Please refer to the Institution Policy Manual link located on the University of Minnesota GME website at http://www.med.umn.edu/gme for University of Minnesota Graduate Medical Education specific policies.

- updated 08/26/16

Subsequent updates of this manual will be found at online and on the Orthopaedic Surgery Residency Moodle/Google site
INTRODUCTION

Welcome to the University of Minnesota Medical School Department of Orthopaedic Surgery Residency Program. Our residency program is truly outstanding. Our department has a long tradition of prioritizing education through exceptional teaching, superb patient care and commitment to advancing orthopaedics though innovation and research.

We pride ourselves in offering a comprehensive experience that will provide the resident an exceptional basis for a career as a general orthopaedist, orthopaedic subspecialist or academic orthopaedic surgeon.

The information contained in this program policy manual pertains to all residents and fellows in the department’s programs except as otherwise identified in the program policy manual or fellowship addendum.

Denis R. Clohisy, MD
Professor
Department Chair

Ann E. Van Heest, MD
Professor
Residency Program Director

Betsy Wehrwein
Program Associate, Education Coordinator
Phone: (612) 273-8043
Fax: (612) 273-8099
wehrw005@umn.edu
**Department Mission Statement**
First in outcomes and patient experience through scholarship, leadership and education

**Program Mission Statement**
It is the objective of the graduate program in orthopaedic surgery to provide a comprehensive educational experience in the management of diseases and injuries of the musculoskeletal system for the physician seeking accreditation as an orthopaedic surgeon. It is the goal of this program to provide educational and research opportunities for those candidates with an interest in an academic career in orthopaedic surgery and provide the candidate interested in the practice of orthopaedic surgery a balanced educational experience.

**Program Overview**
The program includes education in collaboration with six institutions, with a faculty of over 60 regionally and nationally known orthopaedic surgeons. These sites include

- **University of Minnesota Medical Center, Fairview (UMH)**
  - Riverside Campus (West Bank)
  - University Campus (East Bank)
- **Gillette Children’s Specialty Healthcare (GCSH)**
- **Hennepin County Medical Center (HCMC)**
- **Regions Hospital (RGHP)**
- **TRIA Orthopaedic Center (TRIA)**
- **Veterans Affairs Medical Center (VAMC)**

The PGY-1 year comprises of structured education in surgery, emergency medicine, medical intensive care, neurological surgery, anesthesiology and six months of orthopaedics. Rotations during the PGY-2 and PGY-3 years provide a comprehensive background working with faculty to provide a solid base in general orthopaedics, adult reconstruction, pediatric orthopaedics and traumatology and residents are begun exposure in sports. During the PGY-4 year, specialty rotations in adult reconstruction, foot and ankle, hand, musculoskeletal tumor, spine are the focus of the curriculum; residents also revisit pediatrics with an emphasis on trauma. The PGY-5 year completes the program and is spent with chief rotations at the Veterans Affairs Medical Center, Hennepin County Medical Center and Regions Hospital, as well as additional experience in sports medicine.
# Table of Contents

Introduction................................................................................................................................. 2  
Department Mission Statement ................................................................................................. 3  
Program Mission Statement .................................................................................................... 3  
Program Overview .................................................................................................................... 3  
Section 1 – Student Services ..................................................................................................... 9  
Campus Mail .............................................................................................................................. 9  
Email and Internet Access ......................................................................................................... 9  
HIPAA ...................................................................................................................................... 10  
   Text Messages ....................................................................................................................... 10  
Library Services ...................................................................................................................... 10  
Pagers ....................................................................................................................................... 11  
Photo Id Badges ....................................................................................................................... 11  
   Site-Specific ID Badges ......................................................................................................... 11  
   University Card (U Card) ...................................................................................................... 11  
SAC .......................................................................................................................................... 12  
Tuition and Fees ....................................................................................................................... 12  
Section 2 – Benefits .................................................................................................................. 13  
Book and Education Fund ........................................................................................................ 13  
Educational Activities, Department-Sponsored ....................................................................... 13  
Holidays .................................................................................................................................... 14  
Insurance .................................................................................................................................. 14  
Professional Liability Insurance .............................................................................................. 14  
Lab Coats and Laundry Service ............................................................................................... 15  
Leave ....................................................................................................................................... 15  
   Parental, Maternity, Paternity (FMLA) ................................................................................ 15  
   Other Leave Including: Bereavement, Extended Illness or Injury, Jury or Witness Duty,  
      Military Leave, Personal Leave of Absence ..................................................................... 15  
   Professional and Academic Leave ...................................................................................... 15  
   Effect of Leave Policy for Satisfying Completion of Program ........................................... 16  
Meal Tickets/Food Services ....................................................................................................... 16  
   Gillette ................................................................................................................................. 16  
   Hennepin County Medical Center ..................................................................................... 16  
   Regions Hospital .................................................................................................................. 16  
   TRIA Orthopaedic Center ................................................................................................. 16  
   University of Minnesota Medical Center .......................................................................... 16  
   Veterans Affairs Medical Center ...................................................................................... 17  
Parking ..................................................................................................................................... 17  
   Gillette ................................................................................................................................. 17  
   Hennepin County Medical Center ..................................................................................... 17  
   Regions Hospital .................................................................................................................. 17  
   TRIA Orthopaedic Center ................................................................................................. 17  
   University of Minnesota Medical Center .......................................................................... 17  
   Veterans Affairs Medical Center ...................................................................................... 18  
Paychecks ................................................................................................................................ 18
Medical Students on rotation are evaluated on a 4 point scale in these 15 areas: 

Anchors and Definitions for Evaluations - University of Minnesota Medical School – 

Clerkship Programs ........................................................................................................... 71
ABOS Rules for Residency Education .................................................................................. 76
ACGME Competencies ........................................................................................................ 76
  Medical Knowledge ......................................................................................................... 76
  Patient care ....................................................................................................................... 76
  Practice-Based Learning and Improvement .................................................................. 76
  Interpersonal Communication Skills .............................................................................. 77
  Professionalism ................................................................................................................ 77
  System-Based Practice .................................................................................................... 77
Milestones .......................................................................................................................... 77
Program Methods used for Evaluation .............................................................................. 77
  Program Evaluation Tools ............................................................................................... 78
  Resident Performance Review ......................................................................................... 78
  Graduation Status: (PGY-5 Level) .................................................................................. 79
  Semi-annual Review Status: (PGY-1 through PGY-5 Levels) ........................................... 79
  Probationary Status ........................................................................................................ 79
  Dismissal Status .............................................................................................................. 80
Operative Case Logs .......................................................................................................... 80
  Orthopaedic Surgery Minimum Case Numbers .............................................................. 80
  CPT Codes in Each Procedural Category ......................................................................... 81
Weekly Conferences .......................................................................................................... 82
  Gillette Children’s Specialty Healthcare ......................................................................... 82
  Hennepin County Medical Center .................................................................................. 82
  Regions Hospital ............................................................................................................. 82
  University of Minnesota Medical Center ........................................................................ 82
  Veterans Affairs Medical Center .................................................................................... 83
Grand Rounds ..................................................................................................................... 83
Core Curriculum Formal Lectures ...................................................................................... 83
Gross Anatomy Dissection Sessions ................................................................................... 83
Arthroscopy Skills Labs ..................................................................................................... 83
Upper Extremity Skills Lab Competency Testing ................................................................. 86
Residents’ Scholarly Activities .......................................................................................... 86
Duty Hour Reporting .......................................................................................................... 87
  Updating and Approving Assignments and Hours ............................................................ 87
On-Call ................................................................................................................................. 87
On Call Schedules .............................................................................................................. 87
  Gillette Children’s Specialty Health Care ....................................................................... 88
  Hennepin County Medical Center .................................................................................. 88
  Regions Hospital ............................................................................................................. 88
  TRIA Orthopaedic Center .............................................................................................. 88
  University of Minnesota Medical Center ........................................................................ 88
  Veterans Affairs Medical Center .................................................................................... 88
Patient Support Services ................................................................................................... 89
  Laboratory, Pathology, Radiology Services ................................................................. 89
ADDENDUMS

A) Program Forms

Reimbursement Form • Statement in Lieu of Receipt • Time Away PGY-1 • Time Away PGY-2 thru -5 • First Report of Injury (Needle Stick)

B) Travel Policy and Forms

Travel Policy • Reimbursement Form

C) ABOS Rules and Procedures For Residency Education Part I and Part II Examinations

D) ACGME Program Requirements for Graduate Medical Education in Orthopaedic Surgery
E) ACGME Resident Case Log System for Operative Log Reporting
   *ACGME Case Log System Resident User Guide*

F) AAMC Compact Between Resident Physicians and Their Teachers
SECTION 1 – STUDENT SERVICES

Campus Mail
The Department of Orthopaedic Surgery is located on the West Bank or Riverside Campus of the University of Minnesota.

Mailboxes are assigned in the department to all residents and are located at 2512 South 7th Street, R200. These boxes are NOT LOCKED. Important communication concerning the program will be placed in these boxes. It is expected that PGY-2 through PGY-5 residents will check their boxes at least weekly when coming to the department office. Important communication for PGY-1 through PGY-5 levels will also be emailed to residents, using x.500 email addresses.

