

ORTHOPAEDICS AND SPORTS MEDICINE

Elective Clerkships

Department website: <http://www.orthop.washington.edu/>

ORTHP 675 P- Clerkship in Orthopaedics (*, max 4)

Meets the surgery selective requirement.

Offered:	AWSpS; 2 weeks full-time.
Prerequisite:	Completion of HuBio series. Third-and fourth-year medical students. Permission to add or drop. <i>Note:</i> This clerkship can only be dropped if the student finds a replacement. No adds or drops within four weeks of the start of the rotation.
Total Enrollment:	1 student per rotation ASpS; 1 student in W
Faculty Contact:	Department of Orthopaedic Clinical Faculty
Administrative Contact:	Amanda Schwanz, 206-598-9965, amands4@u.washington.edu
Clerkship Sites:	Seattle area private practice/community

The student will spend full time with the preceptor during all his/her working day in order to gain a better understanding of the diagnosis and management of problems of the musculoskeletal system as seen in a private orthopaedic practice, both in the clinic and operating room. If the student has to drop the clerkship less than 4 weeks before the start of the rotation, it is the student's responsibility to find another medical student to take his or her place.

ORTHP 676 P- Pediatric Orthopaedics Clerkship (*, max 8)

Meets the surgery selective requirement.

Offered:	AWSpS; 4 weeks full-time.
Prerequisite:	Surgery required clerkship. Third- and fourth-year medical students.
Total Enrollment:	AWSpS - 1 student each rotation
Faculty Contact:	Vincent S. Mosca, M.D., Kit M. Song, M.D., Gregory A. Schmale, M.D., Thomas Jinguji, M.D., Cheryl Parker, PAC and James Foulsham, PAC
Administrative Contact:	Gregory A. Schmale, M.D. Zina Ivy 206-987-2519, zina.ivy@seattlechildrens.org
Clerkship Site:	Seattle Children's Hospital

Goals:

During the 4 week clerkship, students should be able to identify and describe the most common topics:

- Normal musculoskeletal variations of childhood, including:
 - developmental milestones,
 - torsion, i.e. in-/out-toeing,
 - flexible flatfoot,
 - bow-legs and knock-knees.
- General musculoskeletal diseases of childhood, including:
 - bone and joint infections,
 - hip diseases, such as developmental dysplasia, slipped capital femoral epiphysis,
 - spine deformity, such as scoliosis, back pain,
 - foot deformity, such as clubfoot,
 - limb deficiency and limb length inequality,
 - sports injury in the immature athlete,

- Musculoskeletal trauma, including:
 - fractures and dislocations as treated in the Emergency Department,
 - injuries managed in the outpatient setting,
 - casting and splinting.

Objectives:

At the completion of the clerkship experience the student should be able to:

- Make a reasonable and appropriate differential diagnosis.
 - Know the pertinent diagnostic categories and the likelihood of each.
- Students should be able to demonstrate the ability to perform a focused history and physical examination emphasizing evaluation of the spine and extremities in the pediatric and adolescent patient.
- Students should be able to choose the appropriate imaging studies for such conditions as hip dysplasia, Legg-Calve-Perthes disease and slipped capital femoral epiphysis, meniscus tears and anterior cruciate ligament disruptions and scoliosis.
- Provide the standard of care in the community.
 - Know what you're comfortable treating, and what should be referred.
- Identify conditions that warrant referral to the relevant specialty.
 - These conditions include displaced limb fractures, especially those about the elbow, hip dysplasia, progressive scoliosis, knee cartilage and ligament injuries and bone and joint infections.
 - Ask for assistance when it is necessary and warranted.

Schedule:

Each student will be assigned to one of the three full-time pediatric orthopaedic staff, with additional clinic time spent with Tom Jinguji, James Foulsham or Cheryl Parker. Whether the student attends clinic or operating room will depend upon the staff's schedule.

Monday	7:00-10:00 am	Orthopaedic Curriculum, UWMC-HS Bldg. RR 134 Grand Rounds on first Monday of the month at Harborview Research and Training Bldg.
	1:00 - 5:30 pm	Orthopaedics clinic, CHMC, P704 (Mosca, Parker). Operating rooms, CHMC (Song).
Tuesday		Orthopaedics clinic, CHMC, P704 (Song, Parker Conrad). Operating rooms, CHMC (Mosca and Schmale).
Wednesday	6:30 - 9:00 am	Working conference, CHMC, CS304 (all staff).
	9:00 am - 5:30 pm	Orthopaedics clinic, CHMC, P704 (Mosca, Jinguji, Parker) Operating rooms, CHMC (Schmale and Conrad).
Thursday	6:45 – 7:30 am	Didactic conference, CS-304 or cafeteria.
	7:30am – 5:30 pm	Operating rooms, CHMC (Song, Mosca).
	8:00am – 5:00 pm	Orthopaedics clinic (Schmale, Parker)
Friday	7:00 - 8:00 am	Didactic conference, Orthopaedic office, G-510.
	9:00 am - 5:30 pm	Orthopaedics clinic, CHMC, P704 (all staff). Operating rooms, CHMC (Song, Mosca).

