This elective rotation is a two four (2 4) week introductory, structured clinical experience under direct supervision designed to provide

4. Formulate and communicate a focused differential diagnostic problem list on each psychiatric, surgical, obstetrical/gynecological, pediatric and medical patient. (COMP/AOA core competencies 2, 4; Institutional outcomes 1, 2, 3, 4, 7)

- 5. Identify knowledge deficits and search the medical literature for the most current aspects of diagnostic and management strategies to thereby apply the principles of evidence based medicine to the care of the individual acutely and chronically ill or injured medical, psychiatric, surgical, obstetrical/gynecological, and pediatric patient. This will be supported by ACEP on line material such as guidelines review. (COMP/AOA core competencies 2, 6, 7; Institutional outcomes 1, 2, 6, 7)
- 6. Formulate strategies for disease prevention based on knowledge of disease pathogenesis and mechanisms of health maintenance, with

- 15. Follow all infection control policies and guidelines as established by the Centers for Disease Control and Prevention (CDC) and the Society for Healthcare Epidemiology of America (SHEA). (COMP/AOA core competencies 2, 4, 6, 7; Institutional outcomes 1, 2, 7)
- 16. Obtain a greater understanding of the patient physician relationship and consistently apply the "bio psychosocial model." (COMP 1,2,3,5,7; Institutional Outcomes 1,2,3,4,5,6,8)
- 17. Apply Osteopathic Principles and Practice as an integral part of patient treatment and care. ( COMP 1,2,3,4,5,6,7; Institutional Outcomes 1,2,3,4,5,6,7,8)

At the end of the rotation, the student should be able to:

- Assist in the evaluation, treatment, and disposition of patients.
- Complete an accurate History and Physical
- Write accurate, organized and legible progress notes
- Establish a differential diagnosis for patients
- Recommend to the intern/resident or attending physician a treatment plan for assigned patients
- Demonstrate a knowledge of library use quoting references on patients
- Identify abnormal laboratory values, then create an appropriate treatment plan and present it to your resident or attending.
- Demonstrate knowledge of specific medical procedures (indications and contraindications)

In addition, by the end of the orthopedics, the student will be able to:

**Goal** To gain the basic knowledge to evaluate, diagnose and manage common disorders seen in orthopedics.

**Objectives** The student will be gain basic understanding of:

- The pathology, pathophysiology, natural history, diagnosis and treatment of common acute and chronic orthopedic injuries, including soft tissue, bone and nerve injury.
- The pathology and pathophysiology of acute and chronic medical illness in the active population.
- The psychological aspects of exercise, performance and injury.
- Preventive medicine and possible preventative measures to avoid common orthopedic conditions and injuries.
- Physiology and pathophysiology of hydration, nutrition and the use of pharmacologic agents, including performance enhancing and mood altering substances of athletes.
- How to diagnose and treat common acute and chronic orthopedic injuries.
- The ability to perform and report a basic orthopedic physical examination of the spine, shoulder, elbow, wrist and hand, pelvis and hip, knee, foot and ankle.
- Normal anatomy, physiology and biomechanics of the musculoskeletal and neurologic system.
- Students are expected to assist in the management of preoperative, perioperative and postoperative patient care under supervision (when available).

**Goal** To develop the skills to manage common orthopedic disorders.

**Objectives** The student will gain experience in:

• Obtaining accurate histories regarding orthopedic medicine diseases.

• Understand insurance requirements and reimbursement for orthopedic conditions and supplies, including worker's compensation

**Goal** To demonstrate commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to diversity when dealing with orthopedic medicine problems. **Objectives** The student will be able to:

- Demonstrate respect and sensitivity in dealing with patients, regardless of race, cultural background or sexual orientation.
- Demonstrate good work habits, including maturity, punctuality, availability and efficiency.
- Reliably perform duties, including clinic, training room and athletic event coverage.

**Goal** To understand the integration of Osteopathic Philosophy and Osteopathic Manipulative Medicine with orthopedic medicine conditions.

- Demonstrate the ability to perform and record an osteopathic structural examination on a surgical patient and document such using acceptable osteopathic terminology.
- Demonstrate the application of the osteopathic philosophy into the pre and post operative care of the surgical patient.
- Demonstrate an understanding of palpatory findings, which are found in common conditions, encountered in a surgical practice.
- Demonstrate ability to assess sensory and perfusion of extremities after injury and after reconstruction
- Demonstrates understanding and application of osteopathic manipulative treatment (OMT) by application of multiple methods of treatment as appropriate, such as but not limited to: high velocity, low amplitude (HVLA), strain counterstrain and muscle energy techniques.
- Demonstrates, as documented in the medical record, integration of osteopathic concepts and OMT in patient care as it relates to musculoskeletal disorders.
- Understand the philosophy behind osteopathic concepts and demonstrates this through integration into all patient care activities.
- Describe the role of the musculoskeletal system in disease including somatovisceral reflexes, alterations in body framework, and trauma.
- Understands the indications and contraindications to osteopathic manipulative treatment.

#### **Core Topics of Study**

During the two four (2 4) four week elective, the student will be exposed to a wide variety of common orthopedic disorders. These exposures will occur both during patient sessions and through didactic sessions and outside reading assignments. At a minimum, it is expected that each student will learn to diagnose and treat the following orthopedic disorders:

Fractures, Dislocations, and Subluxations: Students should be able to define, describe and discuss:

Discuss open and closed fractures, dislocations, and subluxations.

Discuss the clinical and radiological features of fractures.

Discuss management priorities in treating fractures, dislocations and subluxations.