Outgoing mail should be stamped and placed in the US Mail bin in the department’s mailroom.

The University of Minnesota Twin Cities does not have a central mailing address. All University mail must be postmarked with the appropriate college or department and building address. The US postal address for this program is

Department of Orthopaedic Surgery
2450 Riverside Ave. South
Room 200
Minneapolis, MN 55454

If a package is to be shipped by special delivery, the address for the street building is

2512 South 7th Street
Room 200
Minneapolis, MN 55454

The Campus mail address is
Orthopaedic Surgery
F282/2A West-B
8393C (Campus Delivery Code)
2450 Riverside Ave
Minneapolis, MN 55454

The General Number for the Orthopaedic Surgery Department is (612) 273-1177.

Email and Internet Access
The University of Minnesota assigns every student an internet ID. This ID also serves as the beginning of an assigned email address. The University of Minnesota email address will be used by the program as an important communication tool. Management of such email is the responsibility of the resident.
Residents should check to make sure they are in the University of Minnesota system. This can be done by going to the U of MN-Twin Cities home page at http://twin-cities.umn.edu/. Click on Search icon. Under search for people, type in the name and click on search. If a resident does not know his/her ID or is not registered, access to the system will be denied. Please contact Betsy Wehrwein at (612) 273-8043 or wehrw005@umn.edu for further assistance.

The Office of Technology at the University of Minnesota http://www.oit.umn.edu can assist residents with email and internet access. The 1-Help Technology Helpline can be reached by calling (612) 301-4357 or through email at help@umn.edu. Regular Helpline hours can be found at http://www.oit.umn.edu.

HIPAA
The Department of Orthopaedic Surgery requires all residents to view the video Maintaining Confidentiality of Clinical Information When Using Technology found on the Orthopaedic Surgery Residency Moodle site. Then each resident must print, sign, and return the form Attestation of Compliance Clinical Information Confidentiality Practices.

Text Messages
At no time is any PHI to be sent in text message format. PHI includes patient name, Medical Record Number, date of birth, patient telephone number, etc. If a faculty member asks a resident to text them with any PHI, the response should be a text that says "The information you want has been sent to your UMN email account." UMN email is considered secure and HIPAA compliant. Text messages are not.

Library Services
Throughout the program, residents are expected to develop their study, clinical and research skills. The University of Minnesota Library has created a website for evidence-based resources for orthopaedic surgeons, available at https://www.lib.umn.edu/libdata/page.phtml?page_id=2054. This includes a list of E-Books in Health Sciences. Browner: Skeletal Trauma, 4th ed. is available online and the resource used for the PGY-1 curriculum.

Jonathan Koffel is the Liaison Librarian assigned to work with the medical school. Contact information for him is at https://hsl.lib.umn.edu/about/staff/jonathan-koffel.

Global Help is another online resource, where Henry’s Extensile Exposure and other publications are available http://global-help.org/products/extensile_exposure.

Residents will have access to the Journal of the American Academy of Orthopaedic Surgeons (JAAOS, aka “The Yellow Journal”) upon registration by the department with AAOS. Resident will also receive a subscription to The Journal of Bone and Joint Surgery (JBJS), dependent on annual subscription policies determined by JBJS. All copies of JBJS and other educational
journals are available online through University of Minnesota Library Services. Further Library and Academic Resources can be found on the Orthopaedic Surgery Residency Moodle site.

**Pagers**
Residents will be assigned a pager and pager number upon entering the program through the Department of Orthopaedic Surgery. These are Fairview maintained pagers that will remain with residents for the duration of their training and should be used for all rotations.

For malfunctioning pagers residents must go to either the UMH main Information Desks at 500 Harvard Street SE or University Children’s Hospital 5th floor Surgery front desk for assistance; both locations are available 24-hours. New batteries can be obtained from the Department of Orthopaedic Surgery stockroom, located behind the reception desk at R200.

*When on duty and paged, residents will answer their pages within the time required by the site.*

**Photo Id Badges**

Site-Specific ID Badges
All residents involved on service at Fairview Riverside are required to have a Fairview identification badge. To obtain this badge, an escort to the security office will be required. Please arrange for this with the program education coordinator, Betsy Wehrwein.

All residents involved in service on the East Bank of the University of Minnesota Medical Center are required to have a University of Minnesota UMH ID badge. Residents will receive an email letting them know that the badge is available to be picked up at the U-Card office in Coffman Union.

All other rotation sites will require identification badges. Details will be given during specific rotation site orientations.

**University Card (U Card)**
SAC
SAC is the Surgical Administrative Center that supports the Graduate Medical Education’s programs for the Departments of Surgery, Orthopaedic Surgery, Urologic Surgery, and Otolaryngology. Their website http://hub.med.umn.edu/administrative-services/administrative-centers/sac outlines services provided and contacts. Please consider the following contacts.

Emily Langerak
Education Manager
612-624-7149
lange274@umn.edu

Susan Simone
Human Resources Partner
Phone: 612-624-5640
simon806@umn.edu

Kirk Skogen
Payroll Manager
Phone: 612-625-3954
k-skog@umn.edu

Tuition and Fees
Currently tuition and student services fees are being waived for trainees enrolled in Graduate Medical Education programs.
SECTION 2 – BENEFITS

Book and Education Fund
A book and education fund has been established to provide each resident with $1,000 per year for PGY-1 through PGY-4 years, to be used for various education expenses. Any rollover money not used can be spent during the PGY-5 year. This money can be used for the following purchases.

- Books
- Journal subscriptions
- Travel\(^1\)
- USMLE Step 3 exam
- PGY-5 registration for boards

A University of Minnesota expense worksheet (form: um 1612) must be submitted for reimbursement. Please see Travel policy in addendum.

Educational Activities, Department-Sponsored
All residents on orthopaedic surgery rotations are to be released from regular clinical duties for the following educational activities and are expected to attend:

- Friday Grand Rounds and Core Curriculum
- Arthroscopy Labs at TRIA (PGY-2, -3 and -4s): eight sessions throughout the year
- Pediatric Trauma Conference: September 25, 2015
- Minnesota Pediatric Conference: November 6, 2015
- Orthopaedic In-Training Examination: November 4, 2015\(^2\)
- HCMC Orthopaedic Trauma Conference: November 5-7, 2015
- Minnesota Orthopaedic Society Annual Meeting: TBD
- Visiting Hand Professor and Hand Skills Lab: TBD
- Residents Visiting Professor/Gustilo Scientific Research Day and Graduation: June 17, 2016
- USMLE Step 3 Exams (time away must be approved ahead of time). Residents MUST pass Step 3 by January 1 of the PGY-1 year.

PGY-1 residents will be released for skills labs; these are part of Objectives Structured Assessment of Technical Skills (OSATS). These are mandatory and are incorporated into semi-annual resident reviews. Dates for these are established by the Department of Surgery.

Resident Simulation Skills Lab: SimPORTAL (5th Floor Mayo, B-507)

\(^1\) PGY-4 travel to the AAOS annual meeting is paid for by the department out of a separate account. Fellowship interviews cannot be reimbursed. Job interview travel is not reimbursable.

\(^2\) ALL Residents (including all PGY-1 residents) are released from rotations from Friday, Nov 8 @ 6PM until Saturday, Nov 9 @ 3:30PM.
PGY-1 residents’ clinical rotation year will end on June 13, 2016 @ 8AM. They will attend G2 Bootcamp June 13-15, 2016. They will be released from any educational activities June 16-19, 2016. Switch Day is June 20, 2016.

Notification of any other special events that residents may be excused from will come from the program director.

The department sponsors one trip to the AAOS in the PGY-4 year. Attendance at all other meetings are at the discretion of the site/rotation director (see Travel Policy Addendum).

**Holidays**

Residents are released from their rotation on holidays depending on the holiday schedule at specific rotation sites. Residents may be released for holiday time at the discretion of the site or rotation director.

**Insurance**


- Health and Dental
- Disability, both short- and long-term
- Life, basic, voluntary and additional

Please refer to the [http://www.med.umn.edu/gme/InstitutionPolicyManual2013/index.htm](http://www.med.umn.edu/gme/InstitutionPolicyManual2013/index.htm) regarding any changes that a resident might wish to make to insurance benefits. The Office of Student Health Benefits is at [http://www.shb.umn.edu/twincities/residents-fellows-interns/med-school/index.htm](http://www.shb.umn.edu/twincities/residents-fellows-interns/med-school/index.htm). This website provides information on enrollment and when you want to add a member to your benefits.

**Professional Liability Insurance**

Proof of Professional Liability coverage for residents can be obtained at [http://www.finsys.umn.edu/riskmgmt/certins.html](http://www.finsys.umn.edu/riskmgmt/certins.html) or contact

Pam Ubel  
Office of Risk Management  
612-624-5884  
ORM@umn.edu

For general insurance information and claims history to health plans or hospitals who are credentialing current or former residents, please contact

Tara Atkisson  
Assistant to Keith Dunder, Office of the General Counsel  
612-625-9995  
tara.atkisson@ogc.umn.edu
Lab Coats and Laundry Service

Scrub suits are appropriate for designated areas, e.g. Operating Room, postoperative care. In all other areas, a white coat must be worn. Lab coats must be kept clean in all clinical settings.