Inpatients: The student will assist the resident on her/his team as indicated. This includes daily morning and afternoon rounds, as well as consultations.

Call: The student will take 1 weekend of call per rotation, during which time she/he will follow the resident on duty and assist as indicated. This is an essential part of practice from which both the future orthopaedist and the future non-orthopaedist will benefit.

Reading:

Staheli, L.T. *Principles of Pediatric Orthopedics*, 2001.

Presentations:

Case presentation: The student will give 1 half-hour case presentation at a Thursday or Friday morning conference. This will be done with the assistance of the chief resident, which will include subject selection, directed reading, synthesis and delivery of complete but concise information in an appropriate and relevant manner.

Evaluation:

1. By student, on <http://webq.catalyst.washington.edu/survey.cgi?user=carlinej&survey=5>
2. By Faculty, on Evaluation of Student Performance in the Clinical Curriculum.

ORTHP 677 P- Musculoskeletal Trauma (*, max 8)

Meets the surgery selective requirement.

Offered:	AWSpS; HMC; 4 weeks full-time.
Prerequisite:	Completion of HuBio series and SURG required clerkship. Third- and fourth-year medical students.
Total Enrollment:	4 students per rotation.
Faculty Contact:	Chris Allan, M.D., David Barei, M.D., Daphne Beingessner, M.D., Carlo Bellabarba, M.D., Steve Benirschke, M.D., Jens Chapman, M.D., Robert Dunbar, M.D., Doug Hanel, M.D., Sigvard Hansen, M.D., Brad Henley, M.D., James Krieg, M.D., Sohail Mirza, M.D., Sean Nork, M.D., Chip Routt, M.D., Bruce Sangeorzan, M.D., Doug Smith, M.D., Lisa Taitsman, M.D.
Administrative Contact:	Bruce Sangeorzan, M.D. bsangeor@u.washington.edu Janet Grant, 206/744-4631
Clerkship Site:	Harborview Medical Center

Goals:

General Orthopaedics, weighted toward musculoskeletal trauma.

- Musculoskeletal knowledge base including:
 - the approach to diagnosis of musculoskeletal injuries.
 - the treatment of simple musculoskeletal injuries.
 - understanding the difference between isolated injuries and polytrauma.
 - the biomechanics of tissue failure.
 - basic principles of tissue healing.
- Musculoskeletal traumatic conditions including:
 - fractures.
 - dislocations.
 - soft tissue injuries such as sprains and ligament disruptions.
 - conditions that affect mobility such as femoral neck fracture or spinal cord injury.

Objectives:

- During the 4 week clerkship, students should be able to identify and describe the most common surgical problems unique to orthopaedic trauma. These include fractures and dislocations of the upper and lower limbs, soft tissue injuries to the upper and lower limbs.
- Understand the impact of trauma on physical and social function and the impact on family and society.
- The student should be able to demonstrate the ability to perform a focused history and physical examination emphasizing neuro muscular function, sensation and motor control.
- Diagnosis and management of musculoskeletal injuries.
- In the operating room and/or clinic, students will be able to understand the anatomy, be able to interpret basic imaging studies of fractures and dislocations.

Evaluation:

1. By student, on <http://webq.catalyst.washington.edu/survey.cgi?user=carlinej&survey=5>
2. By Faculty, on Evaluation of Student Performance in the Clinical Curriculum.

ORTHP 678 P- Musculoskeletal Oncology (8/12)*Meets the surgery selective requirement.*

Offered:	AWSpS; UWMC; 4 weeks full-time.
Prerequisite:	Completion of HuBio series. Third- and fourth-year medical students.
Total Enrollment:	1 student per 4 week clinical rotation.
Faculty Contact:	Ernest U. "Chappie" Conrad III, M.D., FACS,; Jason Weisstein, M.D.
Administrative Contact:	Zina Ivy, 206-987-2519, zina.ivy@u.washington.edu
Clerkship Site:	UWMC

General:

The oncology rotation for medical students provides a basic understanding of the incidence of sarcomas and metastatic adenocarcinomas in adults and children. The general principles of oncology staging will be taught in addition to the fundamentals for imaging for staging and treatment parameters.

Goals:

Students are expected to learn the influence of both primary sarcomas of bone and soft tissue in addition to the incidence of Metastatic disease involving the skeleton in adults and children. The requirements for diagnosis of each sarcoma subtype and the principles for staging and evaluation are all expected goals. Parameters and complications of treatment will also be reviewed and discussed with the students.

