Department of Orthopaedic Surgery

Orthopaedic surgery is concerned with the injuries, diseases and conditions of the musculoskeletal system. The WUSM III rotation in Musculoskeletal Surgery & Medicine exposes the student to multiple aspects of orthopaedic surgery, including caring for patients in the emergency department and the operating room as well as clinical practice in the emergency department and the outpatient and inpatient wards.

Website: http://www.ortho.wustl.edu

Faculty

Regis O'Keefe, MD, PhD (https://www.ortho.wustl.edu/content/Patient-Care/3683/FIND-A-PHYSICIAN/Physician-Directory/Regis-O'Keefe-MD/Bio.aspx)
Department Chair
Visit our website for more information about our faculty (http://www.ortho.wustl.edu/content/Patient-Care/2295/Find-a-Physician/Physician-Directory.aspx) and their appointments.

Yousef Abu-Amer, M.S., Ph.D.
Professor of Orthopedic Surgery (primary appointment)
Professor of Cell Biology and Physiology
Dr J Albert Key Professor of Orthopedic Surgery
Bachelor of Science, Hebrew University of Jerusalem, 1985
Master of Science, Hebrew University of Jerusalem, 1987
Doctor of Philosophy, Hebrew University of Jerusalem, 1993

Alexander William Aleem, M.S., M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Bachelor of Science, Johns Hopkins University, 2006
Doctor of Medicine, Washington University in St Louis, 2010
Master of Science, Washington University in St Louis, 2019

Jonathon David Backus, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Champaign, 2005
Doctor of Medicine, Duke University, 2010

Robert L Barrack, M.D.
Professor of Orthopedic Surgery (primary appointment)
Charles F and Joanne Knight Distinguished Professor of Orthopedic Surgery
Doctor of Medicine, Vanderbilt University, 1973

Kimberly Ann Bartosiak, M.D.
Assistant Professor of Orthopedic Surgery (Pending Executive Faculty Approval) (primary appointment)
Doctor of Medicine, Loyola University Chicago, 2015

Donald R Bassman, M.D.
Instructor in Clinical Orthopedic Surgery
Bachelor of Arts, Washington University in St Louis, 1971
Doctor of Medicine, Washington University in St Louis, 1975

Ilya Bendich, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, Dartmouth College, 2015

Marschall Brantling Berkes, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, Vanderbilt University, 2008

Terra Rupert Blatnik, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Bachelor of Science, Allegheny College, 2003
Doctor of Medicine, Case Western Reserve University, 2007

Michael Anthony Boeving, M.D.
Assistant Professor of Orthopedic Surgery (Pending Executive Faculty Approval) (primary appointment)
Doctor of Medicine, University of Oklahoma, 2018

Martin I Boyer, M.S., M.D.
Professor of Orthopedic Surgery (primary appointment)
Carol B and Jerome T Loeb Professor of Orthopedic Surgery
Doctor of Medicine, University of Toronto, 1988
Master of Science, University of Toronto, 1993

Keith Happ Bridwell, M.D.
Professor of Orthopedic Surgery (primary appointment)
Professor of Neurological Surgery
J Albert Key Distinguished Professor of Orthopedic Surgery
Bachelor of Arts, Washington University in St Louis, 1973
Doctor of Medicine, Washington University in St Louis, 1977

David Micah Brogan, M.S., M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Associate Professor of Neurological Surgery
Master of Science, University of London, 2005
Doctor of Medicine, Washington University in St Louis, 2009

Robert Henry Brophy, M.S., M.D.
Professor of Orthopedic Surgery (primary appointment)
Bachelor of Arts, Stanford University, 1994
Bachelor of Science, Stanford University, 1994
Master of Science, Stanford University, 1995
Doctor of Medicine, Washington University in St Louis, 2001

Jacob M Buchowski, M.S., M.D.
Professor of Orthopedic Surgery (primary appointment)
Professor of Neurological Surgery
Division Chief - Division of Spine
Vice Chair - Department of Orthopedic Surgery
Lawrence G and Elizabeth A Lenke Distinguished Professor of Orthopedic Surgery
Bachelor of Science, Yale University, 1996
Master of Science, Yale University, 1996
Doctor of Medicine, Johns Hopkins University, 2000
C

Ryan Patrick Calfee, M.D.
Professor of Orthopedic Surgery (primary appointment)
Division Chief - Division of Hand and Wrist
Bachelor of Science, University of Virginia, 1997
Doctor of Medicine, Washington University in St Louis, 2001