Residents will be provided with three white lab coats at the beginning of the program. Residents are expected to have their coats laundered through the department on a regular basis. Lab coats are to be exchanged in R-234 in the department office. Any problems with lab coats or laundry service should be brought to the attention of Betsy Wehrwein.

Leave

Please see the [http://www.med.umn.edu/gme/instpolicyman/home.html](http://www.med.umn.edu/gme/instpolicyman/home.html) leave policy and Personal Time Off further in this program manual.

Parental, Maternity, Paternity (FMLA)

Department policy requires that a leave of absence for serious illness of the resident, serious health condition of a spouse, parent, or child, or birth or adoption of a child, be granted through formal request to the program director. The resident shall be granted upon request, up to six weeks maternity leave for birth (two paid), or two weeks paid leave for either paternity leave or adoption. After using paid leave and vacation, any additional leave will be without pay.

Other Leave Including: Bereavement, Extended Illness or Injury, Jury or Witness Duty, Military Leave, Personal Leave of Absence

Please refer to the [http://www.med.umn.edu/gme/InstitutionPolicyManual2013/index.htm](http://www.med.umn.edu/gme/InstitutionPolicyManual2013/index.htm). Department policy requires written application for leave by the resident and signed approval from the site/rotation director(s) and program director. Any leave exceeding 15 days must also have the approval of the department chair. All documentation must be kept in resident’s file. No more than six weeks total of time away from duties is allowed during any academic year. Greater than six weeks total per year away from duties will require repeating of the academic year.  

3 Professional and Academic Leave

Please see the [http://www.med.umn.edu/gme/InstitutionPolicyManual2013/index.htm](http://www.med.umn.edu/gme/InstitutionPolicyManual2013/index.htm) leave policy. Department policy requires that leave for examinations, attendance at non-department-sponsored scientific or professional meetings, or other absences be authorized by the site director(s) and residency program director/department chair. A Time Away form must be completed. Please see the University of Minnesota Resident Research Presentation Travel Policy in the addendum of this manual.

---

Effect of Leave Policy for Satisfying Completion of Program

According to ABOS policy for requirements for Board certification, “one year of credit must include at least 46 weeks of full-time orthopaedic education. Vacation or leave time may not be accumulated to reduce the five-year requirement.”

Meal Tickets/Food Services

Residents on duty must have access to adequate and appropriate food services 24 hours a day at all institutions.

Gillette
Each resident is provided $100.00 per month for meals. A bar code sticker is added to the ID badge/parking card for use in obtaining meals. The bar code sticker is obtained from the Education Coordinator/Orthopaedic Department at the time of orientation. Funds are automatically added monthly to the bar code.

Hennepin County Medical Center
The HCMC picture ID badge serves as the meal ticket. Badges can be obtained from the hospital Safety & Security Department, Lower Level, Red Building, Monday - Friday, 7:30 am to 3:30 pm. Resident must present a valid driver's license to obtain an ID badge. An ID badge deposit is $12.00. The resident is to return the ID badge at end of each rotation. HCMC provides $75.00 per month for meals.

Regions Hospital
IME sponsored residents will receive an annual on-call meal allotment allocated to their account via their ID badge. Meal allotments will be administered through Tricia Corbo. Affiliated residents will receive meal allotments based on actual call days. The meal allotment for rotating residents is administered through the coordinator for that rotation.

TRIA Orthopaedic Center
TRIA requires no in-house call. cafèTRIA has breakfast and lunch available for purchase Monday – Friday 7:30 AM – 2:30 PM. The TRIA reStore also has food, snack items and beverages for sale as well. The reStore is open from 8:00 AM – 4:30 PM Monday - Friday. Cost of food/snacks is the responsibility of the Resident.

University of Minnesota Medical Center
Residents may receive complimentary meals, up to a designated dollar amount, when special scheduling requires their presence beyond the normal duty hours. Residents will be issued swipe cards at the beginning of their rotation to use as meal cards. The swipe card will be valid for the length of the rotation and is subject to audit. Complimentary meals are available in the hospital cafeterias only. Residents will be billed for meals eaten in the Doctors Lounge at Riverside.

Veterans Affairs Medical Center
Food is readily available for residents with the food fund from Helena, (the surgical coordinator). She has different payment plans/options for food. There is also a cafeteria available on the 1st floor.

Parking

Gillette
Residents have parking available on Level E or above of the West Ramp. Parking card/ID badge will be obtained from the Education Coordinator at time of orientation; this badge will provide access to the West Ramp.

Hennepin County Medical Center
Residents on rotation are to park in the Parkside Professional Center ramp, entering on 8th Street at Chicago Avenue. A parking card can be obtained from the hospital Safety & Security Department, Lower Level, Red Building, between 7:30 am and 3:30 pm, with a $50 deposit. Parking cards are to be returned at end of each rotation.

Regions Hospital
Regions Hospital provides parking to residents at no charge. The resident lot is card-controlled and located in the East Ramp.

TRIA Orthopaedic Center
Parking is free of charge at TRIA and is permitted in any space that is not labeled "PATIENT PARKING" on the ground in within the parking space. The best place to look for a spot to park is on the second and third floor of the parking ramp.

University of Minnesota Medical Center
Parking access is provided for each resident assigned to the East Bank (University) and Riverside (University West) campuses.

PGY-1 and PGY-5 residents will have parking cards available that are rotation-specific. PGY-4 residents will have cards assigned to them throughout the academic year. These are issued through the Department of Orthopaedic Surgery for use on the East and West Banks as needed.

PGY-1 and PGY-5 residents completing their rotations are responsible for passing their Fairview parking card on to the next resident on that rotation. Parking on the Riverside campus is available 24/7 in the PURPLE ramp. PGY-1 Anesthesia and SICU parking cards are programmed to work in the Patient/Visitor Ramp on the University Campus 24/7. Other parking cards are programmed to work on the University Campus (East Bank) in the Patient/Visitor Ramp located on Delaware and Harvard Streets after hours, on weekends and holidays. After hours is between 4:30 pm and 5:30 am. Weekends and holidays are 8:00 am to 8:00 am. Free parking validation tickets are available for other times in the Fairview Patient/Visitor Ramp and are available from Betsy Wehrwein.
A monitored number of free parking validation tickets are distributed to all other residents as needed for Grand Rounds/Core Curriculum dates and for other administrative or research purposes.

Veterans Affairs Medical Center
There is free parking at the VAMC. However, they must park in the employee parking lots. These include 5,6,10, and 11. Do not park in the handicap parking or other patient parking. There is a Physicians Parking Lot accessible using their ID badges to get in.

Residents should report to the Surgery Office, Room 2J100, on the first day of the rotation to obtain forms for obtaining an ID card and security codes. Completed forms should be taken to Lisa Loyas, and the residents will be directed to the appropriate stops for completion of the ID badge, fingerprinting, scrubs, etc.

Paychecks
Residents are encouraged to use the direct-deposit system, as paychecks have the potential of being lost or delayed in the mail. Paychecks are either mailed or credited to bank accounts through the direct-deposit system. Direct-deposit information, along with information on pay dates can be accessed at http://hrss.umn.edu. Questions regarding payroll can be directed to Kirk Skogen in SAC at (612) 625-3954 or k-skog@umn.edu.

Personal Time Off
Please see addendum for Time Away forms. The following number of personal days has been allocated.

<table>
<thead>
<tr>
<th>Days/year</th>
<th>PGY-1</th>
<th>PGY-2</th>
<th>PGY-3</th>
<th>PGY-4</th>
<th>PGY-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGY-1 Year Time Away</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

(Personal Vacation time must be in one week blocks Monday-Sunday on non-ortho rotations; any holiday occurring during the week run concurrent with the week and not considered to extend the week. Orthopaedic rotations days may be spaced out. A total of three weeks allowed, one in each Educational Content Area as established by the ABOS requirements for PGY-1 year training. One week blocks must be taken for rotations in Structured Education in Surgery (Plastics, TACS, SICU) and Structured Education in Emergency Medicine, Neurological Surgery, Anesthesiology. All requests should be submitted on program Time Away Form for G1 year through orthoed@umn.edu and Betsy Wehrwein at wehrw005@umn.edu. Detail instructions are found on the form.

PGY-2 through PGY-5 Time Away
Personal time off includes vacation, job and fellowship interviews (see below), and non-department sponsored courses (e.g. review courses). It is based on a five-day work week, with call coverage on adjacent weekends to be arranged by the resident. Unused personal time off cannot be rolled over into next academic year.

A Time Away MUST be sent electronically to both orthoed@umn.edu and the site coordinator.

Gillette - Deb Berny: dberny@gillettechildrens.com
HCMC - Claudia Miller: claudia.miller@hcmed.org
Regions - Michelle Stepka: 
TRIA - Ali Hemphill: alicia.hemphill@tria.com
Time Away forms must be signed by the affected site/rotation and copy emailed to orthoed@umn.edu or faxed to (612) 273-8099.

No service or rotation can deny a request provided that no more than one resident is away from the site and patient care responsibility and call coverage are properly arranged. Any exception to this will require written approval by the program director.

No more than one week of personal time off may be taken at a time, except under extreme circumstances and must be pre-authorized by the program director.