Objectives:

Demonstrable proficiency with goals as stated.

Schedule:

Attendance at clinics and conferences associated with the Orthopaedic Tumor Service/Sarcoma Service at the University of Washington.

Monday	7:00-10:00 am	Orthopaedic Curriculum, UWMC-HS Bldg. RR 134 Grand Rounds on first Monday of the month at Harborview Research and Training Bldg.
	12:00 -1:00 pm	Sarcoma Conference, BB204.
	1:15 – 3:00 pm	Bone & Joint Clinic, Bone & Joint Center, 2nd floor, UWMC Roosevelt II.
Tuesday	7:00-8:00 am	Bone Tumor Conference, Seattle Children's Team Rm #2
	8:00 am -1:45 pm	Sarcoma Clinic at Seattle Cancer Care Alliance.
	2:00-6:00 pm	Bone Tumor Clinic – Seattle Children's
Wednesday	7:00-8:30 am	Seattle Children's Preop Conference, Rm R3478
	8:30-5:00 pm	Seattle Children's OR, Rm #14 or #8
Thursday	6:30 - 8:30 am	UWMC Ortho Preop Conference.
	7:45am – end	UWMC OR, Rooms 8 and 9
Friday	1:00-6:00 pm	Seattle Children's Clinic, Team Rm #2

Readings/texts:

Readings are required. Sharon Weiss, *Soft-Tissue Sarcomas*, and Les Wold, *Tumor Atlas*.

Additional readings, suggested texts and monographs may be obtained from the Tumor Service office in BB1033A.

Evaluation:

1. By student, on <http://webq.catalyst.washington.edu/survey.cgi?user=carlinej&survey=5>
2. By Faculty, on Evaluation of Student Performance in the Clinical Curriculum.

ORTHP 680 P- General Orthopædic Clerkship (*, max 8)

Meets the surgery selective requirement.

Offered:	AWSpS; 4 weeks full-time.
Prerequisite:	Surgery required clerkship. Third- and fourth-year medical students.
Total Enrollment:	2 students by 4 week rotation.
Faculty Contact:	Howard Chansky, M.D., Theodore Greenlee, M.D., John Sack, M.D., Bruce Sangeorzan, M.D., Richard Bransford, M.D.
Administrative Contact:	Howard A. Chansky, M.D. Cynthia Lostoski, 206-277-1105, cynthia.lostoski@va.gov
Clerkship Sites:	Veterans Affairs Medical Center

Goals:

Clerkship content, or what student should expect at the beginning.

- General orthopædic service. This represents the bulk of the general orthopædic care delivered at VAMC and is directed by Dr. Chansky, Dr. Greenlee and Dr. Bransford.
- Shoulder:
 - rotator cuff
 - Instability
 - arthritis
- Knee:
 - arthritis
 - meniscal tear
 - ligament tear
- Hip:
 - arthritis
 - osteonecrosis
 - fracture
- Musculoskeletal infections:
 - osteomyelitis
 - septic arthritis
 - native joint
 - prosthetic joint
- Soft tissue infection:
 - cellulites
 - suppurative tenosynovitis
 - septic bursitis
 - abscess
 - necrotizing fasciitis

The hand service is directed by Dr. Sack and entails the care of a wide range of degenerative and traumatic conditions.

The amputation, foot and ankle service is directed by Dr. Sangeorzan and is focused on the care of veterans with vasculopathy and diabetes mellitus as well as more generalized foot and ankle diseases.

The spine service, directed by Dr. Bransford in conjunction with the Neurosurgery service, focuses on adult reconstructive spine surgery.

Rotation on these services is available by permission of Dr. Chansky.

Objectives:

- Medical care of the orthopædic patient:
 - obtain necessary but not excessive preoperative studies according to published guidelines,
 - obtain appropriate consultations,
 - triage patients who should be admitted to a medical service or intensive care unit,
 - perioperative care and discharge of orthopædic patients.
- Evaluation of patients in the emergency department.
- Outpatient orthopædics:
 - basic exam for each joint and spine,
 - indications for appropriate radiographic and laboratory studies,
 - appropriate period of follow-up, when to discharge patient from care,
 - low back pain,
 - when to work-up
 - imaging – what studies and when to get them
 - nonoperative treatment
 - osteoarthritis – primary and secondary, shoulder, knee, hip,
 - risk factors, history and physical
 - nonoperative management – literature
 - Tylenol/NSAIDs
 - aides
 - shoe inserts/unloading braces
- Manual and other basic skills:
 - Suturing,
 - dressings/casts,
 - patient positioning, prepping and draping.