Alejandra Camacho-Soto, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Bachelor of Arts, Georgetown University, 2005
Doctor of Medicine, University of Pittsburgh, 2011

Alexandre Carter, Ph.D., M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Associate Professor of Occupational Therapy
Associate Professor of Neurology
Bachelor of Science, Brandeis University, 1991
Doctor of Philosophy, Harvard University, 2003
Doctor of Medicine, Harvard University, 2003

Abby Ling Lee Cheng, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Assistant Professor of Neurology
Assistant Professor of Surgery (Public Health Sciences)
Doctor of Medicine, Washington University in St Louis, 2013

John C Clohisy, M.D.
Professor of Orthopedic Surgery (primary appointment)
Vice Chair - Department of Orthopedic Surgery
Daniel C. and Betty B. Viehmann Distinguished Professor of Orthopedic Surgery
Bachelor of Arts, Northwestern University, 1985
Doctor of Medicine, Northwestern University, 1989

D

Kayla E Daniel, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Bachelor of Arts, Washington University in St Louis, 2011
Doctor of Medicine, Rush University, 2016

Gregory M Decker, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Assistant Professor of Neurology
Doctor of Medicine, American University of the Caribbean, 2014

Ryan Everett Doyel
Assistant Professor of Orthopedic Surgery (Pending Executive Faculty Approval) (primary appointment)

Christopher J. Dy, M.P.H., M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Associate Professor of Surgery (Public Health Sciences)
Bachelor of Science, University of Miami, 2004
Master of Public Health, University of Miami, 2008
Doctor of Medicine, University of Miami, 2008

E

Dennis Ian English, M.A., M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Bachelor of Arts, Washington University in St Louis, 2008
Doctor of Medicine, Loyola University Chicago, 2014

Lawrence Glennon Evans
Instructor in Clinical Orthopedic Surgery

F

Roberta Faccio, Ph.D.
Professor of Orthopedic Surgery (primary appointment)
Professor of Cell Biology and Physiology
Doctor of Philosophy, University of Bari, 2000

G

Richard H Gelberman, M.D.
Professor of Orthopedic Surgery (primary appointment)
Bachelor of Arts, University of North Carolina at Chapel Hill, 1965
Doctor of Medicine, University of Tennessee, 1969

Charles A Goldfarb, M.D.
Professor of Orthopedic Surgery (primary appointment)
Division Chief - Division of Pediatric Orthopedics
Executive Vice Chair - Department of Orthopedic Surgery
Richard H. Gelberman, MD Distinguished Professorship in Orthopaedic Surgery
Bachelor of Arts, Williams College, 1992
Doctor of Medicine, University of Alabama in Tuscaloosa, 1996

Matthew Lawrence Goodwin, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Assistant Professor of Neurological Surgery
Doctor of Medicine, Cornell University, 2013

J. Eric Gordon, M.D.
Professor of Orthopedic Surgery (primary appointment)
Bachelor of Science, University of California, 1983
Doctor of Medicine, University of California Davis, 1988

Farshid Guilak, M.P.H., M.S., Ph.D.
Professor of Orthopedic Surgery (primary appointment)
Professor of Biomedical Engineering
Professor of Mechanical Engineering and Materials Science
Professor of Developmental Biology
Mildred B. Simon Research Professorship in Orthopaedic Surgery
Bachelor of Science, Rensselaer Polytechnic Institute, 1985
Master of Science, Rensselaer Polytechnic Institute, 1987
Master of Public Health, Columbia University, 1990
Doctor of Philosophy, Columbia University, 1992

Munish C Gupta, M.D.
Professor of Orthopedic Surgery (primary appointment)
Mildred B. Simon Distinguished Professor of Orthopedic Surgery
Bachelor of Science, Northwestern University, 1982
Mark E. Halstead, M.D.
Professor of Orthopedic Surgery (primary appointment)
Professor of Pediatrics
Bachelor of Science, University of Wisconsin Madison, 1994
Doctor of Medicine, University of Wisconsin Madison, 1998

Charles Patrick Hannon, M.B.A., M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, Georgetown University, 2015
Bachelor of Science, Villanova University, null
Master of Business Administration, University of Chicago, null

Jeremy A Hartman, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, Saint Louis University, 2013

Damon Joseph Louis Hays, M.D.
Instructor in Clinical Orthopedic Surgery
Bachelor of Science, Truman State University (Duplicate of Truman State University (Formerly Northeast Missouri State University)), 1998