Personal time off requests will be accommodated on a first-come, first-served basis.

Personal time off may not be taken when the resident’s absence would require another resident to take call more than every third night in a hospital.

Personal time off will be taken for the first five days a resident is away from the rotation due to fellowship interviews. Subsequent days taken will be department-sponsored.

No time off is granted during the last week of the academic year.

The department program is responsible for monitoring all time off, regardless of site or rotation. Sites may have their own particular requirements as well. Permission granted from a particular site or rotation must be directed to the program education coordinator via orthoed@umn.edu to monitor compliance. Any days that exceed the requirements will be reported immediately.

Gillette
Personal Time Away forms are signed by Deborah Quanbeck, MD

Hennepin County Medical Center
1. Orthopaedic Surgery rotation forms are signed by Thomas Varecka, MD. No resident is released the first week or the last week of a rotation.
2. Emergency Medicine rotation forms are signed by Marc Martel, MD.

Regions Hospital
1. Orthopaedic Surgery rotation forms are submitted to Tricia Corbo for approval. Once approved, time away is put on the calendar and paperwork is sent to the University of Minnesota for compliance purposes. Time away requests need to be submitted six weeks in advance of when a resident wants to be gone.
2. Plastic Surgery rotation forms are approved through Valery Rousseau.
3. TACS and SICU rotation forms are signed through the University of Minnesota Surgery Department.
4. Neurosurgery rotation forms are signed through Joanne Niemi.

University of Minnesota Medical Center / TRIA Orthopaedic Center
1. For Orthopaedic Surgery rotations, A Time Away form is submitted to the program education coordinator. All faculty affected by absence must be notified. All requests must be made at least 6 weeks in advance of dates to be gone. Fellowship interviews are the only exception
and it is the resident’s responsibility to notify both attendings and the site coordinator as soon as possible regarding interview dates.

2. Anesthesia rotation time away forms are signed by Mojca Konia, MD.

Veterans Affairs Medical Center
Orthopaedic Surgery rotation Time Away forms are signed by V. Franklin Sechriest, MD. No resident is released the first week or the last week of a rotation.

Stipends
Resident stipends are determined each year. Please see http://www.med.umn.edu/residents-fellows/current-residents-fellows/stipends-benefits

2016/2017 Annual Base Stipend Rates with Bi-weekly Amount

<table>
<thead>
<tr>
<th>Level:</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
<th>Step 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Rate</td>
<td>52,290</td>
<td>53,899</td>
<td>55,753</td>
<td>57,745</td>
<td>59,967</td>
</tr>
<tr>
<td>Bi-weekly Rate</td>
<td>2,011.15</td>
<td>2,073.04</td>
<td>2,144.35</td>
<td>2,220.96</td>
<td>2,306.42</td>
</tr>
</tbody>
</table>

Worker’s Compensation
Please refer to the http://www.med.umn.edu/gme/instpolicyman/home.html. There are no program specific worker’s compensation policies and procedures.

Needle Stick/Bloodborne Pathogen Exposure
Please refer to the policy at http://www.med.umn.edu/residents-fellows/current-residents-fellows/health-wellness/needle-sticks-blood-borne-pathogen-exposure-management.
SECTION 3 – INSTITUTION RESPONSIBILITIES

SECTION 4 – DISCIPLINARY AND GRIEVANCE PROCEDURES

SECTION 5 – GENERAL POLICIES AND PROCEDURES
Please refer to the Graduate Medical Education Institution Manual as well at http://hub.med.umn.edu/graduate-medical-education/policies-governance/graduate-medical-education-institution-manual.

Program Curriculum
The program includes education and research in collaboration with six institutions, with a faculty of over 60 regionally and nationally known orthopaedic surgeons. Rotation sites include

- University of Minnesota Health (UMH), includes
  - Riverside Campus (West Bank)
  - University Campus (East Bank)
  - Fairview Maple Grove Medical Center
- Gillette Children’s Specialty Healthcare (GCSH)
- Hennepin County Medical Center (HCMC)
- Regions Hospital (RGHP)
- TRIA Orthopaedic Center (TRIA)
- Veterans Affairs Medical Center (VAMC)

The PGY-1 year comprises of structured education in multisystem trauma, plastic surgery, surgical intensive care, emergency medicine, neurological surgery, anesthesiology and orthopaedics. Rotations during the PGY-2 and PGY-3 years provide a comprehensive background working with faculty to provide a solid base in general orthopaedics, adult reconstruction, pediatric orthopaedics and traumatology, along with an introduction to sports. During the PGY-4 year, specialty rotations in foot and ankle, hand, musculoskeletal tumor, joint restoration, pediatrics and spine are the focus of the curriculum. The PGY-5 year completes the program and is spent with chief rotations at the Veterans Affairs Medical Center, Hennepin County Medical Center and Regions Hospital, as well as additional experience in sports.
<table>
<thead>
<tr>
<th>Rotation Schedule</th>
<th>PGY-1</th>
<th>PGY-2</th>
<th>PGY-3</th>
<th>PGY-4</th>
<th>PGY-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ortho-Mpls VA</td>
<td>Sports-TRIA</td>
<td>Sports-TRIA</td>
<td>Trauma-HCMC</td>
<td>Foot &amp; Ankle-TRIA/UMH</td>
<td>Adult-Mpls VA Chief</td>
</tr>
<tr>
<td>Ortho-Regions Hospital</td>
<td>Pediatric Orthopaedic-Gillette</td>
<td>Trauma-HCMC</td>
<td>Hand-GOLD-TRIA/UMH</td>
<td>Adult-Mpls VA Gump</td>
<td></td>
</tr>
<tr>
<td>Ortho-UMH Sports</td>
<td>Trauma/General-Regions</td>
<td>Adult-Mpls VA</td>
<td>Hand-MAROON-UMH/TRIA</td>
<td>Gen/Trauma-Regions</td>
<td></td>
</tr>
<tr>
<td>Ortho-UMH Gen/Research</td>
<td></td>
<td></td>
<td>Joint Restoration-UMH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Medicine-HCMC</td>
<td></td>
<td></td>
<td>Pediatric Orthopaedic-Gillette/Children’s</td>
<td>Sports-TRIA</td>
<td></td>
</tr>
<tr>
<td>Multi-Level Trauma-Regions</td>
<td>Pediatric Orthopaedic-Gillette</td>
<td>Trauma-HCMC</td>
<td>Spine-UMH</td>
<td>Sports-UMH</td>
<td></td>
</tr>
<tr>
<td>Plastic Surgery-Regions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurological Surgery-Regions</td>
<td></td>
<td></td>
<td>Tumor-UMH</td>
<td>Trauma-HCMC Purple</td>
<td></td>
</tr>
<tr>
<td>SICU-UMH</td>
<td>Trauma/General-Regions</td>
<td>Adult-Mpls VA</td>
<td>Tumor/Joint-UMH</td>
<td>Trauma-HCMC White</td>
<td></td>
</tr>
<tr>
<td>Anesthesia-UMH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Weeks Vacation</td>
<td>3 Weeks Vacation</td>
<td>3 Weeks Vacation</td>
<td>3 Weeks Vacation</td>
<td>3 Weeks Vacation</td>
<td></td>
</tr>
<tr>
<td>3 Weeks Vacation</td>
<td>3 Weeks Vacation</td>
<td>3 Weeks Vacation</td>
<td>3 Weeks Vacation</td>
<td>3 Weeks Vacation</td>
<td></td>
</tr>
</tbody>
</table>
Residency Program Goals and Objectives

It is the objective of the graduate program in orthopaedic surgery to provide a comprehensive educational experience in the management of diseases and injuries of the musculoskeletal system for the physician seeking accreditation as an orthopaedic surgeon. It is the goal of this program to provide educational and research opportunities for those candidates with an interest in an academic career in orthopaedic surgery and provide the candidate interested in the practice of orthopaedic surgery a balanced educational experience.

The following are goals and objectives pertaining to specific rotations for the program.

PGY-1 Rotation - Anesthesiology - UMH
Rotation Director: Lida Trillos, MD

Introduction: PGY-1 residents learn to provide anesthesia in a variety of general operating room cases including general surgery, orthopedic surgery, otolaryngology, urology, and gynecology.

GOALS
The goals of the CA-1 general operating room rotation are:
1. To be competent at evaluating and providing anesthesia care for patients undergoing general operating room procedures such as general surgery, orthopedic surgery, gynecology, and urology.
2. To obtain a level of skill providing care for these basic operations to allow the resident to adequately perform when they are assigned to the subspecialty rotations.

OBJECTIVES
Patient Care
Following completion of the CA-1 general operating room rotation, the resident should be able to competently perform the following patient care activities:
- Perform and record a thorough preoperative assessment.
- Formulate and intelligently discuss an anesthetic management plan for a general surgical patient.
- Check-out and trouble-shoot the anesthesia delivery system using the manufacturer’s recommendations and the current FDA published “Anesthesia Apparatus Checkout Recommendations.”
- Understand the rationale for selecting drugs used during a surgical anesthetic. Determine the doses and anesthetic agents needed to anesthetize a general surgical patient.
- Be able to skillfully place a peripheral intravenous catheter.
- Be able to skillfully perform standard tracheal intubation in an average adult patient.
- Place a central venous catheter in the average adult patient.
- Place an arterial catheter in an average adult patient.
- Properly manage the maintenance of general anesthesia during surgery in an average adult patient.
- Properly manage the emergence and recovery of an adult patient undergoing general anesthesia, including postoperative pain management.
- Describe the techniques of regional anesthesia, surgical anesthesia and postoperative pain management.