Schedule:

Each student will be assigned to one of the four full-time pediatric orthopædic staff. Whether the student attends clinic or operating room will depend upon the staff's schedule.

Monday	7:00-10:00 am	Orthopædic Curriculum, UWMC-HS Bldg. RR 134 Grand Rounds on first Monday of the month at Harborview Research and Training Bldg
	1:00 - 6:00 pm	Orthopædic follow-up clinic, East clinic (Chansky)
Tuesday	7:30 am -2:00 pm	Orthopaedic Hand Clinic, East Clinic (Sack) Hand & Elbow Surgery, operating rooms (Sack)
	7:30 - 8:30 am	Amputation Rounds (Sangeorzan)
Wednesday	7:30-8:30 am	M&M Conference (Chansky, Greenlee, Bransford)
	8:30 am - 5:30 pm	Operating rooms (Chansky, Greenlee, Bransford)
Thursday	8:00 am -12:00 pm	General Orthopædic Clinic, East Clinic (Greenlee)
	1:00 - 5:30 pm	New Patient Clinic, East Clinic (Bransford)
Friday	7:30 am -3:30 pm	Operating rooms (Chansky, Greenlee, Bransford, Sangeorzan)
	1:00 – 6:00 pm	Ortho Spine Clinic, East Clinic (Ananthakrishnan)

Inpatients: The student will assist the residents on daily morning and afternoon rounds, as well as consultations.

Call: Call is from home. The student will spend one weekend on call with the R-4 orthopædic resident.

Reading:

Campbell's Operative Orthopædics. Canale, S.T., ed., Mosby, 1998.

Evaluation:

1. By student, on <http://webq.catalyst.washington.edu/survey.cgi?user=carlinej&survey=5>
2. By Faculty, on Evaluation of Student Performance in the Clinical Curriculum.

ORTHP 681 P-Sports Medicine Orthopædic Clerkship (8)*Meets the surgery selective requirement.*

Offered:	AWSpS; 4 weeks full-time.
Prerequisite:	Surgery required clerkship. Third- and fourth-year medical students.
Total Enrollment:	1 student per 4 week clinical rotation
Faculty:	John Green III, M.D., Roger Larson, M.D., Carol Teitz, M.D., "Trey" Green and Chris Wahl
Administrative Contacts:	"Trey" Green, M.D. 206 / 543-6595, jgreen3@u.washington.edu Deidra M. Montoya, 206-543-6595, dmontoya@u.washington.edu
Clerkship Site:	UW Sports Medicine Clinic, Hec Edmundson Pavilion

Objectives:

When the clerkship is completed the student will be able to:

- Perform and present a history and directed physical exam of patients presenting with sports-related musculoskeletal complaints,
- Recite a differential diagnosis for knee pain in the active patient (with and without a history of injury):
 - < 20 y.o.
 - 20-40 y.o.
 - > 40 y.o.
- Recite a differential diagnosis for shoulder pain in the active patient (with and without a history of injury),
- Describe the differential diagnosis for patients presenting with a post-traumatic hemarthrosis of the knee,
- List the common treatment recommendations for a patient with patellofemoral pain,
- Describe the expected history and physical findings in a patient with tendonitis, stress fracture, torn meniscus, ACL tear, rotator cuff tear, shoulder dislocation, AC separation, ankle sprain.

Schedule:

Each student will follow the orthopædic resident on the Sports Medicine Service. The resident changes schedules in the middle of a 10 week rotation so as to maximize contact with different faculty members. Depending on when the student arrives, the resident may be on schedule A or schedule B.

Schedule A:

Monday	7:00-10:00 am	Orthopædic Curriculum, UWMC-HS Bldg. RR 134 Grand Rounds on first Monday of the month at Harborview Research and Training Bldg.
		Grand Rounds on first Monday of the month at Harborview Research and Training Building
	11:00 am	Operating rooms (Green)
Tuesday	8:00 am -5:30 pm	Operating rooms (Larson)
Wednesday	8:00 am -3:00 pm	Sports Medicine Clinic (Larson)
Thursday		<i>ad lib</i>
Friday	7:30 am - 5:30 pm	Operating rooms (Larson)

Schedule B:

Monday	7:00-10:00 am	Orthopædic curriculum, UWMC-HS Bldg. RR 134
		Grand Rounds on first Monday of the month at Harborview Research and Training Building
	11:00 am	Operating rooms (Green)
Tuesday	8:00 am -3:00 pm	Sports medicine clinic (Green)
Wednesday		<i>ad lib</i>
Thursday	8:00 am -3:00 pm	Sports medicine clinic (Green)
Friday	7:30 am - 5:30 pm	Operating rooms (Green)
Call		Take call with the orthopaedic resident (usually Thursday)

Reading:

Orthopædics Clerkship Syllabus.

