rotation. At some time in almost all physicians' careers, they will be faced with patients with a musculoskeletal injury. We wish to give exposure to orthopedics as a career option and to give the student an approach to managing the injured patient.

### INTRODUCTION

# Location(s):

**Health Sciences Centre** 

# **Preceptors:**

### **Attending Surgeons**

Dr. Laurie Barron, Assistant Professor

Dr. Jamie Dubberley, Assistant Professor

Dr. Chris Graham, Assistant Professor

Dr. Bradley Pilkey, Assistant Professor

Dr. Ted Tufescu, Assistant Professor

#### **Contact Person:**

Michelle Elands, Program Administrator

Phone: 204 -787-7581 melands@hsc.mb.ca

# **LEARNING OBJECTIVES (CanMEDS)**

### **Medical Expert**

As Medical Experts, physicians integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills and professional attitudes in their provision of patient-centered care.

Clinical clerks should develop skills in the following areas:

- Become comfortable examining an injured patient
- Develop an approach to reading x-rays
- Identify orthopedic emergencies
- Apply a splint to an arm and leg
- Manage common medical problems associated with orthopedic patients
- Identify and know treatment of common orthopedic injuries (ankle, wrist)
- Operating room conduct, including sterile technique and assisting.
- Recognition and management of common perioperative complications (DVT, PE, fat embolism, infection, joint dislocation, etc.

### Communicator

Physicians effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

As Communicators, students will facilitate the doctor-patient relationship:

- Establish rapport, trust and a therapeutic relationship with patients and families.
- Listen effectively.
- Elicit relevant information and perspectives of patients, families, and the health care team.
- Convey relevant information and explanations to patients, families and the health care team.
- Convey effective oral and written information about a medical encounter.
- Maintain clear, accurate, appropriate, and timely records of clinical encounters and operative procedures
- Address challenging communication issues effectively
  - Obtain informed consent
  - Deliver bad news
  - Disclose adverse events
  - Discuss end-of-life care
  - o Discuss organ donation
- Addressing anger, confusion and misunderstanding using a patient centric approach

### Collaborator

Physicians effectively work within a healthcare team to achieve optimal patient care.

As Collaborators, students will work effectively within the surgical team to achieve optimal patient care:

- Demonstrate a team approach to health care
- Participate effectively in an interprofessional and interdisciplinary health care team.
- Recognize and respect the diversity of roles, responsibilities, and competences of other health professionals in the management of the surgical patient.
- Work with others to assess, plan, provide, and integrate care of the surgical patient.

### Leader

Physicians engage with others to contribute to a vision of a high-quality health care system and take responsibility for the delivery of excellent patient care through their activities as clinicians, administrators, scholars, or teachers.

As Leaders, students will participate in the activities of the surgical service, making decisions, allocating resources, and contributing to the effectiveness of the health care team:

- Employ information technology appropriately for patient care.
- Allocate finite health care resources

### **Health Advocate**

Physicians responsibly use their expertise and influence to advance the health and well-being of individual patients, communities and populations.

As Health Advocates, students will responsibly use their expertise and influence to advance the health and well-being of individual patients, communities and populations:

- Concern for the best interest of patients
- Identifying health needs of individual patients, and advocate for the patient in cases where appropriate
- Promote and participate in patient safety

#### **Scholar**

Physicians demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

As Scholars, students will demonstrate a lifelong commitment to learning:

- Demonstrate the ability for continuing self-learning
- Discuss the principles of surgery and the application of basic sciences to surgical treatment.
- Demonstrate appropriate presentation skills, including formal and informal presentations.
- Critically evaluate medical information and its sources and apply this appropriately to clinical decisions.
- Critically appraise the evidence in order to address a clinical question.
- Integrate critical appraisal conclusions into clinical care.

### **Professional**

As Professionals, physicians are committed to the health and well-being of individuals and society through ethical practice, profession-Led regulation, and high personal standards of behaviour.

As Professionals, students are committed to health and well-being of individuals through ethical practice, profession-led regulation and high personal standards of behavior:

- Exhibit professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.
- Demonstrate a commitment to delivering the highest quality care.
- Recognize and respond appropriately to ethical issues encountered in practice.
- Recognize and respect patient confidentiality, privacy and autonomy.
- Participation in peer review
- Manage conflicts of interest
- Maintain appropriate relations with patients.
- Demonstrate awareness of industry influence on medical training and practice
- Recognition of personal and clinical limitations

### **INFORMATION**

These are locations, readings, evaluations, call responsibilities, etc.

### **Required Reading**

Lawrence Essentials of General Surgery, 3rd Ed. Chapters of particular relevance to this rotation include:

- Chapter 9 Trauma
- Chapter 26 Surgical Procedures, Techniques & Skills Lawrence Essentials of Surgical Specialties, 2nd ed. Chapters of particular relevance to this rotation include:
- Chapter 7 Orthopedic Surgery Diseases of the Musculoskeletal System pp 298-350

## **Suggested Reading**

- Principles of Fracture Management
- Evarts Volume 5 Books of Orthopaedics
- Campbell's Operative Orthopaedics
- Rockwood and Green's Volume 3 Book of Fractures
- Journal of the American Academy of Orthopaedic Surgeons
- Orthopaedic Medline on CD-ROM
- Orthopaedic Knowledge Update 4 and 5
- Instructional Course Lectures
- A Guide to Physical Examination and History-Taking (Bates)
- Musculoskeletal Examination (Hawkins)

### **Teaching Unit**

The teaching unit is located on GD2, Health Sciences Centre

### **Evaluations**

An exit interview should be set up at the beginning of the rotation so that student evaluations may be completed.

Service evaluation by student to be handed in at the end of rotation.

At the end of a rotation, we welcome any constructive criticism to help make the experience beneficial. Hand in at the end of rotation to Surgical Education Office.

#### WARD ACTIVITIES

These are examples of schedules, expectations, rotation details, etc. All the details below are subject to change.

### **Expectations**

- Attend morning rounds, make notes and orders on charts (under supervision)
- Take calls from the ward and the ER
- See patients in the ER and participate in their initial management
- Attend clinics
- Attend OR

Students must be vigilant and proactive in their participation. They should take advantage of the busy service by seeking opportunities to care for patients. There are ample opportunities to be involved. They will work alongside the staff and residents who will help guide the student through cases. They should read around common cases and related topics. At the end of a rotation, we welcome any constructive criticism to help make the experience beneficial.

### **Academic Schedule**

Ortho Rounds