Pooya Hosseinzadeh, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, Isfahan University of Medical Sciences, 2004

Devyni M. Hunt, M.D.
Professor of Orthopedic Surgery (primary appointment)
Professor of Neurology
Division Chief - Division of Physical Medicine & Rehabilitation
Bachelor of Science, University of Texas Austin, 1995
Doctor of Medicine, University of Texas Houston, 2000

Thy N Huskey, M.D.
Professor of Orthopedic Surgery (primary appointment)
Bachelor of Science, Northwestern University, 1993
Doctor of Medicine, Northwestern University, 1996

Sindhu Saji Jacob, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, Kottayam Medical College, 1994

Kirsten A Jansen, M.D.
Instructor in Orthopedic Surgery (primary appointment)
Doctor of Medicine, University of Missouri Kansas City, 2011

Jeffrey E Johnson, M.D.
Professor Emeritus of Orthopedic Surgery
Bachelor of Arts, Duke University, 1976
Doctor of Medicine, Georgetown University, 1980

Neringa Juknis, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, Lithuanian University of Health Sciences, 1989

Jay Donovan Keener, M.D.
Professor of Orthopedic Surgery (primary appointment)
Division Chief - Division of Shoulder and Elbow
Vice Chair - Department of Orthopedic Surgery
Bachelor of Science, West Virginia University, 1991
Doctor of Medicine, West Virginia University, 1998

Brian Adams Kelly, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Assistant Professor of Neurological Surgery
Bachelor of Arts, Williams College, 2002
Doctor of Medicine, Columbia University, 2009

Derrick Michael Knapik, M.D.
Assistant Professor of Orthopedic Surgery (Pending Executive Faculty Approval) (primary appointment)
Main Campus, 2014

Robert S Kramer, M.D.
Instructor in Clinical Orthopedic Surgery
Bachelor of Arts, Harvard University, 1979
Doctor of Medicine, Washington University in St Louis, 1983

Robert E Kuhlman, M.D.
Assistant Professor Emeritus of Clinical Orthopedic Surgery
Bachelor of Arts, Washington University in St Louis, 1953
Doctor of Medicine, Washington University in St Louis, 1956

Adam J. LaBore, M.D.
Professor of Orthopedic Surgery (primary appointment)
Division Chief - Division of Orthopedic Injury Clinic
Professor of Neurology
Bachelor of Science, Louisiana College, 1994
Doctor of Medicine, Loyola University Chicago, 1998

Scott J Luhmann, M.D.
Professor of Orthopedic Surgery (primary appointment)
Professor of Neurological Surgery
Bachelor of Arts, Gustavus Adolphus College, 1986
Doctor of Medicine, University of Minnesota, 1991

Paul Sherman Lux, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, Tulane University, 1983

Matthew J Matava, M.D.
Professor of Orthopedic Surgery (primary appointment)
Professor of Physical Therapy
Division Chief - Division of Sports Medicine
Bachelor of Arts, University of Missouri Kansas City, 1986
Doctor of Medicine, University of Missouri Kansas City, 1987

Audrey McAlinden, Ph.D.
Professor of Orthopedic Surgery (primary appointment)
Professor of Cell Biology and Physiology
Doctor of Philosophy, University of London, 1998

Christopher M McAndrew, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, University of Tennessee, 2004

Sarah Howe McBride, M.S., Ph.D.
Adjunct Instructor in Orthopedic Surgery
Bachelor of Science, Clemson University, 2004
Master of Science, Case Western Reserve University, 2008
Doctor of Philosophy, Case Western Reserve University, 2011

Jeremy James McCormick, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Division Chief - Division of Foot and Ankle
Baccalaureatus, Dartmouth College, 1999
Doctor of Medicine, Loyola University Chicago, 2003

Douglas J. McDonald, M.D.
Professor Emeritus Orthopaedic Surgery
Bachelor of Science, Saint Johns University, 1982
Doctor of Medicine, University of Minnesota, 1982

Maria Isabel Menendez Montes, D.V.M., Ph.D.
Instructor in Orthopedic Surgery (Pending Dean’s Approval) (primary appointment)
Bachelor of Science, University of Arkansas Main Campus, 2012

John P Metzler, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Associate Professor of Neurology
Bachelor of Science, Texas A&M University, 1991
Doctor of Medicine, University of Texas Galveston, 1995

Zachary Isaac Meyer, M.D.
Assistant Professor of Orthopedic Surgery (Pending Executive Faculty Approval) (primary appointment)
Doctor of Medicine, Washington University in St Louis, 2015