Evaluation:

1. By student, on <http://webq.catalyst.washington.edu/survey.cgi?user=carlinej&survey=5>
2. By Faculty, on Evaluation of Student Performance in the Clinical Curriculum.

ORTHP 682 P-Outpatient Orthopædics (8)

Meets the surgery selective requirement.

Offered:	AWSpS; 4 weeks full-time.
Prerequisite:	Surgery required clerkship. Third- and fourth-year medical students.
Total Enrollment:	1 student per 4 week clinical rotation
Faculty:	Frederick Matsen III, M.D., Winsont Warme, M.D., Chappie Conrad, M.D., Thomas Trumble, M.D., Michael Lee, M.D., Jens Chapman, M.D., Trey Green, M.D., Roger Larson, M.D., Carol Teitz, M.D. John O'Kane, M.D. and Chris Wahl, M.D.
Administrative Contacts:	Carol Teitz, M.D., teitz@u.washington.edu , 206-543-6495 Deidra M. Montoya, 206-543-6595, dmontoya@u.washington.edu
Clerkship Site:	UWMC Bone and Joint Center

Goals:

Clerkship content, or what to expect:

Musculoskeletal knowledge base, including:

- normal alignment and joint range of motion,
- basic biomechanics,
- basic bone pathophysiology.
- General musculoskeletal diseases, including:
 - bone and joint infections,
 - hip conditions, such as osteoarthritis, rheumatoid arthritis, avascular necrosis,
 - spine conditions, such as spinal stenosis, disc disease, adult scoliosis, back pain,
 - foot conditions, such as bunions, flatfoot or cavus deformities, tendonitis,
 - hand conditions, such as carpal tunnel syndrome, osteoarthritis and rheumatoid arthritis,
 - shoulder diseases, such as recurrent dislocations, osteoarthritis, frozen shoulder,
 - sports injury in the athlete,
 - tumors of bone and soft tissue.
- Musculoskeletal trauma, including:
 - fractures and dislocations as treated in the Emergency Department,
 - injuries managed in the outpatient setting,
 - casting and splinting.

Objectives:

What you will be able to do for musculoskeletal problems in adult outpatient setting, or what we expect at the end:

- Make a correct diagnosis.
 - know what you're dealing with, and don't miss anything important.
- Perform an acceptable work-up.
 - perform a basic but thorough evaluation, including physical examination, imaging studies, laboratories.
- Provide the standard of care in the community.
 - treat what you're comfortable treating.
- Seek an appropriate referral.
 - ask for help when it is necessary and warranted.

Schedule:

Each student will be assigned to one of the full-time orthopaedic staff. Whether the student attends clinic or operating room will depend upon the staff's schedule.

Monday	AM	Basic Orthopaedic Curriculum (Monday Morning Conference), UWMC-HS Bldg. RR 134 Grand Rounds on first Monday of the month at Harborview Research and Training Building
	PM	Tumor Clinic (Dr. Conrad) – at Bone & Joint Center
Tuesday	AM	Sports Medicine Clinic (Dr. Teitz) at the Sports Medicine Clinic
	PM	Spine Clinic (Dr. Chapman/Dr. Lee) - at Bone & Joint Center
Wednesday	AM	Hand Clinic (Dr. Trumble) at Bone & Joint Center or preparation time
	PM	Hand Clinic (Dr. Trumble) - at Bone & Joint Center
Thursday	AM	Hip/Knee Arthritis (Dr. Leopold) - at Bone & Joint Center
	PM	Hip/Knee Arthritis (Dr. Leopold) - at Bone & Joint Center or Preparation Time
Friday	AM	Shoulder Clinic (Dr Matsen/Dr. Warme/Fellow/Resident on rotation) –at Bone and Joint Center.
	PM	Shoulder Clinic (Dr Matsen/Dr. Warme/Fellow/Resident on rotation) –at Bone and Joint Center.

Call: The student will take 1 weekend of call per rotation, during which time she/he will follow the chief resident on duty and assist as indicated. This is an essential part of practice from which both the future orthopaedist and the future non-orthopaedist will benefit.

Evaluation:

1. By student, on <http://webq.catalyst.washington.edu/survey.cgi?user=carlinej&survey=5>
2. By Faculty, on Evaluation of Student Performance in the Clinical Curriculum.

Reading:

Fundamentals of Orthopaedics, Mark R. Brinker, Mark D. Miller.
Campbell's Operative Orthopaedics, S. Terry Canale, ed.

Other:

Case presentation: The student will give 1 half-hour case presentation at Thursday morning conference. This will be done with the assistance of the chief resident, which will include subject selection, directed reading, synthesis and delivery of complete but concise information in an appropriate and relevant manner.