Medical Knowledge
The resident will be expected to describe basic anesthesia knowledge at a textbook level and basic concepts of anesthesia for cases they have managed. In addition, residents are expected to do the following to increase his or her medical knowledge during their general operating room rotation:
- Read and demonstrate understanding of Basics of Anesthesia (Stoelting and Miller).
- Read and discuss the literature for issues involving individual patients they care for.
- Read and discuss articles for journal club.
- Read and discuss articles for individual cases presented in the morbidity and mortality conference.
- Attend at least 75 percent of the prepared didactic lectures, conferences and journal clubs.
Participate and read the material for the problem-based-learning-discussion sessions.
Participate in the difficult airway and other department sponsored workshops.
Read other texts as recommended in the “Residents Reading List”.

**Practice-based Learning and Improvement**
The resident will be expected to demonstrate life-long practice based learning and improvement with the following activities:
- Review the literature and lead the discussion on practice improvement for the cases they present in the weekly morbidity and mortality conference.
- Rapidly review the literature, including the use of electronic media, for anticipated difficult cases to which they are assigned to provide anesthesia for.

**Interpersonal and Communication Skills**
The resident will be expected to do the following to further their interpersonal and communication skills.
- Competently and compassionately discuss the anesthetic plan and risks with patients and their families.
- Interact with nursing and surgical personnel to facilitate safe and efficient care in the operating room.
- Learn to communicate with and calm patients undergoing surgery under local or regional anesthesia.
- Competently discuss and present cases to the faculty and other residents at the weekly morbidity and mortality conferences.

**Professionalism**
The resident will be expected to act responsibly and with integrity to patients, nurses, fellow residents and health care providers throughout the rotation. In addition the resident is expected to:
- Show sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.
- Have a commitment to ethical principles including the confidentiality of patient information and informed consent.

**Systems-based Practice**
The resident should demonstrate an awareness of and responsiveness to the needs of the large health care system as it relates to patient care. The resident should:
- Interact and participate in hospital initiatives to improve quality and efficiency in the operating room.
- Discuss systems-based problems as they pertain to patient care at the weekly morbidity and mortality conference.

**Assessments**
The following methods are used to assess the residents’ achievement of the educational objectives and competencies during their rotation:
- Introductory lecture series test (Medical Knowledge).
- Anesthesia knowledge test (Medical Knowledge).
- Faculty evaluations (Patient Care, Medical Knowledge, Practice-based Learning and Improvement, Interpersonal and Communication Skills, Professionalism, Systems-based Practice).
- Conference and lecture attendance records (Practice-based Learning and Improvement, Interpersonal and Communication Skills, Professionalism).
- 360 Evaluations from medical, nursing and ancillary colleagues.

Suggested Textbooks:
- *Basics of Anesthesia, Miller & Stoelting, 5th Ed.*
- *Miller, 6th Edition or Clinical Anesthesia, Barash & Cullen*
- *Anesthesia and Co-existing Disease, 5th Ed.*
- *Anesthesia Uptake and Action by Ed Eger II*
- *Pharmacology & Physiology in Anesthetic Practice, Stoelting*
PGY-1 Rotation - Emergency Medicine - HCMC
Rotation Director: Megan Rischall, MD

Goals:
• Develop familiarity with common general orthopedic disorders.
• Develop relevant history and physical exam skills.
• Develop procedural skills relevant to orthopedics, including but not limited to splinting, casting, fracture and dislocation reduction and compartment pressure measurement.
• Learn indications for consultation and surgical intervention in patients with orthopedic injuries.

Objectives:

**Patient Care**
• Demonstrate appropriate history taking skills for all patients presenting to the Orthopedic Emergency Department.
• Demonstrate the ability, based on the history acquired, to do an immediate assessment and initial stabilization, followed by a complete directed examination.
• Combine the knowledge defined in the objectives below with the history and physical examination, to develop an appropriate differential diagnosis for all presentations.

**Practice-Based Learning and Improvement**
• To develop a personal program of learning related to the requirements of the emergency medicine residency.
• To develop methods of analyzing the resident’s own practice to improve quality of health care provided.
• To develop skills in the use of evidence from scientific studies to alter the resident’s practice of medicine, with the goal of improving the health care provided.

**Interpersonal and Communication Skills**
• To develop a physician-patient relationship model that creates a therapeutic relationship with patients.
• To develop listening skills that will facilitate communication with patients, their families, and other members of the health care.
• To further develop skills a working within a health care team with the goal of providing excellent patient care.

**Professionalism**
• To develop a physician-patient relationship model that creates a therapeutic relationship with patients.
• To develop listening skills that will facilitate communication with patients, their families, and other members of the health care.
• To further develop skills a working within a health care team with the goal of providing excellent patient care.

**Systems-Based Practice**
• To develop an understanding of the interaction of the practice of emergency medicine with that of the larger health care system as a whole.
• To develop knowledge of the practice and delivery of health care in different systems and environments.
• To develop cost-effective strategies in the practice of emergency medicine.
• To develop an attitude of being an advocate for the patient within the health care system.
• To develop a willingness to become involved in a partnership to improve health care and system performance within the emergency department and hospital health care system.

**Medical Knowledge**
• Develop ability to correctly perform a history and physical in patients with musculoskeletal disorders.
• Demonstrate ability to correctly order and interpret radiographs in patients with orthopedic injuries.
• Demonstrate understanding of the anatomy, mechanism of injury, presentations, complications, and management and prognosis of common musculoskeletal injuries.
• Demonstrate knowledge of standard orthopedic nomenclature.
• Demonstrate knowledge of appropriate aftercare and rehabilitation of orthopedic injuries.
• Demonstrate knowledge of the differences in pediatric and adult skeletal anatomy and indicate how those differences are manifest in clinical and radiographic presentations.
• Demonstrate ability to apply orthopedic devices, including compressive dressings, splints, and immobilizers.
• Demonstrate skill in performance of the following procedures: fracture/dislocation immobilization and reduction, arthrocentesis, and extensor tendon repair.
• Demonstrate ability to prioritize and manage the treatment of orthopedic injuries in multiple trauma patients.
• Describe the presentation of patients with inflammatory and infectious disorders and demonstrate ability to diagnose and treat them.
• Demonstrate ability to diagnose and treat soft tissue foreign bodies.
• Describe the presentations, complications, diagnosis, management, and prognosis of patients with human and animal bites.
• Describe the presentations, complications, diagnosis, and management of compartment syndromes.
• Demonstrate ability to provide regional anesthesia, including hematoma blocks, Bier blocks, and radial, ulnar, median, axillary, posterior tibial, and sural nerve blocks.
• Discuss the dosages, indications, contraindications, and side effects of standard analgesic and sedative agents used to treat patients with acute orthopedic trauma, and demonstrate skills in their use.
• Discuss the dosages, indications, contraindications, side effects, and relative potency of standard oral analgesics used in treatment of patients with musculoskeletal disorders.
• Discuss the differential diagnosis, historical features, and physical and examination findings of patients with low back pain.
• Demonstrate ability to recognize and treat soft tissue infections involving muscle, fascia, and tendons.
• Describe diagnosis and treatment of over-use syndrome.
• Describe how to evaluate and preserve amputated limb parts.
• Demonstrate knowledge of joint injuries, evaluation, and grading of joint injuries, treatment of joint injuries, and prognosis.
• Discuss evaluation and treatment of soft tissue injuries, such as strains, penetrating soft tissue injuries, crush injuries, and high pressure injection injuries.

Description of Clinical Experience:
• Residents will be assigned 8 to 12-hour shifts in the emergency department orthopedics treatment area.
• Residents will be primary care givers to non-critical patients presenting with primary orthopedic problems.
• Resident will perform the initial history and physical examination, obtain ancillary tests, such as radiographs, and formulate treatment plans with the aid of the senior resident and faculty physician.
• Residents will also provide orthopedic assistance to critical patients in the stabilization room as needed.

Evaluation Process:
An evaluation form will be distributed to all emergency medicine faculty for each resident at the completion of the rotation. These forms will be collated and summarized by the rotation director, John McGill, MD. Specific areas such as patient care, clinical judgment, physical examination, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, case presentations, record keeping, professionalism, systems-based practice, and overall clinical competence will be numerically assessed and recorded.

Feedback:
• Written evaluations will be placed into a permanent resident file located in the residency coordinator/program director office. The file will be locked and confidential. Residents are able to view their individual file anytime they desire. Residents are encouraged to view their rotation evaluations as soon as possible.
• Residents will have formal feedback by the residency or assistant residency director at least 2x/year. The written evaluation from this rotation will be specifically reviewed.
• All written evaluations will be entered into a computer database for summary analysis and reports, and longitudinal tracking of progress.
More frequent evaluation and feedback will be individualized as needed.

PGY-1 Rotation - Neurosurgery - Regions Hospital
Rotation Director: Fotis Souslian, MD

Medical Knowledge and Patient Care
By the end of the PGY-1 rotation the following levels of knowledge and technical competency are expected.

The resident should have a three dimensional concept of the spine and spinal cord anatomy and should be adequate in the assessment of the spine and spinal cord disorders. This would include knowledge of the pathophysiology and presentation of cervical and lumbar disc herniation, cervical and lumbar stenosis, cervical spine fractures, and a basic knowledge of the radicular, plexus and peripheral nerve injuries, disorders, and entrapment syndromes. The resident should have working knowledge of a median and ulnar nerve neurolysis, and the ability to expose and remove a lumbar disc and decompress the lumbar spine.

The resident should participate in the preoperative diagnosis and nonsurgical management and postoperative care of acute subarachnoid hemorrhage, transient ischemic attacks, and stroke. The resident should have a basic angiographic anatomy of the cervical and intracranial circulation.

With regard to cranial base neurosurgery the resident should possess a basic knowledge of the anatomy of the VII, VIII, and lower cranial nerves and be able to clinically evaluate a patient with an acoustic neuroma.

With regard to pediatric Neurosurgery, the resident should have a basic knowledge of normal and abnormal embryology of the brain and spinal cord including spina bifida and hydrocephalus with increased intracranial pressure. The resident should understand cerebrospinal fluid dynamics and physiology and have familiarity with shunt complications. The resident should understand the pathophysiology of intraventricular hemorrhages in the neonate and a working knowledge of the pathophysiology and diagnosis and recognition of skull fractures, hematomas, and late complications of trauma, spinal cord injuries, and peripheral nerve injuries, particularly to the brachial plexus. The resident should also be comfortable with pediatric, as well as adult, critical care and intensive care management. The resident should be comfortable assisting in the placing a ventriculostomy or intracranial pressure monitor and performing a straightforward ventriculoperitoneal shunt with attending supervision. The resident should have working knowledge of a stereotactic brain biopsy and placing burr holes for evacuation of subdural hematomas and hygromas.

Practice-Based Learning
The ability to continuously learn from and improve one’s practice is an important part of maintaining competence and sustaining continuing intellectual interest and growth as a surgeon. Many of the daily activities of residency are, in fact, informal exercises in practice-based learning. During the course of this rotation, the resident is expected to:
- locate, appraise and assimilate evidence from scientific studies related to patients’ health issues;
- obtain and use information about the patient population and the larger population from which patients are drawn;
- apply knowledge of study designs and statistical methods to the appraisal of clinical studies;
- use information technology to manage information, access on-line medical information and support the resident’s own education;
- critically evaluate literature

Interpersonal and Communication Skills
The resident is expected to:
- be able to create and sustain a therapeutic and ethically sound relationship with patients and their families;
- be able to effectively use listening skills;
- be able to effectively provide information via various methods;
- be able to work effectively with others as a member or leader of a health care team;
- provide necessary reporting to more senior residents, fellows and attending staff to ensure good patient care;
- respond to patient phone calls and communication from allied health professionals.
Professionalism
The resident is expected to
- maintain the strictest confidence in any and all interactions dealing with all patients
- demonstrates compassion and empathy for those being evaluated
- demonstrates respect, compassion and integrity in response to the needs of patients and their families
- demonstrates ethical principles pertaining to patient confidentiality issues
- demonstrates sensitivity to the culture, age, gender and disabilities of patients
- promptly recognizes and acknowledges complications that arise
- maintain adequate documentation and timely completion of medical records
- complete teaching and rotation evaluations

PGY-1 Rotation - Orthopaedic Surgery - VAMC / UMH
Rotation Directors: V Franklin Sechriest II, MD (VAMC), Christian Ogilvie, MD (UMH)

Medical Knowledge
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:
- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

Specific rotation goals related to this competency
- Present a Grand Rounds or morning conference presentation every rotation on a topic chosen by staff, demonstrating use of current literature and explaining current concepts or technology.
- Demonstrate basic preoperative and postoperative patient evaluation and assessment skills
- Possess a basic understanding of the anatomy underlying common surgical approaches
- Possess knowledge of appropriate imaging studies to recommend for the common clinical conditions encountered

Patient Care
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:
- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about their patients.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans.
- Counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Work with health care professionals, including those from other disciplines, to provide patient-focused care.

Specific rotation goals related to this competency
- Be able to manage the common postoperative orthopaedic and medical issues following THA, TKA, hip fracture, spine surgery, shoulder surgery, and foot and ankle surgery
- Be able to diagnose common postoperative complications on the basis of history, examination, and laboratory findings

Practice-Based Learning and Improvement
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:
• Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
• Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
• Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
• Use information technology to manage information, access online medical information; and support their own education.
• Facilitate the learning of students and other health care professionals.

Specific rotation goals related to this competency
• Participate actively in weekly Journal Club, demonstrating the ability to critically evaluate orthopaedic studies
• Participate actively in weekly case-based presentations at Grand Rounds and morning conference

System-Based Practice
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:
• Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
• Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
• Practice cost-effective health care and resource allocation that does not compromise quality of care.
• Advocate for quality patient care and assist patients in dealing with system complexities.
• Maintain strict confidence in all interactions dealing with patients

Specific rotation goals related to this competency
• Assess, coordinate and improve the care of patients following spine, joint arthroplasty with PT, OT, and Social Services
• Interact with other services in a professional and timely manner when performing inpatient consultation

Professionalism
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:
• Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
• Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
• Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

Specific rotation goals related to this competency
• Maintain excellent documentation and timely completion of medical records
• Demonstrate compassion and empathy for the elderly and cognitively challenged

Interpersonal and Communication Skills
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:
• Create and sustain a therapeutic and ethically sound relationship with patients.
• Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
• Work effectively with others as a member or leader of a health care team or other professional group.
Specific rotation goals related to this competency

- Show and explain four ways to communicate better with patients.
- Demonstrate ability to work well with a team; provide necessary reporting to more senior residents and staff

PGY-1 Rotation - Plastic Surgery - Regions Hospital
Rotation Director: Ashish Mahajan, MD

Patient Care
Manual Dexterity & Care Plans
Be able to manage
- Wound care and debridement
- Advanced suture technique
- Ability to evaluate complex wounds
- Basic examination of the hand
- Apply splints or casts for common hand injuries

Perform operative procedures
Wound repair:
- Intermediate and complex
- Split-thickness skin graft
- Full-thickness skin graft
- Excision of skin tumors
- Drainage of hand infections
- Repair of fingertip injuries

Closed and open reduction of hand fractures

Medical Knowledge
Understand the principles of wound healing and wound care
Understand the principles of grafts and flaps
Understand the “reconstructive ladder”
Recognize common skin lesions
Understand the basic embryology underlying common congenital anomalies
Understand aesthetic surgery principles

Practice-Based Learning and Improvement
Analyze personal strengths and weakness.
Accept constructive criticism.
Utilize scientific literature in patient management questions.
Apply principles of biostatistics, study design, and epidemiology to surgical problems.
Apply the concepts of “best practice” and “evidence-based medicine.”
Utilize technology and medical informatics in patient management.

Interpersonal Communication Skills
Create ethical and appropriate patient relationships.
Develop effective listening skills, including observing nonverbal cues and using explanatory questioning.
Develop effective, complete, and legible note writing skills.
Learn to give effective medical presentations to other providers, on rounds, at institutional conferences, and at local/national meetings.

Professionalism
Demonstrate respect, compassion, integrity and honesty.
Demonstrate patient care that supercedes personal self interest.
Demonstrate personal responsibility for patient problems.
Understand and utilize privacy policies, informed consent, business and medical ethics.
Understand and follow institutional behavior policies (ie. Sexual harassment, duty hours, dress code, etc.).

**System-Based Practice**
Understand how patient care affects other health care providers.
Learn role of consultant.
Understand the continuity between clinic and hospital based care.
Understand the role the community hospital and private practice in the healthcare system.
Practice cost-effective and appropriate preoperative evaluation and postoperative follow up.
Understand resource allocation issues.

**PGY-1 Rotation - Surgical Intensive Care - UMH**
Rotation Director: Jeffrey Chipman, MD

**Medical Knowledge**
By the end of the rotation residents should know:
- The clinical appearance of shock
- Examples of distributive, cardiogenic, neurogenic, obstructive, and hypovolemic shock
- How to determine oxygen delivery (DO2)
- What an intensivist does
- The clinical and laboratory indicators of acute respiratory failure
- Basic ventilator modes (CMV, SIMV, PC, PS)
- The distinction between the systemic inflammatory response syndrome SIRS), bacteremia, and sepsis.
- SIRS criteria
- The physiologic response that defines sepsis
- Risks and benefits of blood transfusion
- Current opinions of “transfusion triggers”
- Biochemical indicators of renal failure
- The meaning of DNR/DNI and comfort care
- Indications for tracheostomy
- Risks and benefits of tracheostomy

**Patient Care**
By the end of the rotation PGY-1 residents should be able to perform:
- A history and physical exam to identify the shock state
- Write and initiate orders to treat the shock state and achieve resuscitative end-points including: intravenous fluid rates and boluses, DVT & ulcer prophylaxis, blood transfusions
- Recognize the need for antibiotics
- Recognize the need for vasoactive Agents
- Order basic ventilator settings (tidal volume, respiratory rate, mode, and PEEP)
- Interpret blood gases and recognize acute and compensated, respiratory and metabolic acid base disorders
- Recognize SIRS and when it becomes sepsis
- Resuscitate from sepsis (see objectives for Shock)
- Order proper blood products
- Recognize the signs and symptoms of pain, anxiety or other discomfort at end-of-life
- Recognize the landmarks both bronchoscopically and externally for a tracheostomy location

**Practice-Based Learning and Improvement**
By the end of the rotation residents should be able to:
- Recognize his/her limitations
- Utilize available resources to answer questions regarding critical illness and patient care issues

**Interpersonal Communication Skills**
By the end of the rotation residents should:
- Have witnessed an end-of-life exam
• Have communicated a status update to family
• Present effectively and organized on daily rounds
• Use SBAR to communicate

**Professionalism**
By the end of the rotation residents should be able to perform:
• Resolve conflict with nursing
• Be prepared for rounds
• Take ownership of all patients on service, not just the ones “you are covering.”

