

Updated 2/10/10

## Columbia/NYOH Department of Orthopaedics Hip and Knee Service Competency Requirements

### Patient Care

Faculty will evaluate the resident's ability to obtain a History and Physical examination (H & PE) and appropriate diagnostic tests and formulate a treatment plan for outpatients and inpatient consults.

In the operating room, the faculty will evaluate the resident's familiarity with the patient, the indications for surgery, rationale for the working diagnosis (Dx), understanding of the surgical treatment plan, ability to execute the operative plan, and understanding of the post-operative treatment plan.

Residents will be evaluated by mid-cycle and end of rotation faculty feedback, on-the-fly faculty feedback, case presentation, operative case log, 360 degree surveys, and self assessment.

PGY- 1,2,3 Resident Goals & Objectives:	PGY 4,5 Resident Goals and Objectives
<p>The resident will:</p> <ol style="list-style-type: none"> <li>1. Effectively able to evaluate the following systemic conditions affecting the hip or knee via a thorough H&amp;P:               <ol style="list-style-type: none"> <li>a. Osteoporosis</li> <li>b. Osteoarthritis</li> <li>c. Rheumatoid Arthritis</li> <li>d. Osteonecrosis (ON)</li> <li>e. Ankylosing Spondylitis</li> <li>f. Gout</li> <li>g. Sickle Cell Disease</li> <li>h. HIV</li> <li>i. Paget's Disease</li> <li>j. Metastatic Disease</li> <li>k. Reflex Sympathetic Dystrophy</li> <li>l. Workman's Compensation Issues</li> <li>m. Heterotopic ossification</li> <li>n. Deep venous thrombosis</li> </ol> </li> <li>2. Effectively demonstrate that he/she can competently:               <ol style="list-style-type: none"> <li>a. Obtain a comprehensive <b>history</b></li> </ol> </li> </ol>	<p>The resident will:</p> <ol style="list-style-type: none"> <li>1. Demonstrate mastery of all PGY 2,3 level goals and objectives</li> <li>2. Demonstrate understanding of the anatomy and surgical plan for:               <ol style="list-style-type: none"> <li>a. Revision total hip and knee arthroplasty including                   <ol style="list-style-type: none"> <li>i. Pre-operative planning</li> <li>ii. Implant choice</li> <li>iii. Use of allograft</li> </ol> </li> <li>b. Vascularized free fibula grafting</li> <li>c. Advanced fracture fixation methods</li> <li>d. Knee arthrodesis</li> <li>e. Resection arthroplasty of the hip and knee</li> <li>f. Two stage reimplantation for infection</li> </ol> </li> <li>3. Demonstrate knowledge of the surgical approach and anatomy for all operative procedures including elective and emergent cases.</li> </ol>

- b.** Perform any relevant condition-specific **PE**
- c.** Identify appropriate diagnostic **studies**
- d.** Formulate a differential and make an accurate final **Dx**
- e.** Outline the **etiology**, or possible etiologies of the specific condition
- f.** Outline the **natural history** of the specific condition with and without surgical treatment (Tx)
- g.** Describe appropriate **non-operative Tx options**
- h.** Describe appropriate **operative Tx options** (if they exist)
- i.** Describe possible **complications** of each Tx
- j.** Outline the **rehabilitation program** involved for each Tx
- k.** Outline the **prognosis** of non-operative and operative treatment in order to evaluate the following specific conditions affecting the hip or knee
  - 1. Osteoarthritis of the knee
    - a.** Varus gonarthrosis
    - b.** Valgus gonarthrosis
  - 2. Post-traumatic arthrosis of the knee
  - 3. Pes anserine bursitis
  - 4. Meniscal tears
  - 5. Extensor mechanism disruption
  - 6. Patello-femoral syndrome
  - 7. Tibial plateau fracture
  - 8. Patella fracture
  - 9. Compartment syndrome
  - 10. Infectious arthritis of the hip or knee
  - 11. Osteoarthritis of the hip
  - 12. Post-traumatic arthrosis
  - 13. ON of the femoral head
  - 14. ON of the femoral condyle
  - 15. Acetabular dysplasia
  - 16. Trochanteric bursitis
  - 17. Femur fracture (all types)
  - 18. Simple acetabular fracture
  - 19. Calcium pyrophosphate deposition (CPPD)
  - 20. Femoro-acetabular impingement (FAI)
- 3. Be able to perform simple invasive procedures including:
  - a.** Knee joint aspiration/injection
  - b.** Hip joint aspiration/injection (under fluoro)