Presentations:

Case presentation: The student will present cases at one Tuesday morning preoperative conference. This will be done with the assistance of the senior resident, which will include synthesis and delivery of complete but concise information in an appropriate and relevant manner.

ORTHP 684 P-Adult Reconstructive Spine Surgery for Orthopaedics Clerkship (8)

Offered:	AWSpS; 4 weeks full time
Total Enrollment:	1 student per 4 week clinical rotation
Prerequisite:	Surgery required clerkship. Third- and fourth-year medical students.
Faculty Contact:	Ted Wagner, M.D., Jens Chapman, M.D., Michael Lee, M.D.
Administrative Contact:	Erin Van Antwerp (206)543-7195 etwerp@u.washington.edu
Clerkship Site:	UWMC

Goals:

- Initial evaluation of the spine:
 - understand and be able to perform a complete physical examination of the spine,
 - special diagnostic tests for the spine.
- Disorders of the spine:
 - understand the differences between surgical and nonsurgical spine disorders,
 - understand what disorders constitute a surgical emergency,
 - understand the complete spectrum of nonsurgical management of spine disorders,
 - understand surgical indications,
 - understand the relative contraindications for spine surgery,
 - understand the risks of spine surgery,
 - understand the postoperative care and rehabilitation of spine surgery patients.

Objectives: At the end of the clerkship, the student should be able to:

When the clerkship is completed the student will be able to:

- Perform a thorough history and physical examination of a patient presenting with a spine abnormality
- Understand the appropriate diagnostic tests based on a differential diagnosis established after a history and physical examination
- Have a basic understanding of the type of surgery necessary for differing types of spine disorders
- Understand what types of problems are appropriate for primary care management and what spine problems require referral to a spine surgeon

Schedule:

The student will be assigned to work with any of the spine surgeons at the University of Washington who have clinic or operative cases as delineated below.

Schedule:

Monday	7:00-10:00 am	Basic Orthopaedic Curriculum, UWMC-HS Bldg. RR 134
		Grand Rounds on first Monday of the month at Harborview Research and Training Building
Tuesday	7:00 am – 8:30 am 8:30 am – 5:00 pm	Rounds. Spine preoperative conference, South Campus Center. Spine Clinic at Roosevelt Bone and Joint Center (Chapman/Wagner)
Wednesday	9:00 am - 5:30 pm	Rounds, Operating at UWMC (Chapman/Wagner)
Thursday	6:30 - 8:00 am	Orthopedic Curriculum UWMC – HS Bldg. RR134 Operating at UWMC/Research(Chapman / Wagner/ Ananthakrishnan / Bransford / Mirza)

Friday	7:30 am -5:30 pm	Operating at UWMC/Research (Chapman / Wagner/ Ananthakrishnan / Bransford / Mirza)
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Inpatients: The student will assist the resident on her/his team including daily morning rounds, consultations, and in operative cases.

Call: The student will take one weekend of call per rotation, during which time she/he will follow the resident on duty and assist in evaluating acute spine abnormalities/trauma.

Reading:

Physical Examination of the Spine and Extremities

Evaluation:

1. By student, on <http://webq.catalyst.washington.edu/survey.cgi?user=carlinej&survey=5>
2. By Faculty, on Evaluation of Student Performance in the Clinical Curriculum.

Presentations:

Case presentation: The student will present cases at one Tuesday morning preoperative conference. This will be done with the assistance of the senior resident, which will include synthesis and delivery of complete but concise information in an appropriate and relevant manner.

ORTHOP 685 P-Adult Reconstructive Orthopædics Clerkship (8)

Meets the surgery selective requirement.

Offered:	AWSpS; 4 weeks full-time
Prerequisite:	Surgery required clerkship. Third- and Fourth-year medical students.
Total Enrollment:	1 student per 4 week clinical rotation
Faculty:	Seth Leopold, M.D.
Administrative Contacts:	Leslie Meyer, 206/221-5084, meyerla@u.washington.edu
Clerkship Sites:	UWMC, UWMC Bone Joint Center (Roosevelt 2), Eastside Specialty Center, Bellevue

Goals:

- Physical Examination of the Hip:
 - understand and be able to perform a complete physical examination of the hip,
 - be familiar with special diagnostic tests for the hip.
- Physical Examination of the Knee:
 - understand and be able to perform a complete physical examination of the knee in older adults,
 - be familiar with special diagnostic tests for the knee in older adults.
- Arthritis of the Hip and Knee:
 - understand the basics of hip and knee arthritis,
 - understand the basics of non surgical treatment of hip and knee arthritis,
 - be familiar with the role of surgery for patients with hip and knee arthritis,
 - be familiar with the contraindications for hip and knee replacement.