**System-Based Practice**
By the end of the rotation residents should:
• Recognize the need for timely order writing and SICU discharge
• Communicate ongoing care needs to services providing care after SICU discharge, including to other facilities

**PGY-1 Rotation - Trauma and Acute Care Surgery - Regions Hospital**
**Rotation Director: Michael D. McGonigal, MD**

**Medical Knowledge**
Trauma Mechanism and Physiology
• Understand normal and abnormal responses to shock
• Describe classes of hemorrhage and physiologic responses
• List basic mechanisms of injury
• Describe common injury patterns based on mechanism
• Understand basic concepts of ballistics and firearm injury
• Review management of DVT and PE in trauma patients
• Describe the concepts of damage control surgery

Resuscitation
• Describe classes of hemorrhage and their physical manifestations
• All Understand the differences between commonly used resuscitation fluids
• All List uses for commonly administered blood products
• All Describe causes and treatment of coagulopathy due to trauma

Head and Neck Trauma
• Review the anatomic types of brain injury
• All Understand manifestations of concussion and post-concussive syndrome
• All Describe airway management principles in trauma
• All Review findings in and management of cervical spine and cord injury

Chest Trauma
• Describe the 12 major chest injuries and their management
• Understand the implications and management of cardiac contusion

Abdominal Trauma
• Describe the principles of solid organ injury management
• Recognize signs and symptoms of hollow viscus injury and detail their management

Specialty Surgery
• Describe management of injuries to kidney, ureter, bladder and urethra
• Review diagnosis and management of pelvic fractures
• Review diagnosis and management of spine fractures and spinal cord injury
• List signs and symptoms of extremity compartment syndrome and detail management

**Patient Care**
Participate in Trauma Team Activations as MD1
Insert chest tube
Implement solid organ injury protocol when appropriate
**Practice-Based Learning and Improvement**
Identify own learning needs or goals at the onset of the rotation.
Following a trauma activation, debrief what went well, and what could have been improved.
Following a surgical procedure, debrief what went well, and what could have been improved.
Diagnose personal learning needs associated with any medical errors, complications, or “near misses” that occurred during your watch.
Use feedback gained from others, and the experience gained on this rotation, to formulate future learning goals and steps.

**Interpersonal Skills and Communication**
Communicate patient information clearly to other health providers in written notes and oral presentations.
Work constructively with all members of the trauma care team, including nurse clinicians, floor nurses, social workers and therapists.
Apply appropriate communication skills with patients and families (i.e. effective listening, awareness of nonverbal cues, and use of open-ended questions).
Counsel and educate patients and families on their treatment options, their surgical outcomes and prognosis, and home care needs.

**Professionalism**
Adhere to patient privacy and informed consent policies at all times.
Adhere to Regions Hospital behavior policies (e.g., sexual harassment, duty hours, dress code) at all times.
Demonstrate respect, compassion, integrity, and honesty in all interactions with patients, families, and other health care providers.
Demonstrate personal responsibility for patient welfare.
Articulate ethical issues underlying clinical decisions made for at least once complex case seen during this rotation.

**System-Based Practice**
Know when to call for help from attending physicians.
Understand when, how, and why to request a consult from medical and surgical specialists, and how to use the information gained as a result.
Provide timely and pertinent consultation when asked by Emergency Medicine physicians.
Use the talents and skills of other health providers in the OR and ward.
Diagnose any “systems issues” associated with medical errors, complications, and “near misses” that occurred during this rotation.

**PGY-2 Rotation - Pediatrics - Gillette Children’s Specialty Healthcare**
Rotation Director: Deborah Quanbeck, MD

**Medical Knowledge**
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:

- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

**Specific rotation goals related to this competency**

- Describe the basic anatomy, development, and function of the child’s musculoskeletal system.
- Develop an understanding of and describe conditions affecting the child’s musculoskeletal system. Outline treatment plans. For example: describe primary conditions of the spine and upper and lower extremities and describe musculoskeletal effects of conditions such as cerebral palsy, spina bifida, muscular dystrophy, infection, trauma, etc.

**Patient Care**
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:
• Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
• Gather essential and accurate information about their patients.
• Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
• Develop and carry out patient management plans.
• Counsel and educate patients and their families.
• Use information technology to support patient care decisions and patient education.
• Perform competently all medical and invasive procedures considered essential for the area of practice.
• Provide health care services aimed at preventing health problems or maintaining health.
• Work with health care professionals, including those from other disciplines, to provide patient-focused care.

Specific rotation goals related to this competency
• Complete thorough but concise histories and physical examinations of children.
• Perform competent perioperative care of children, including fluid and electrolyte management, drug usage, resuscitation, pain management and rehabilitative plans.

Practice-Based Learning and Improvement
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:
• Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
• Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
• Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
• Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
• Use information technology to manage information, access on-line medical information; and support their own education.
• Facilitate the learning of students and other health care professionals.

Specific rotation goals related to this competency
• Demonstrate the ability to obtain and master scientific knowledge (e.g. textbooks and scientific journals) specifically addressing the patient’s condition and treatment.
• Review evaluations regarding care practices (e.g. dictations, technical abilities, presentation skills, etc.) and incorporate findings to improve abilities.

System-Based Practice
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:
• Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
• Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
• Practice cost-effective health care and resource allocation that does not compromise quality of care.
• Advocate for quality patient care and assist patients in dealing with system complexities.
• Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency
• Demonstrate an ability to interact with professionals outside the immediate care system to arrange and achieve timely care for children with urgent problems; e.g., be able to discuss and arrange evaluation and care for a child with hip dysplasia, fractures, limps, etc.
• Demonstrate knowledge of and participate in professional organizations and activities to foster the development of other professionals’ understanding of musculoskeletal problems in children.
**Professionalism**
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:
- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

**Specific rotation goals related to this competency**
- Attend and actively participate in a breadth of learning opportunities (conferences, lectures, seminars, case presentations) to demonstrate commitment to professionalism.
- Participate in the care of children with diverse backgrounds (e.g. care for patients with physical disabilities, cognitive delays, financial difficulties, language or other communication barriers).

**Interpersonal and Communication Skills**
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:
- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a member or leader of a health care team or other professional group.

**Specific rotation goals related to this competency**
- Consistently display ability to relate to and work collaboratively with professional staff, including co-residents, nurses, attending physicians, and with patients and their parents to achieve optimal outcomes for all.
- Demonstrate the ability to interact effectively through a variety of methods, such as verbal, online and written communications to achieve efficient, appropriate care.
## PGY-2 Rotation - Regions Hospital

**Rotation Director:** Sarah Anderson, MD

### Trauma

**Medical Knowledge**

Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:

- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

**Specific rotation goals related to this competency**

- Understand indications and timing of emergent orthopaedic intervention: role of the physical examination (plain radiographs, CT scans, occult soft tissue injury and MRI); trauma scoring systems
- Understand the limb at risk, in particular vascular assessment: “hard” signs; “soft” signs; assessment tools: (physical examination, Arterial Pressure Index, angiogram, ultrasound)
- Understand the meaning of compartment syndrome: pathophysiology of compartment syndrome; clinical presentation of compartment syndrome; pressure monitoring; treatment and outcomes; surgical technique for fasciotomies
- Understand the basic principles of fracture management for: long bone fractures (humerus, femur, tibia); pelvis and hip fractures; periarticular fractures (elbow, knee, ankle)
- Understand indications for closed reduction of various fractures: evaluation for instability; anesthesia; methods of reduction; fluoroscopy; casting; position of immobilization; follow-up
- Understand the basics of bone metabolism / osteoporosis: prevention and treatment of osteoporosis; basic clinical workup
- Understand the different types of nonunions: pathophysiology and evaluation; treatment options (reamed nailing/rhBMP-7/OP-1/bone growth stimulator).

### Joint Reconstruction

- Understand the treatment options for the arthritic knee: arthroscopy, unicompartmental knee replacement, high tibial osteotomy, and total knee arthroplasty;
- Understand indications/contraindications for minimally invasive surgery
- Understand the treatment options for the arthritic hip: osteoarthritis, avascular neocrosis, other; total hip arthroplasty, hemiarthroplasty, femoral osteotomy, core decompressions
- Understand indications/contraindications for minimally invasive surgery

### Patient Care

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about their patients.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans.
- Counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Perform competently all medical and invasive procedures considered essential for the area of practice.
- Provide health care services aimed at preventing health problems or maintaining health.
• Work with health care professionals, including those from other disciplines, to provide patient-focused care.