Laura L Meyers, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Division Chief - Division of Orthopedic Trauma
Vice Chair - Department of Orthopedic Surgery
Bachelor of Arts, Rice University, 2001
Doctor of Medicine, Baylor College of Medicine, 2005

Anna Noel Miller, M.D.
Professor of Orthopedic Surgery (primary appointment)
Division Chief - Division of Orthopedic Trauma
Vice Chair - Department of Orthopedic Surgery
Bachelor of Arts, University of Chicago, 1973
Doctor of Medicine, Jefferson Medical College, 1977

Gary Arthur Miller, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Bachelor of Arts, University of Chicago, 1973
Doctor of Medicine, Jefferson Medical College, 1977

Mark L. Miller, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Bachelor of Science, Stanford University, 2004
Doctor of Medicine, Harvard University, 2008

Marie Theresa Morris, M.D.
Assistant Professor of Orthopedic Surgery (Pending Executive Faculty Approval) (primary appointment)
Bachelor of Science, University of Arkansas Main Campus, 2012
Doctor of Medicine, Washington University in St Louis, 2016

Jeffrey Jerome Nepple, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Bachelor of Science, Truman State University (Formerly Northeast Missouri State University), 2003
Doctor of Medicine, Washington University in St Louis, 2007

Brian J. Neuman, M.D.
Associate Professor of Orthopedic Surgery (Pending Executive Faculty Approval) (primary appointment)
Doctor of Medicine, Thomas Jefferson University, 2007

Robert John Nims, M.S., Ph.D.
Instructor in Orthopedic Surgery (primary appointment)
Master of Science, Columbia University, 2012
Doctor of Philosophy, Columbia University, 2017

Ryan M. Nunley, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Bachelor of Arts, Vanderbilt University, 1998
Doctor of Medicine, University of North Carolina at Chapel Hill, 2002

Regis James O’Keefe, Ph.D., M.D.
Professor of Orthopedic Surgery (primary appointment)
Head of the Department of Orthopedic Surgery
Fred C Reynolds Professor of Orthopedic Surgery
Bachelor of Arts, Yale University, 1981
Doctor of Medicine, Harvard University, 1985
Doctor of Philosophy, University of Rochester, 2000

Arin D Oestreich, Ph.D.
Instructor in Orthopedic Surgery (primary appointment)
Doctor of Philosophy, University of Rochester, 2000

Nathan P Olafsen, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Assistant Professor of Neurology
Doctor of Medicine, University of Missouri Columbia, 2015

Nicholas Pallotta, M.S., M.D.
Assistant Professor of Orthopedic Surgery (Pending Executive Faculty Approval) (primary appointment)
Assistant Professor of Neurological Surgery
Bachelor of Science, Rensselaer Polytechnic Institute, 2007
Master of Science, Rensselaer Polytechnic Institute, 2009
Doctor of Medicine, Stony Brook School of Medicine, 2013

Julia Partin, D.P.M.
Assistant Professor of Orthopedic Surgery (primary appointment)
Cecilia Pascual Garrido, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, Universidad de Buenos Aires, 2000

Terrence L. Piper, M.D.
Assistant Professor of Clinical Orthopedic Surgery
Bachelor of Arts, Saint Louis University, 1971
Doctor of Medicine, Saint Louis University, 1975

Feini Qu, Ph.D.
Instructor in Orthopedic Surgery (primary appointment)
Doctor of Philosophy, University of Pennsylvania, 2009

Muhammad Farooq Rai, Ph.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Doctor of Philosophy, Freie Universität Berlin, 2008

Elizabeth Yanik Rowlands, Sc.M., Ph.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
College Park, 2007
Master of Science, Johns Hopkins University, 2009
Doctor of Philosophy, University of North Carolina at Chapel Hill, 2013

Rimma Ruvinskaya, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, Saint Petersburg State Pediatric Medical Academy, 1985

Linda J. Sandell, M.S., Ph.D.
Professor Emeritus of Orthopedic Surgery
Bachelor of Arts, University of Denver, 1969
Master of Science, University of Denver, 1971
Doctor of Philosophy, Northwestern University, 1980

Perry Lee Schoenecker, M.D.
Professor of Orthopedic Surgery (primary appointment)
Bachelor of Science, University of Wisconsin Madison, 1964
Doctor of Medicine, University of Wisconsin Madison, 1968

