Orthopaedics and Rehabilitation

Chair
• J. Lawrence Marsh

Faculty: http://www.uiortho.com/index.php/faculty-listing/specialty-listing
Web site: http://uiortho.com/

The Department of Orthopaedics and Rehabilitation offers training for residents and provides education for undergraduate students.

Undergraduate Education

The Department of Orthopaedics and Rehabilitation participates in the Bachelor of Science with a major in athletic training, which is offered by the Department of Health and Human Physiology (College of Liberal Arts and Sciences). Members of the orthopaedics and rehabilitation faculty teach ORTH:4187 Practicum in Athletic Training IV, a two-semester advanced clinical sequence (8 s.h.). Students who complete the program are eligible to apply for national certification in athletic training and to pursue employment opportunities as health care professionals in sports medicine clinics, hospitals, and academic settings.

Residency Program

The department offers a five-year integrated clinical program for postgraduate trainees, in which interns and residents participate simultaneously in inpatient and outpatient care, surgery, and sciences related to the neuromusculoskeletal system.

Trainees enter this program directly from medical school through the National Residency Matching Program.

During the first year, trainees gain experience not only in clinical orthopaedics but also in surgical specialties, intensive care, radiology, and surgical skills.

During years two through five, residents gain experience in the diagnosis and management of adult and pediatric orthopaedic disorders, including joint reconstruction, trauma, including multisystem trauma; surgery of the spine, including disk surgery, spinal trauma and deformities; hand and foot surgeries; athletic injuries and orthopaedic rehabilitation; orthopaedic oncology, including metastatic disease; and amputations as well as post-amputation care and nonoperative outpatient diagnosis and care, including all orthopaedic anatomic areas.

Laboratories

The orthopaedics laboratories deal with problems in these major subject areas.

Biochemistry: the biochemistry of proteoglycans, collagens, and matrix proteins, both normal and altered in musculoskeletal disorders

Biomechanics: problems of the upper extremity; biomechanics of the spine, hip, and gait; total joint replacements (in conjunction with the College of Engineering)

Cell and molecular biology: studies of normal bone, cartilage, tendon, muscle, and tissues altered by experiment and disease

Bone healing: research toward better ways to heal bones

Facilities

The Department of Orthopaedics and Rehabilitation is housed in the John Pappajohn Pavilion of University of Iowa Hospitals and Clinics and has an active service in the Iowa City Veterans Affairs Medical Center. The department's facilities include 48 orthopaedic beds, ten outpatient clinics, inpatient and outpatient operating rooms, a specialty library, a specialty radiology unit, and physical therapy and rehabilitation facilities. Its specialty clinics deal with virtually every orthopaedic disorder known, including, but not limited to scoliosis, club feet, congenital dislocated hip, neuromuscular disease, metabolic disease, amputation, neoplasm, trauma, and neck, back, hip, foot, knee, and hand problems. Physicians in the outpatient clinic see approximately 280 patients per day, over 70,000 patients per year. Approximately 7,000 surgeries are performed each year.

The department's Institute for Orthopaedics, Sports Medicine, and Rehabilitation is located on the University of Iowa's Hawkeye Campus. The institute provides MRI, X-ray, and physical therapy services, and a full range of nonoperative orthopaedic ambulatory care services.

Courses

ORTH:4187 Practicum in Athletic Training IV 4 s.h.
Clinical experience arranged through the athletic training program and the Department of Orthopaedic Surgery for athletic training majors; development of global proficiency in clinical skills. Requirements: athletic training major, and grades of C or higher in ATEP:3030 and ATEP:3040.

ORTH:8301 Clinical Orthopaedics arr.

ORTH:8401 Advanced Clinical Orthopaedics 2,4 s.h.
Requirements: fourth-year M.D. enrollment.

ORTH:8402 Musculoskeletal Trauma arr.
Requirements: fourth-year M.D. enrollment.

ORTH:8403 Subinternship in Orthopaedics 4 s.h.
Opportunity to enhance clinical skills by taking intern-level responsibility for management of a limited number of orthopaedic patients; proficiency in perioperative patient assessment and management, including assisting in procedures and using laboratory diagnosis and radiologic studies pertinent to one faculty member's clinical practice.

ORTH:8404 Introduction to Physical Medicine and Rehabilitation 2 s.h.
Management of a wide range of common acute and chronic neuro-musculoskeletal pain conditions (shoulder, back, knee pain) to more devastating neuromuscular injuries (spinal cord injuries, brain injury, strokes, amputations). Requirements: M.D. enrollment.

ORTH:8405 Advanced Physical Medicine and Rehabilitation 4 s.h.
Management of a wide range of common acute and chronic neuro-musculoskeletal pain conditions (shoulder, back, or knee pain) to more devastating neuromuscular injuries (spinal cord injuries, brain injury, strokes, amputations); students work-up individual patients in outpatient clinics and perform inpatient consultations at subintern level. Prerequisites: ORTH:8404. Requirements: M.D. enrollment.

ORTH:8498 Orthopaedics On Campus
Requirements: fourth-year M.D. enrollment.

ORTH:8499 Orthopaedics Off Campus
Requirements: fourth-year M.D. enrollment.