Objectives:

When the clerkship is completed the student will be able to:

- Identify, based on radiographic and clinical data the presence of osteoarthritis, avascular necrosis and other common degenerative conditions affecting the hip and knee,
- Understand the general indications and contraindications for reconstructive (joint replacement) surgery on the adult hip and knee,
- The student should be able to demonstrate the ability to perform a focused history and physical examination on the adult hip and knee. The student should also be able to identify the common “red flag” signs that would contraindicate elective surgery on those joints,

- The student will be able to identify conditions that warrant referral to the hip and knee service and also be able to formulate a plan for initial non-operative management of adults with degenerative conditions of those joints who present for evaluation,
- Suggest appropriate diagnostic tests based on a differential diagnosis established after a history and physical examination,
- Suggest an appropriate course of non surgical treatment for a patient presenting hip or knee arthritis,
- Identify patients for whom surgery would not be appropriate,
- In the operating room and/or clinic, students will be able to demonstrate and sharpen skills in basic surgical techniques such as knot-tying and suturing,
- Students should be able to list the use of appropriate imaging studies for the common conditions affecting the adult hip and knee.

Schedule:

Each student will be assigned to work Dr. Leopold at the University of Washington.

Monday	7:00-10:00 am	Orthopaedic Curriculum, UWMC-HS Bldg. RR 134 Grand Rounds on first Monday of the month at Harborview Research and Training Bldg.
	10:00 am - 5:30 pm	Operating Room with Dr. Leopold
Tuesday	8:00 am -5:30 pm	Operating Room with Dr. Leopold
Wednesday	9:00 am - 5:00 pm	Clinic at the Eastside Specialty Center with Dr. Leopold
Thursday	6:30 am – 8:00 am	UWMC Conference, RR-134
	9:00 am - 5:00 pm	Clinic at UWMC Bone and Joint Center with Dr. Leopold
Friday	8:00 am - 5:00 pm	Clinic at the Eastside Specialty Center with Dr. Leopold

Inpatients: The student will assist the resident on her/his team as indicated. This includes daily morning and afternoon rounds, as well as consultations.

Call: The student will take call with the resident on the reconstruction service, typically Mondays and one weekend a month, during which time she/he will follow the resident on duty and assist as appropriate.

Reading:

Physical Examination of the Spine and Extremities (Hoppenfeld), Orthopaedic Knowledge Update: Hip and Knee-2.

Evaluation:

1. By student, on <http://webq.catalyst.washington.edu/survey.cgi?user=carlinej&survey=5>
2. By Faculty, on Evaluation of Student Performance in the Clinical Curriculum.

Other:

Student will participate in Monday and Thursday morning conferences at a level appropriate for a fourth-year medical student.

ORTHP 687 P-Shoulder and Elbow (8)

Meets the surgery selective requirement.

Offered:	AWSpS; 4 weeks full-time.
Prerequisite:	Surgery required clerkship. Third- and fourth-year medical students.
Total Enrollment:	1 student per 4 week clinical rotation
Faculty:	Frederick A. Matsen III, M.D., Winton Warme, M.D.
Administrative Contacts:	Fred Westerberg, 206-543-3690, fwesterb@u.washington.edu
Clerkship Sites:	UWMC

Objectives:

- Obtain a basic, relevant knowledge of shoulder and elbow anatomy and pathology. This may be achieved by:
 - reading and understanding the material listed above under “reading”
 - reviewing Dr. Douglas Harryman's videos entitled, *Safe and Effective Surgical Approaches to the Shoulder and Mechanisms of Glenohumeral Stability*.
- Evaluate and develop management plans for patients with shoulder and elbow problems by:
 - conducting a thorough/efficient clinical history and physical examination,
 - understanding the implications of systemic, emotional, and situational factors to the treatment of shoulder and elbow problems,
 - understanding the relationship of conditions of the neck and brachial plexus to symptoms and findings in the shoulder and elbow area,
 - understanding the indications for and interpretation of standard radiographs, CTs, MRIs, and sonograms of the shoulder and elbow,
 - understanding the relevant basic science and anatomy (gross and arthroscopic) related to the shoulder and elbow,
 - presenting basic treatment options, including home exercises, medications and surgery along with the alternatives and risks of each,
 - understanding the diagnosis and treatment for a core group of shoulder problems including:
 - stability (atraumatic and traumatic instability),
 - stiffness (localized, global, idiopathic, diabetic, post-traumatic, and post-surgical),
 - smoothness (OA, RA, AVN, capsulorrhaphy arthropathy, cuff tear arthropathy, post-traumatic DJD, snapping scapula, and subacromial roughness),
 - strength (rotator cuff tears and nerve lesions),
 - biceps tendonitis,
 - AC joint problems (DJD and separation),
 - trauma (clavicular, scapular, and proximal humeral fractures).
 - understanding the diagnosis and treatment for a core group of elbow problems including:
 - instability (acute and chronic ligament insufficiency),
 - stiffness (post-traumatic, post-surgical, heterotopic ossification),
 - smoothness (OA, RA, and post-traumatic DJD),
 - strength (distal biceps ruptures and nerve lesions),
 - medial and lateral epicondylitis,
 - olecranon bursitis,
 - loose bodies,
 - entrapment neuropathies,
 - trauma (distal humerus, radial head, olecranon, coronoid fractures).
 - understanding appropriate rehabilitation protocols and schedules for various shoulder and elbow problems, both conservative and post-operative.