Girdhar G. Sharma, M.S., Ph.D.
Instructor in Orthopedic Surgery (primary appointment)
Bachelor of Science, Banaras Hindu University, 1990
Master of Science, Banaras Hindu University, 1992
Doctor of Philosophy, Banaras Hindu University, 2000

Hua Shen, M.S., Ph.D., M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, Capital University of Medical Sciences (#####), 1991
Master of Science, Peking Union Medical College (#####formerly ####), 1996
Doctor of Philosophy, University of Konstanz, 2002

Jie Shen, M.S., Ph.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Bachelor of Science, Nanjing University (####), 2005
Master of Science, University of Rochester, 2011
Doctor of Philosophy, University of Rochester, 2012

Matthew J. Silva, M.Eng., Ph.D.
Professor of Orthopedic Surgery (primary appointment)
Assistant Professor of Biomedical Engineering
Professor of Mechanical Engineering and Materials Science
Vice Chair - Research, Department of Orthopedic Surgery
Julia and Walter R. Peterson Professor of Orthopedic Research
Bachelor of Science, Cornell University, 1982
Master of Engineering, Cornell University, 1984
Doctor of Philosophy, Massachusetts Institute of Technology, 1996

Scott A. Simpson, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Assistant Professor of Neurology
Bachelor of Arts, Columbia University, 2005
Doctor of Medicine, University of Rochester, 2010

Matthew Vernon Smith, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, Virginia Commonwealth University, 2002

Michael F. Sookochoff, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Doctor of Medicine, University of Wisconsin Madison, 2016

Gaurav Swarnkar, Ph.D.
Instructor in Orthopedic Surgery (primary appointment)
Doctor of Philosophy, Jawaharlal Nehru University, 2012

Chi-Tsai Tang, M.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Associate Professor of Neurology
Doctor of Medicine, University North Carolina, 2004

Simon Tang, M.S., Ph.D.
Associate Professor of Orthopedic Surgery (primary appointment)
Associate Professor or Mechanical Engineering and Materials Science
Bachelor of Science, University of California Berkeley, 2003
Master of Science, Rensselaer Polytechnic Institute, 2005
Doctor of Philosophy, Rensselaer Polytechnic Institute, 2007

Lauren MacCormick Tatman, M.D.
Assistant Professor of Orthopedic Surgery (primary appointment)
Main Campus, 2014

Susan Thapa, M.P.H., Ph.D.
Instructor in Orthopedic Surgery (primary appointment)
Instructor in Surgery (Public Health Sciences)
Bachelor of Science, Dhaka University, 2009
Doctor of Philosophy, University of Arkansas for Medical Sciences, 2018
Master of Public Health, University of Arkansas for Medical Sciences, 2018

Andrew Paul Thome, M.D.
Research Electives

Orthopaedic Surgery Research Electives

During the fourth year, opportunities exist for many varieties of advanced clinical or research experiences.

Various orthopaedic surgery research opportunities are available with the following faculty attendings. If interested, please contact the Education Office at 314-747-2543, email the orthopaedic surgery department (orthsurg@wudosis.wustl.edu), or contact the faculty member directly.

- Yousef Abu-Amer, PhD
- Alexander Aleem, MD
- Robert L. Barrack, MD
- Robert Brophy, MD
- Jacob M. Buchowski, MD, MS
- Ryan Calfee, MD
- Aaron Chamberlain, MD
- Cara A. Cipriano, MD
- John Clohisy, MD
- Matthew Dobbs, MD
- Charles A. Goldfarb, MD
- Farshid Guilak, PhD
- Munish Gupta, MD
- Pooya Hosseinzadeh, MD
- Deeptee Jain, MD
- Michael Kelly, MD
- Sandra Klein, MD
- Charles Lawrie, MD
- Scott J. Luhmann, MD
- Matthew J. Matava, MD
- Audrey McAlinden, PhD
- Chris McAndrew, MD
- Mark Miller, MD
- Jeff Nepple, MD
- Regis O’Keefe, MD
- Nathan Olafsen, MD
- Linda Sandell, PhD
- Perry Schoenecker, MD
- Matt Silva, PhD
- Matthew Smith, MD
- Lindley B. Wall, MD

Courses


M96 Ortho 807 Physical Medicine and Rehabilitation (Clinical Elective)