1. Fractures

Type

#### 4. Compartment Syndrome

"4 Ps"

#### 5. Common Fractures, Dislocations, and Ligament Injuries

Carpal Scaphoid Fracture

Colles Fracture

Olecranon Fracture

Supracondylar Humerus Fracture

**Shoulder Dislocation** 

Hip Fracture

Femoral Shaft Fracture

**Hip Dislocation** 

Tibia/Fibular Shaft Fracture

Ankle Injures

**Spinal Fractures** 

**Pelvic Fractures** 

# 6. Discuss common fractures and joint injuries; identify specific problems with their diagnosis and management.

#### 7. Traumatic Amputations and Replantation

- a. Discuss the indications and contraindications for replantation of an amputated appendage.
- b. Discuss the proper method of transporting the amputated part.

#### 8. SPORTS MEDICINE Students should be able to define, describe and discuss:

(More Common Injuries)

- 1. Stress Fractures
- 2. Lateral Epicondylitis (Tennis Elbow)
- 3. Rotator Cuff Tendinitis (Shoulder Bursitis)
- 4. Plantar Fasciitis (Heel Spur)
- 5. Patellar Overload

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- Osteomyelitis
  Septic Arthritis

### 15. GAIT Students should be able to define, describe and discuss:

1. Basic components of gait and discuss common gait abnormalities in relation to mechanical or neurological disorders

It is strongly recommended that students spend approximately 10 hours per week reading independently. Students should not rely solely on the review books to be adequately prepared for the rotation as they do not provide the knowledge()Tj/TT8 1 Tf k

Updated: November

information provided to you by the site. Some sites have additional requirements above and beyond those set forth by the College of Osteopathic Medicine.

## **Expectations:**

During this rotation, the student is expected to do the following:

- 1. Function as an essential member of the office team.
- 2. Report to the office daily. If you are going to be late or absent, you must notify the resident or attending that you are assigned to and the WesternU/COMP Rotations Office.

day of service, the supervising physician should review the student's performance with the student and have the student review the evaluation form before submission.

Additional information is located in the Clinical Education Manual at: https://www.westernu.edu/media/osteopathic/pdfs/cem.pdf

entrusted in performing these skills. As a medical student your "Level of EPA Entrustment" would be expected to be at a beginner's level. Your EPA's will progress in post graduate training, but you will become familiar with the process in your medical school clinical rotations.

Once a week, students will ask a resident (PGY1 5) or and attending to <u>answer a single question</u> in the EPA Preceptor Skills Assessment that is accessed through the EPA app on COMP Connect using your iPad or iPhone. Following this one question, students will be asked to answer a single self reflection question. We ask that you select two EPAs in each rotation and repeat these EPAs with the same or different evaluator later in the rotation to see if your skills have improved. You are encouraged to have some of the same EPAs evaluated on different rotations. This method of evaluation will allow you to start a conversation with your evaluator on ways that you can improve your clinical skills, and because it is "in the moment" of caring for your patient, you will learn practical

• Student must attend all mandatory teleconference learning sessions during the virtual portion of the rotation.

The principal and practices of osteopathic medicine are interwoven in the practice of every osteopathic physician. Many specialties may utilize the osteopathic principals but not provide an opportunity for osteopathic manipulative medicine. If the provider and specialty lends itself to the use of osteopathic manipulative medicine you are encouraged to provide this treatment option and document your procedure on T Res. As a graduation requirement for the fourth year medical student at WesternU COMP and COMP/NW you must document in T Res at least

WU INSTITUTIONAL OUTCOMES	Health Professional Education
1. Critical Thinking	The graduate should be able to identify and solve problems that
	require the integration of multiple contexts when performing
	patient care.
2. Breadth and Depth of	The graduate should be able to perform appropriate diagnostic
Knowledge in the	and therapeutic skills, to apply relevant information to patient
Discipline/Clinical Competence	care and practice, and to educate patients regarding prevention of
	common health problems.
3. Interpersonal	The graduate should be able to effectively use interpersonal skills
Communication Skills	that enable them to establish and maintain therapeutic
	relationships with patients and other members of the health care
	team.
4. Collaboration Skills	The graduate should be able to collaborate with clients and with
	other health professionals to develop a plan of care to achieve
	positive health outcomes for their patients.
5. Ethical and Moral Decision	The graduate should be able to perform the highest quality of
Making Skills	care, governed by ethical principles, integrity, honesty and
	compassion.
6. Life Long Learning	The graduate should be able to engage in life long, self directed
	learning to validate continued competence in practice.
7. Evidence Based Practice	The graduate should be able to utilize research and evidence
	based practice and apply relevant findings to the care of patients.
8. Humanistic Practice	The graduate should be able to carry out compassionate and
	humanistic approaches to health care delivery when interacting
	with patients, clients, and their families. They should unfailingly
	advocate for patient needs.

COMP/AOA CORE	Competency: Osteopathic Medical Students are part of an educational
COMPETENCIES	continuum that leads to residency and the curriculum provides the
	foundation for the following outcomes:
1. Osteopathic	Residents are expected to demonstrate and apply knowledge of accepted
Philosophy and	standards in Osteopathic Manipulative Treatment (OMT) appropriate to
Osteopathic	their specialty. The educational goal is to train a skilled and competent
Manipulative Medicine	osteopathic practitioner who remains dedicated to life long learning and
	to practice habits in osteopathic philosophy and manipulative medicine.
2. Medical Knowledge	Residents are expected to demonstrate and apply knowledge of accepted
	standards of clinical medicine in their respective specialty area, remain
	current with new developments in medicine, and participate in life long
	learning activities, including research.
3. Patient Care	
4. Interpersonal and	Residents are expected to demonstrate interpersonal/communication
Communication Skills	skills that enable them to establish and maintain professional
	relationships with patients, families, and other members of health care
	teams.

Updated: