

**Physician Assistant Post–Graduate  
Orthopaedic Surgery Fellowship  
Program**

**Watauga Orthopaedics**

# Physician Assistant Post-Graduate Fellowship Program in Orthopaedic Surgery

Required Texts:

1. Backache

Macnab, I and McCulloch, J  
Williams and Wilkins

2. Physical Examination of the Spine and Extremities

Hoppenfeld, S.  
Appleton & Lange

3. Handbook of Fractures, Second Edition

Koval, K.J. and Zuckerman, J.D.  
Lippincott Williams and Wilkins

4. Treatment & Rehabilitation of Fractures

Hoppenfeld, S. and Murthy, V.  
Lippincott Williams and Wilkins

- Each PA fellow is required to submit one article for journal publication prior to completion of the program.
- Attendance of an AO/ASIF trauma course is strongly recommended.

Required equipment:

Eye Protection

Stethoscope

Ruler/tape measure

Lab Coat

Heavy Duty Scissors

## **Spine Service**

Duration: 2 weeks

Attending Physician: Richard W. Duncan, MD and Clint P. Hill, MD

Required text: Backache

Learning objectives:

1. Able to perform a history and physical exam specific to spine patients
2. Be familiar with interpretation of plain x-rays and MRI scans of the spine
3. Exhibit proficiency as a 1<sup>st</sup> assistant in spine surgery, including use of a surgical microscope, and spinal instrumentation.
4. Accurately describe common spine fractures, including mechanism of injury and treatment options.

Required readings:

Backache, MacNabb

Spine Trauma, Levine, A.M.

Chapters, 3, 4, 16, 19 – 22, 24, 27

Textbook of Spinal Disorders, Esses, S.I.

Chapt. 14

# Foot/ Ankle Service

Duration: 2 weeks

Attending Physician: Karen J. McRae,MD

Required Text: None

Learning Objectives:

1. Show proficiency in performing a comprehensive foot/ ankle exam based on the examiners knowledge of anatomic structures and physiologic function of nerves, vessels, muscles, tendons, ligaments, and bones.
2. Recognize contribution of overall lower extremity alignment and how this may put the patient “at risk” for injury in athletes, and non-athletes.
3. Be able to perform routine foot/nail care for the diabetic patient.
4. Differentiate between Grade I, II, and III ankle sprains, and develop an appropriate treatment plan based on level of injury.
5. Recognize and develop an appropriate treatment plan for the common “over use” injuries of the foot/ankle. i.e Achillies tendonitis, plantar fasciitis, posterior tibial tendonitis.
6. Diagnose and treat acute Achillies tendon rupture, and know the risks/benefits of surgical vs. non-surgical treatment.
7. Develop appropriate diagnostic plan for differentiating between acute charcot arthropathy vs. infection in the diabetic patient.
8. Perform a toe, ray, and ankle anesthetic block.
9. Be able to appropriately order basic shoe inserts/modifications for patients with hindfoot, midfoot, and forefoot deformities/arthritis.
10. Apply a short leg splint and cast correctly.
11. Apply a Jones dressing.

Required readings: Surgery of the Foot and Ankle, 6<sup>th</sup> ed. Mann and Coughlin  
Chapters : 1, 2, 5, 19, 22, 27

## **Sports Medicine Service**

Duration: 2 weeks

Attending Physician: Todd A. Fowler, MD

Required text: Physical examination of the Spine and Extremities, Hoppenfeld

Learning Objectives:

1. Become proficient in Orthopaedic history and physical exam.
2. Be familiar with common sports injuries and their treatment.
3. Understand which injuries are indicated for orthopaedic surgical referral.
4. Become familiar with Athletic Trainers, and their function in sports medicine
5. Exhibit familiarity with bracing techniques for upper and lower extremity problems.  
(i.e. Tennis elbow, patella subluxation)
6. Understand the “team approach” to Sports Medicine coverage; including the role of MD, P.T. , ATC, PA-C, and others.

Recommended readings: The Team Physician Handbook, Mellion

# **General Orthopaedics/ Adult Reconstruction**

Duration: 12 weeks

Attending Physicians: Robert J. DeTroye, MD  
Joseph D. Grant, MD  
Marc A. Aiken, MD  
Calvin J. Johnson, MD  
Gregory L. Stewart, MD

Required texts: Fractures and Dislocations, Alpert  
Physical Examination of the Spine and Extremities, Hoppenfeld  
Surgical Exposures in Orthopaedics, Hoppenfeld and deBoer  
Essentials of Hand Surgery, ASSH

Learning Objectives:

1. Identify the radiographic signs of OA, and RA
2. Identify the indication for cemented, hybrid, and cementless total joint arthroplasty. Show an understanding for the importance of proper implant selection for joint instability, and/or salvage procedures.
3. Show proficiency in 1<sup>st</sup> assisting for total joint arthroplasty and trauma surgery. To include proper use of a fracture table, and patient positioning.
4. Accurately describe and classify fractures of the long bones and pelvis, and be able to discuss treatment options.
5. Show proficiency in pre-operative templating of total joint arthroplasties.
6. Develop a DVT prophylaxis protocol for THR and TKR patients.
7. Write post operative orders for THR and TKR patients. Include DVT prophylaxis, P.T., pulmonary toilet care, and antibiotics.
8. Show and understanding of possible post-op complications and their management. Include, bleeding, compartment syndrome, nerve deficit, CSF leak, and DVT.

Required Readings: none

## **Physical/ Rehab. Medicine**

Duration: 2 weeks

Attending Physician: Mark T. McQuain,MD

Required texts: none

Learning Objectives:

1. Obtain a history and physical from patients with a chief complaint of “back pain”.
2. Construct a plan of care for the patient listed above.
3. Understand reasoning and justification of requesting EMG testing.
4. Review plain radiographs and MRI scans of the axial skeleton and use that information to accurately initiate a plan of care for the above listed patients.
5. Accurately pull pertinent information from a patients chart for musculoskeletal work up.
6. Be familiar with proper recording of joint ROM and tables of functional impairment as per AMA guidelines.

Required readings: none

## **Radiology**

Duration: 1 week

Attending Physician: Radiology technician staff

Required text: None

Learning Objectives:

1. Understand and demonstrate the necessity of proper labeling of radiographs for accuracy.
2. Show proper positioning of the patient to always achieve two views of the desired structure.
3. Differentiate which x-rays to order for a specific anatomical part. (i.e. shoulder vs. proximal humerus)
4. Show an understanding of how to achieve good radiograph readability and quality.
5. Understand when it is appropriate to hyper-extend, use weights, stress, or rotate a patient in order to achieve the desired radiograph.

## **Outpatient Fractures / Acute Care**

Duration: 2 Weeks

Attending: Greg Cowen, PA-C

Required Text: Handbook of Fractures, Koval & Zuckerman

Learning Objectives:

1. Demonstrate an understanding of the role of a P.A. in a fracture clinic setting for maximizing patient care and physician efficiency.
2. Utilize appropriate criteria for surgical fracture treatment and decision making.
3. Understand and perform simple orthopaedic splinting and casting.
4. Exhibit a firm understanding of fracture description.
5. Understand and perform simple orthopaedic wound care and repair.

## **Physical Therapy**

Duration: 1 week

Attending: David Graham, PT, ATC

Required Text: None

Learning Objectives:

1. Demonstrate the ability to write a complete Physical Therapy prescription for some common conditions.
2. Understand the correct indications for cryotherapy, ultrasound, heat therapy, and phonophoresis.
3. Develop a plan for post –operative rehabilitation for an athlete after arthroscopic knee surgery. How is this different from a non-athlete ?