The elective is designed to provide the student with a broad introduction to the field of Physical Medicine and Rehabilitation. Major objective of this clinical elective is to achieve greater knowledge of the neurological and musculoskeletal diseases and their treatment, and gain understanding of basic principles of rehabilitation. The student will learn the clinical and rehabilitative care of patients with strokes, traumatic brain injury, spinal cord trauma and diseases, and limb amputations. Student will gain clinical skills in evaluating and management of functional impairments. Students will be expected to participate in daily rounds on inpatient rehabilitation units with the clinical care team, follow 3-5 patients, attend multidisciplinary team conferences and family meetings, attend outpatient rehabilitation clinics in spinal cord, stroke, traumatic brain injury, and amputee. Teaching and supervision is provided by the physiatry and neurology faculty of the Division of Rehabilitation. Rehabilitation and neurology residents are involved in student teaching as well. Students are required to participate in didactic teaching conferences within the PM&R residency. This rotation is particularly useful for students considering careers in rehabilitation, neurology, geriatrics, primary care, neurosurgery, or any other field that will require experience in the evaluation and management of patients with physical impairment and disabilities.
M96 Ortho 815 Orthopedic Surgery (Clinical Elective)
Available blocks: All
2 or 4 weeks

This 2 or 4 week elective will allow for a rich immersion within one of many possible orthopaedic surgery subspecialties. The student will be assigned to a mentor/preceptor and work primarily with a single attending within the possible available subspecialties including orthopaedic oncology, hand surgery, orthopaedic trauma, sports medicine, arthroplasty and adult reconstruction, pediatric orthopaedics, spine, foot and ankle or shoulder and elbow. The student will have the opportunity to care for patients in the inpatient and outpatient setting, and working within a team to include residents, attendings and possibly fellows. Emphasis will be on the evaluation and treatment of a variety of orthopaedic conditions in the outpatient clinic and hospital. Surgical education with an emphasis on anatomy, surgical approaches and operative rationale will be central to the rotation. Participation in department and service specific lectures and conferences will be expected. Oversight call responsibilities will be available to allow for further exposure to the management of acute orthopaedic problems in the emergency room.

Student time distribution: Variable by service. Inpatient 0-80%; Outpatient 20-100%; Conferences/Lectures 10%; Subspecialty Care 80%
Patients seen weekly: Variable, approximately 80
On-call/weekend responsibility: Call will be expected. Frequency will be no more than every 4th day, variable based on number of students in the call pool.

M96 Ortho 816 PM&R Musculoskeletal and Sports Medicine (Clinical Elective)
Available blocks: 1, 2, 4, 5, 6, 7, 9, 10, 11, 13, 14, 15, 16
Rotation options: 2 or 4 weeks

In this outpatient Physical Medicine and Rehabilitation rotation, students will assess patients with musculoskeletal and sport medicine concerns, develop a diagnostic approach, and design treatment plans. Common presenting concerns include acute or chronic pains, strains, and sprains. Students will be exposed to a variety of outpatient procedures including diagnostic ultrasound, electrodiagnostic testing, as well as anatomic, ultrasonad, and fluoroscopic-guided injections. This rotation is useful for any student, especially those interested in PM&R, primary care, emergency medicine, pediatrics, radiology, and orthopedic surgery.

Duties: Evaluating new and return patients in clinic, participating in and helping with outpatient procedures, attending PM&R Conference / Journal club. All of this will be under the guidance of attendings, residents, and possibly fellows.

Patient population: pediatric and adult, including geriatric

Student time distribution: 95% Outpatient; 5% Conferences/Lectures; 100% Subspecialty care
Patients seen weekly: 15-25 per day, 60-125 per week, 30-50 of which will be outpatient procedures
On-call/weekend responsibility: none

M96 Ortho 899C Clinical Special Study Elective: Ortho

M96 Ortho 910 Orthopedic Surgery Advanced Clinical Rotation (ACR)
This will be a 4 week clinical experience involving the evaluation, diagnosis and treatment of orthopedic conditions. This will be an inpatient and outpatient clinical experience with exposure to a variety of degenerative and acute orthopedic disease states. Students will be expected to function at the level of a PGY1 with regard to clinical duties and responsibilities. Participation will involve floor management, ER evaluation, operating theatre participation and outpatient clinic experience. Emphasis will be on correlating anatomy to function in normal and pathologic states. Patient populations: adult and pediatric Services: orthopedic trauma, adult reconstruction (joint replacement), or pediatric orthopedics.
Duties: rounding on inpatients, participating in service and department wide education conference, participating/assisting in operations, seeing and evaluating new, return and postoperative patients in clinic, taking call in the emergency room. This will be done under the guidance of attendings, fellows and residents.
Credit 140 units.