

ADULT JOINT RECONSTRUCTION SERVICE GOALS AND OBJECTIVES

OVERVIEW

Two residents rotate on the Adult Joint Reconstruction Service, an R-2 resident and an R-3 resident. This is a 3 month rotation with these residents involved in clinic, operative cases and peri-operative medical and pain management. These residents will be exposed to basic (primary) and complex/revision reconstruction of adult hip and knee disorders. The residents will be exposed to a large volume and wide spectrum of adult hip and knee disease.

This rotation provides an opportunity for the R-2 and R-3 residents to have intimate one on one interaction with attending staff, perform a large volume of surgical procedures, and participate in patient care. This rotation also allows the resident to improve communication skills with patients and hospital staff, and gain better understanding of the multidisciplinary approach to care.

PATIENT CARE

R-2 Resident is expected to:

- Demonstrate patient care proficiency in obtaining appropriate history and physical examination, formulating a differential diagnosis and related treatment plan, providing a specialized postoperative management in joint replacement patients.
- Communicate effectively incorporating compassion, professionalism and appropriate medical knowledge base when interacting with patients, family members and colleagues.
- Provide continuity of care with the patient, including initial preoperative evaluation, discussion of treatment options (including non-operative and operative), postoperative care as an inpatient as well as in the follow-up clinic appointment.
- Understand and explain the indications for nonsurgical and surgical treatment for adult hip and knee disease.
- Utilize information technology to develop patient treatment plans and educate the patient and family.
- Demonstrate competency in using electronic medical records to document information.
- Comfortably perform basic joint related procedures including joint aspirations and injections.
- Identify and manage postoperative complications of primary total hip and knee arthroplasty.
- Demonstrate competency with surgical approaches to the hip and knee joint.
- Demonstrate competency in primary total knee and hip arthroplasty techniques.

R-3 Resident is expected to:

- Demonstrate patient care proficiency in obtaining appropriate history and physical examination, formulating a differential diagnosis and related treatment plan, providing a specialized postoperative management in joint replacement patients.
- Communicate effectively incorporating compassion, professionalism and appropriate medical knowledge base when interacting with patients, family members and colleagues.
- Provide continuity of care with the patient, including initial preoperative evaluation, discussion of treatment options (including non-operative and operative), postoperative care as an inpatient as well as in the follow-up clinic appointment.
- Understand and explain the indications for nonsurgical and surgical treatment for adult hip and knee disease.
- Utilize information technology to develop patient treatment plans and educate the patient and family.
- Demonstrate competency in using electronic medical records to document information.
- Comfortably perform basic joint related procedures including joint aspirations and injections.
- Identify and manage postoperative complications of primary and revision total hip and knee arthroplasty.
- Demonstrate competency with surgical approaches to the hip and knee joint.
- Demonstrate the ability to evaluate and treat a painful total joint replacement.
- Demonstrate competency in primary and revision total knee and hip arthroplasty techniques.

MEDICAL KNOWLEDGE

R-2 Resident is expected to:

- Understand the pathophysiology of adult hip and knee disease, including degenerative osteoarthritis, inflammatory arthritis, posttraumatic arthritis, avascular necrosis, secondary arthritis related to congenital deformity, and other related cartilage diseases.
- Understand the biomechanics of the hip and knee joint, including normal, pathologic, and reconstructed joints.
- Understand the surgical anatomy of the hip and knee and the various surgical approaches.
- Understand the indications for nonsurgical and surgical treatment for adult hip and knee disease.
- Understand material science of prosthetic joint replacement.
- Understand design-engineering principles underlining total joint replacement

- Understand the biologic principles underlying osteotomy and cartilage transplantation.
- Understand the principles of prosthesis fixation and biologic reaction to the prosthesis.
- Demonstrate the ability to recognize patterns are prosthesis failure.
- Understand the basic concepts and details of rehabilitation after joint reconstruction procedures and the use of clinical pathway inpatient care.
- Understand and implement peri-operative medical management of joint replacement patient with special emphasis on:
 - Screening for patients at increased risk of venous thromboembolism
 - Prophylaxis of venous thromboembolism
 - Perioperative pain management.
- Demonstrates preoperative templating techniques using specialized software on IMPAX electronic radiographs.
- Demonstrates effective case presentation skills during conferences.
- Demonstrates knowledge obtained from the OKU Specialty Series on Hip and Knee Reconstruction.
- OITE Review based on Adult Joint Reconstruction
- Attend a weekly Joint Arthroplasty Conference on Thursday mornings discussing:
 - Preoperative indications and post-op case review
 - Selected journal articles
 - Selected chapters in OKU-Adult Hip and Knee
- Master the adult joint arthroplasty syllabus which includes:
 - Classic journal articles
 - Detailed descriptions of the rationale involved in pre-operative planning and templating for hip and knee reconstruction.
- Understands the indications for revision surgery.