Schedule:

Each student will be assigned to work with both of the Shoulder and Elbow Surgery Staff at the University of Washington.

Monday	7:00-10:00 am	Basic Orthopædic Curriculum, UWMC-HS Bldg. RR 134 Grand Rounds on first Monday of the month at Harborview Research and Training Building
	10:00 am - 5:00 pm	Orthopædic Clinic, Bone & Joint Center (Matsen)
Tuesday	8:00 am -5:30 pm	Operating rooms (Matsen)
Wednesday	7:30 am - 7:00 pm	Research Day/Call with third - year orthopædic resident
Thursday	6:30 – 8:30 am	Orthopædics Conference, UWMC RR-134
Friday	7:30 am - 5:30 pm	Orthopædic Clinic, Bone & Joint Center, (Matsen)

Inpatients: The student will assist the resident on her/his team as indicated. This includes daily morning and afternoon rounds, as well as consultations.

Call: The student will take 1 weekend of call per rotation, during which time she/he will follow the resident on duty and assist as indicated. This is an essential part of practice from which both the future orthopaedist and the future non-orthopaedist will benefit.

Reading:

Surgical Exposures in Orthopaedics: The Anatomic Approach
Physical Examination of the Spine and Extremities
Practical Evaluation and Management of the Shoulder
The Shoulder
The Elbow and Its Disorders

Evaluation

1. By student, on <http://webq.catalyst.washington.edu/survey.cgi?user=carlinej&survey=5>
2. By Faculty, on Evaluation of Student Performance in the Clinical Curriculum.

Other:

Case presentation: The student may give one 15-30 minute case presentation at Thursday morning conference. This will be done with the assistance of the house staff, which will include subject selection, directed reading, synthesis and delivery of complete but concise information in an appropriate and relevant manner.

ORTHP 697 P- Orthopaedic Special Elective (*, max 12)

Offered:	AWSpS; 4 weeks full-time.
Total Enrollment:	Open
Prerequisite:	Permission of department. Completion of HuBio series. + 2 month application process
Faculty Contact:	Dr. Greg Schmale
Administrative Contact:	Amanda Schwanz, 206 598-9965, amands4@u.washington.edu

By specific arrangement for qualified students, special clerkships or 'away clerkships' may be available at institutions other than the University of Washington. Interested students should submit a "Credit for Away Clerkship" form available from the UWSOM Dean's Office Registrar and complete for departmental approval at least two months before advance registration.

Evaluations:

Departmental evaluations are required to be completed by faculty and student prior to receiving a grade.

Additional requirements:

- The student will write a letter of personal goals and objectives. The letter will indicate the student's intent, focus, desired experience and description of the teaching site.
- A letter from your preceptor which states an agreement to precept you, a brief description of the types of experiences you will likely be exposed to, as well as a brief description of the patient population. The student must have the preceptor mail this letter or via email to Amanda Schwanz before registration will be finalized.

ORTHP 699 P- WWAMI Orthopaedics Special Electives (*,max 24)

Offered:	AWSpS; 4 weeks full-time.
Prerequisite:	Permission of department. + 2 month application process
Total Enrollment:	Variable.
Faculty Contact:	Greg Schmale, M.D.
Administrative Contact:	Amanda Schwanz, 206 598-9965, amands4@u.washington.edu

By specific arrangement for qualified students, special clerkships or 'away clerkships' may be available at institutions other than the University of Washington located within the WWAMI region. Interested

students should obtain a "Credit for Away Clerkship in WWAMI" form available from the UWSOM Dean's Office Registrar and complete for departmental approval at least two months before advance registration.

Evaluations:

Departmental evaluations are required to be completed by faculty and student prior to receiving a grade.

Additional requirements:

- The student will write a letter of personal goals and objectives. The letter will indicate the student's intent, focus, desired experience and description of the teaching site.
- A letter from your preceptor which states an agreement to precept you, a brief description of the types of experiences you will likely be exposed to, as well as a brief description of the patient population. The student must have the preceptor mail this letter or via email to Amanda Schwanz before registration will be finalized.

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