<ul style="list-style-type: none"><li>c. Pes anserine bursa injection</li><li>d. Hematoma block</li><li>e. Femoral and tibial skeletal traction pin placement</li><li>f. Compartment pressure measurement</li></ul> <p>4. Demonstrate competence in the operating room to:</p> <ul style="list-style-type: none"><li>a. Position patients for hip and knee procedures</li><li>b. Prep and drape of the operative field</li><li>c. Perform initial surgical dissection</li><li>d. Close the surgical wound</li><li>e. Apply post-operative dressing</li></ul> <p>5. Demonstrate understanding of anatomy and surgical plan for:</p> <ul style="list-style-type: none"><li>a. Total hip arthroplasty</li><li>b. Core decompression of the femoral head</li><li>c. Percutaneous pinning of a femoral neck fracture</li><li>d. ORIF of intertrochanteric femur fracture</li><li>e. Hemiarthroplasty for displaced femoral neck fracture</li><li>f. Arthroscopic meniscectomy</li><li>g. Total knee arthroplasty</li><li>h. Arthrotomy, washout of infected knee</li><li>i. Arthrotomy, washout of infected hip</li></ul>	

**Medical Knowledge**

Faculty will evaluate the resident’s knowledge on an ongoing basis in the clinic and operating room.

Residents will be evaluated by mid-cycle and end of rotation faculty feedback, on-the-fly faculty feedback, Indication conference performance, case presentations, journal club, OITE scores, 360 degree surveys, self assessment.

PGY 1,2,3 Resident Goals and Objectives:	PGY 4,5 Resident Goals and Objectives:
The resident will: <ol style="list-style-type: none"><li>1. Demonstrate knowledge of the indications for surgical procedures such as ORIF of lower extremity fractures, arthroscopy of the knee, TKA, THA, arthrotomy and washout, ...</li><li>2. Demonstrate understanding of the relevant surgical anatomy of the lower extremity</li><li>3. Demonstrate an understanding of simple invasive procedures for patients such as injection/aspiration, abscess drainage, closed reduction of simple fractures</li><li>4. Demonstrate an understanding of the classic and contemporary literature pertaining to lower extremity reconstruction through self-guided study and participation in Journal club</li></ol>	In addition to obtaining competency in the PGY 2,3 goals and objectives, the resident will: <ol style="list-style-type: none"><li>1. Possess knowledge and demonstrate expertise in the discussion of the natural history of the systemic and specific conditions listed above</li><li>2. Demonstrate proficiency in the application of all splints and casts</li><li>3. Demonstrate an advanced understanding of pathology, surgical anatomy and operative exposures</li><li>4. Assume a leadership role in planning patient care and teaching conferences</li></ol>

**Practice Based Learning and Improvement**

Residents will be evaluated based upon awareness of background and recent advances in common treatments, surgical indications, and surgical principles through participation in weekly Wednesday AM Hip/Knee Conference, morning trauma rounds, monthly M&M conference Journal club and pre-operative planning small group sessions.

Residents will be evaluated by mid-cycle and end of rotation faculty feedback, on-the-fly faculty feedback, Indications conference performance, case presentations, journal club performance, M&M assessments, 360 degree surveys, self assessment.

PGY 2,3 Resident Goals & Objectives:	PGY 4,5 Resident Goals & Objectives:
<p>The resident will:</p> <ol style="list-style-type: none"> <li>1. Demonstrate familiarity and understanding of reading materials describing the systemic and specific conditions listed above including those assigned from:               <ol style="list-style-type: none"> <li>a. OKU: Hip and Knee Reconstruction 3 (Ed. Barrack et al)</li> <li>b. Campbell's Operative Orthopaedics</li> <li>c. The Adult Hip (Ed. Callahan et al)</li> <li>d. The Adult Knee (Ed. Callahan et al)</li> <li>e. Arthritis and Arthroplasty: The Hip (Brown et al)</li> <li>f. Arthritis and Arthroplasty: The Knee (Brown et al.)</li> <li>g. Orthopaedics (Malkani et al)</li> </ol> </li> <li>2. Accurately locate, appraise and assimilate evidence from scientific studies relating to the patient's orthopaedic condition. This requires knowledge of the pertinent recent literature as may be obtained in:               <ol style="list-style-type: none"> <li>a. American and British JBJS</li> <li>b. CORR</li> <li>c. Journal of Arthroplasty</li> <li>d. Journal of the AAOS</li> </ol> </li> </ol>	<p>In addition to obtaining competency in the PGY 2,3 goals and objectives, the resident will:</p> <ol style="list-style-type: none"> <li>1. Apply critical thinking in the appraisal of clinical studies read in the peer reviewed literature as well as in the treatment of patients</li> <li>2. Direct the education for the more junior residents on the service</li> <li>3. Prepare and organize the weekly pre-operative conference to include templating of all total joint cases and review of implant logs for all revision total joint cases</li> </ol>

**Interpersonal & Communication Skills**

See common program competencies

**Professionalism**

See common program competencies

**Systems-based Practice**

See common program competencies