

Updated 2/8/10

**Columbia/NYOH Department of Orthopaedics**  
**Pediatric Orthopaedic Service Competency Requirements**

**Patient Care**

Faculty will evaluate the resident's ability to obtain an H&P and appropriate radiographs 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, 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-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. Be able to effectively evaluate, via a thorough H&amp;P, the following conditions affecting the pediatric musculoskeletal system:<ol style="list-style-type: none"><li>a. Club feet</li><li>b. Hip dysplasia</li><li>c. Idiopathic scoliosis</li><li>d. Perthe's disease</li><li>e. Slipped capital femoral epiphysis</li><li>f. Leg length discrepancy</li><li>g. Angular deformity of the lower extremity</li><li>h. Osteomyelitis and septic arthritis</li><li>i. Cerebral palsy</li><li>j. Myelomeningocele</li><li>k. Benign and malignant bone and soft tissue tumors</li><li>l. Back pain</li><li>m. Growth plate injuries, and other fractures</li><li>n. Common foot disorders – flatfoot, coalitions, accessory navicular, toe walking</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><li>b. Perform any relevant condition-specific <b>physical examination</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. Scoliosis surgery<ol style="list-style-type: none"><li>i. Pre-operative planning</li><li>ii. Implant choice</li></ol></li><li>b. Open reduction of the hip</li><li>c. Lower extremity osteotomies for deformity</li><li>d. Club foot treatment</li><li>e. Fracture reduction and fixation</li></ol></li><li>3. Demonstrate knowledge of the surgical approach and anatomy for all operative procedures including elective and emergent cases.</li></ol>

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| <ul style="list-style-type: none"><li>c. Identify appropriate radiographic <b>imaging studies</b></li><li>d. Formulate a differential diagnosis and make an accurate final <b>diagnosis</b></li><li>e. Outline the <b>etiology</b>, or possible etiologies of the specific condition</li><li>f. Outline the <b>natural history</b> of the specific condition with and without surgical treatment</li><li>g. Describe appropriate <b>non-operative treatment options</b> (if they exist)</li><li>h. Describe appropriate <b>operative treatment options</b> (if they exist)</li><li>i. Describe possible <b>complications</b> of non-operative and operative treatment</li><li>j. Outline the <b>rehabilitation program</b> involved in non-operative and operative treatment</li><li>k. Outline the <b>prognosis</b> of non-operative and operative treatment in order to evaluate the following specific conditions affecting the pediatric patient<ul style="list-style-type: none"><li>1. Club foot</li><li>2. Scoliosis</li><li>3. Kyphosis</li><li>4. Hip dysplasia</li><li>5. Perthe's disease</li><li>6. Slipped capital femoral epiphysis</li><li>7. Patello-femoral syndrome</li><li>8. Forearm fractures</li><li>9. Elbow fractures</li><li>10. Distal radius fractures</li><li>11. Ankle fractures</li><li>12. Compartment syndrome</li><li>13. Infectious arthritis</li><li>14. Osteomyelitis</li><li>15. Myelomeningocele</li><li>16. Cerebral palsy</li><li>17. Skeletal dysplasias</li><li>18. Muscle diseases</li><li>19. Orthopaedic-related syndromes</li><li>20. Metabolic bone diseases</li><li>21. Limb deficiencies</li></ul></li></ul> |  |
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<p style="text-align: center;">22. Benign musculoskeletal tumors 23. Malignant musculoskeletal tumors</p> <ol style="list-style-type: none"> <li>3. Be able to perform simple invasive procedures including: <ol style="list-style-type: none"> <li>a. Hematoma block</li> <li>b. Closed reduction of ankle fracture</li> <li>c. Closed reduction of distal radius fracture</li> <li>d. Closed reduction of radial head subluxation</li> </ol> </li> <li>4. Demonstrate competence in the operating room to: <ol style="list-style-type: none"> <li>a. Position patients for surgical 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> </ol> </li> <li>5. Demonstrate understanding of anatomy and surgical plan for: <ol style="list-style-type: none"> <li>a. Spine fusion</li> <li>b. Percutaneous fixation of fractures</li> <li>c. Open reduction of fractures</li> <li>d. Proximal femoral osteotomies</li> <li>e. Lower extremity osteotomies</li> <li>f. Soft tissues procedures for spasticity treatment</li> <li>g. Application of external fixation devices</li> <li>h. Arthrotomies for drainage of septic arthritis</li> </ol> </li> </ol>	
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**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 2,3 Resident Goals and Objectives:	PGY 4,5 Resident Goals and Objectives:
<p>The resident will:</p> <ol style="list-style-type: none"> <li>1. Demonstrate knowledge of the indications for surgical procedures such as ORIF of upper and lower extremity fractures, spinal fusion, treatment of hip dysplasia, lower extremity osteotomies...</li> <li>2. Demonstrate understanding of the relevant surgical anatomy of the upper extremity, lower extremity, pelvis, spine</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>	<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. 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 Indications conference, morning trauma rounds, subspecialty conference, monthly M&M conference, and Journal club.

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.

<p>PGY 2,3 Resident Goals &amp; Objectives:</p>	<p>PGY 4,5 Resident Goals &amp; Objectives:</p>
<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>1. Basic Knowledge: <u>OKU: Pediatrics – Superficial introduction to pediatric orthopaedics. A good starting point. For more in depth information consult <u>Lovell and Winter’s Pediatric Orthopaedics</u> and/or Tachdijian’s <u>Pediatric Orthopaedics</u>.</u></li> <li>2. Trauma: The pediatric volume of either <u>Rockwood and Green’s</u> text or <u>Swiontkowski’s (Browner, Jupiter, Trafton; Skeletal Trauma)</u> text. In addition, Rang’s <u>Children’s Fractures</u> offers a very easy to read overview of the basic principles of pediatric fracture care.</li> <li>3. Surgical Atlas: Tachdijian’s <u>Atlas of Pediatric Orthopaedic Surgery</u> or <u>Lovell and Winter’s (Morrissey) Pediatric Orthopaedic Surgery Atlas</u>. Dealer’s choice.</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. JPO and JPO-B</li> <li>b. American and British JBJS</li> <li>c. 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 measurements of all spine xrays.</li> </ol>

**Interpersonal & Communication Skills**

See common program competencies

**Professionalism**

See common program competencies

**Systems-based Practice**

See common program competencies