R-3 Resident is expected to:

- Understand the pathophysiology of adult hip and knee disease, including degenerative osteoarthritis, inflammatory arthritis, posttraumatic arthritis, avascular necrosis, secondary arthritis related to congenital deformity, and other related cartilage diseases.
- Understand the biomechanics of the hip and knee joint, including normal, pathologic, and reconstructed joints.
- Understand the surgical anatomy of the hip and knee and the various surgical approaches.
- Understand the indications for nonsurgical and surgical treatment for adult hip and knee disease.
- Understand material science of prosthetic joint replacement.
- Understand design-engineering principles underlining total joint replacement
- Understand the biologic principles underlying osteotomy and cartilage transplantation.

- Understand the principles of prosthesis fixation and biologic reaction to the prosthesis.
- Demonstrate the ability to recognize patterns are prosthesis failure.
- Understand the basic concepts and details of rehabilitation after joint reconstruction procedures and the use of clinical pathway inpatient care.
- Understand and implement peri-operative medical management of joint replacement patient with special emphasis on:
 - Screening for patients at increased risk of venous thromboembolism
 - Prophylaxis of venous thromboembolism
 - Perioperative pain management.
- Demonstrates preoperative templating techniques using specialized software on IMPAX (digital radiography).
- Demonstrates effective case presentation skills during conferences.
- Demonstrates knowledge obtained from the OKU Specialty Series on Hip and Knee Reconstruction.
- OITE Review based on Adult Joint Reconstruction
- Attend a weekly Joint Arthroplasty Conference on Thursday mornings discussing:
 - Preoperative indications and post-op case review
 - Selected journal articles
 - Selected chapters in OKU-Adult Hip and Knee
- Master the adult joint arthroplasty syllabus which includes:
 - Classic journal articles
 - Detailed descriptions of the rationale involved in pre-operative planning and templating for hip and knee reconstruction.
- Understands the indications for revision surgery and treatment options.
- Demonstrates the ability to diagnose and treat pain in a symptomatic total joint replacement.

PRACTICE-BASED LEARNING AND IMPROVEMENT

R-2 and R-3 Residents are expected to:

- Demonstrate fundamental knowledge obtained through the core curriculum materials on adult joint reconstruction and apply this knowledge into patient care principles.
- Prepare and present cases at M&M conference, including presenting relevant literature references, what lessons were learned from the case, and how to avoid similar complications in the future.
- Participate in adult joint reconstruction journal club with review of classic and most recent literature.
- Demonstrate the ability to critically evaluate and assimilate evidence base medicine from the past and current practices.

- Demonstrate the ability to obtain and use information technology to support, augment or modify current practices.
- Maintain committed to continued teaching and learning to other colleagues, students and health care professionals.

INTERPERSONAL AND COMMUNICATION SKILLS

R-2 and R-3 Residents are expected to:

- Demonstrate the ability to effectively convey and exchange information with patients, families and professional associates.
- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use of effective learning skills.
- Utilize appropriate interpreters in order to assure the patient is in full understanding in spite of the language barriers.
- Work effectively with others as a member of the health care team.

PROFESSIONALISM

R-2 and R-3 Residents are expected to:

- Demonstrate respect, compassion and integrity at all times when interacting with patients, families, colleagues, hospital and ancillary staff.
- Demonstrate commitment to ethical conduct in the last with the patient care.
- Demonstrate sensitivity to diverse patient population specifically in regard to disability, age, culture and gender.
- Adhere to ethical code in regard to confidentiality when discussing patients.
- Attend to consults in a timely fashion.
- Maintain committed to continued learning.
- Teach more junior residents, medical students and staff.
- Attend weekly conferences.
- Be prompt to the clinic and operating room.
- Complete medical records and dictations in a timely fashion.

SYSTEMS-BASED PRACTICE

R-2 and R-3 Residents are expected to:

- Demonstrate the awareness that arthritis is one of the major causes of lost work time and major disability in the United States.
- Demonstrate awareness of how the expected exponentially growth of total joint replacements in the near future will impact economic issues related to reimbursements for total joint replacements as well as having a shortage of total joint specialists.

- Demonstrate awareness for the need to continue to develop techniques to improve clinical outcomes to decrease the number of expected revision joint replacements.
- Practice cost effective medical care within the system without compromising quality of care.
- Demonstrate an understanding of various health funding systems including Medicare, Medi-Cal, workers compensation, and private insurance.
- Understand the importance of correct coding for patient office visits and surgery.
- Demonstrate the awareness of a multidisciplinary health care team involved in the care of a total joint replacement patient.
- Use specialized software to template cases pre-operatively on IMPAX (digital radiography).
- Use electronic medical records to gather clinical data and appropriately document information.