Specific rotation goals related to this competency

Trauma
• Understand the specific needs of the polytrauma patient: staged protocols with use of external fixation; timing of definitive fixation
• Understand the specific needs of the geriatric patient: treatment options appropriate for this patient population; specialized discharge planning
• Understand the specific needs for postoperative management of the following fractures: long bone fractures (humerus, femur, tibia); pelvis and hip fractures; periarticular fractures (elbow, knee, ankle).

Joint Reconstruction
• Understand the specific needs for postoperative management of the following: total hip arthroplasty; hemiarthroplasty; total knee replacement; unicompartimental knee replacement

Practice-Based Learning and Improvement
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:
• Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
• Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
• Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
• Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
• Use information technology to manage information, access on-line medical information; and support their own education.
• Facilitate the learning of students and other health care professionals.

Specific rotation goals related to this competency

Trauma
• Ability to assess appropriateness and timing for management of the following: the limb at risk; compartment syndrome; polytrauma patient
• Ability to interpret and critique intraoperative and postoperative radiographs for: long bone fractures (humerus, femur, tibia); pelvis and hip fractures; periarticular fractures (elbow, knee, ankle)
• Ability to interpret clinical outcomes of the following: long bone fractures (humerus, femur, tibia); pelvis and hip fractures; periarticular fractures (elbow, knee ankle)

Joint Reconstruction
• Ability to interpret and critique postoperative radiographs for the following: total hip arthroplasty; hemiarthroplasty; total knee replacement; unicompartimental knee replacement
• Ability to assess clinical and functional outcomes for the following: total hip arthroplasty; hemiarthroplasty; total knee replacement; unicompartimental knee replacement

System-Based Practice
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:
• Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
• Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
• Practice cost-effective health care and resource allocation that does not compromise quality of care.
• Advocate for quality patient care and assist patients in dealing with system complexities.
• Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency
• Ability to respond in a timely fashion to emergent needs from the Emergency Department
• Ability to develop a working relationship with the Emergency Department staff, residents, and paramedical personnel
• Ability to recognize the indications for the following consultations: Internal Medicine; Infectious Disease; TACS Service
• Ability to develop a working relationship with ER resident
• Ability to develop a working relationship with the physicians’ assistants
• Ability to develop a working relationship and mentoring role with the medical students
• Ability to respond to outside referrals for transfers and emergent needs in a timely fashion
• Ability to develop a working relationship with the Medicine service and nursing home staff

Professionalism
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:
• Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
• Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
• Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

Specific rotation goals related to this competency
• Demonstrate Professionalism in the context of Regions Hospital rotation.

Interpersonal and Communication Skills
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:
• Create and sustain a therapeutic and ethically sound relationship with patients.
• Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
• Work effectively with others as a member or leader of a health care team or other professional group.

Specific rotation goals related to this competency
• Demonstrate effective interpersonal and communication skills in the context of Regions Hospital rotation.

PGY-2 Sports Rotations - TRIA
Rotation Director: Bradley Nelson, MD

Medical Knowledge
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:
• Demonstrate an investigatory and analytic thinking approach to clinical situations.
• Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

Specific rotation goals related to this competency
• Understanding of clinical pathologies as they relate to shoulder and knee injuries and conditions.
• Interest in ongoing knowledge acquisition

Methods to demonstrate this include
• Pre-operative and post-operative discussions with faculty
• Consistent preparation for cases pre-operatively and ability to demonstrate understanding of pathologies, anatomy, and techniques in the operating room
• Intra-operative discussions of the pathology
• Excellence in required presentations demonstrating advanced level of understanding of Sports Medicine cases and their evaluation and management
• Active and vibrant participation in journal club discussions
• Extra-curricular written work on certain pertinent pathologic conditions
• Participation in chapter writing, clinical research, or case presentation generation
• Ability to perform surgical procedures such as diagnostic arthroscopy either in the dry lab setting or the operating theatre
• Eagerness to work on areas of poor clinical skills in order to augment areas or personal inadequacy

Patient Care
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:
• Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
• Gather essential and accurate information about their patients.
• Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
• Develop and carry out patient management plans.
• Counsel and educate patients and their families.
• Use information technology to support patient care decisions and patient education.
• Perform competently all medical and invasive procedures considered essential for the area of practice.
• Provide health care services aimed at preventing health problems or maintaining health.
• Work with health care professionals, including those from other disciplines, to provide patient-focused care.

Specific rotation goals related to this competency
• Ability to perform the clinical examination of the shoulder and knee as it relates to the athletic and degenerative pathologies.
• Ability to engage patients in the outpatient, operative, and inpatient settings in compassionate and thorough evaluation and management.

Methods to demonstrate this include
• Rapport establishment with patients in clinic
• Discussions with Faculty regarding best treatment options
• Conscientiousness in patient care and handling in the clinic and the Emergency Department/On Call hours
• Demonstration of clinical skills which are likely to provide therapeutic treatment of a given patient’s problem.

Practice-Based Learning and Improvement
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:
• Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
• Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
• obtain and use information about their own population of patients and the larger population from which their patients are drawn.
• Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
• Use information technology to manage information, access on-line medical information; and support their own education.
• Facilitate the learning of students and other health care professionals.

Specific rotation goals related to this competency
• Understanding that there are costs associated with the practice of Sports Medicine and that choices made in the care of a patient have consequences for the patient and should be driven by data whenever possible. Methods to demonstrate this include
  • Discussions with faculty regarding indications and alternatives
  • Eagerness to learn in a self-directed fashion when gaps in his/her knowledge base are exposed
  • Self-initiated projects regarding areas of weakness in clinical evaluation and understanding including reviews of the literature
  • Chapter writing or case presentation on areas of personal interest or inadequate knowledge
  • Active participation in journal club revealing an ability to synthesize and apply the knowledge from a given article or set of articles
  • Self-initiated work on an arthroscopic model
  • Attendance at and active participation in directed arthroscopy or surgical labs

System-Based Practice
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:
  • Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
  • Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
  • Practice cost-effective health care and resource allocation that does not compromise quality of care.
  • Advocate for quality patient care and assist patients in dealing with system complexities.
  • Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency
  • Awareness that the practice of Sports Medicine has consequences not only to other patients with sports injuries, but to the whole medical system as a whole. Methods to demonstrate this include
    • Discussions with Faculty regarding the cost-effectiveness of certain alternatives to care
    • Review of the literature for cost-utility analyses or related studies and incorporation of these into the decision making process
    • Conscientiousness regarding the cost of implants, braces, therapy, and surgical interventions as discussions of risks and benefits are had between faculty and residents

Professionalism
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:
  • Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
  • Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
  • Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

Specific rotation goals related to this competency
  • Diligence in regards to the responsibilities of patient care as manifest by the daily care of patients in the clinic, on the hospital floor, and in the operating room for the Faculty of the Sports Medicine rotation. Methods to demonstrate this include
    • Timely and thorough completion of all documentation including clinic notes, discharge summaries, and emergency room consultations/On-Call work
    • Ability to interact with patients from diverse cultural backgrounds in the clinic, ER, Floor, and operating room
    • Appropriate conduct in the Operating Room, on the hospital Floor, and Clinic
    • Professional and appropriate attire which is acceptable for the setting
Interpersonal and Communication Skills
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a member or leader of a health care team or other professional group.

Specific rotation goals related to this competency
- Ability to clearly communicate between patient and provider, provider and ancillary staff, and provider to provider.

Methods to demonstrate this include
- Well-written and thorough Discharge Summaries which facilitate post-discharge patient care
- Organized, complete, and thoughtful clinic notes which adequately reflect the visit and demonstrate the ability to understand the pathology, formulate a plan of treatment, and record the findings of the examination, studies, and history
- Oral presentations which show an understanding of the pathology presented and enable peer-to-peer education
- Active participation in journal club revealing an ability to synthesize and apply the knowledge from a given article or set of articles
- Thorough patient workups which include discussions with patients and their families about the potential treatment options and yield comprehension on the patient’s behalf
Patient Care
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about their patients.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans.
- Counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Perform competently all medical and invasive procedures considered essential for the area of practice.
- Provide health care services aimed at preventing health problems or maintaining health.
- Work with health care professionals, including those from other disciplines, to provide patient-focused care.

Specific rotation goals related to this competency
- Demonstrate the ability to establish rapport with patients of various ethnic and socio-economic background.
- Demonstrate the ability to do exposures for common, routine fracture surgery, i.e., hip, forearm, hand, foot.

Practice-Based Learning and Improvement
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
- Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Use information technology to manage information, access on-line medical information; and support their own education.
- Facilitate the learning of students and other health care professionals.

Specific rotation goals related to this competency
- Supervise and mentor medical students and PGY-1 trainees.
- Demonstrate ability to organize, create and present patient case studies in electronic format.
- Recognize and report complications and untoward events and discuss relevant teaching points.

System-Based Practice
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:

- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- Practice cost-effective health care and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing with system complexities.
- Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency
- Demonstrate use of social service and home health personnel and agencies and facilitate efficient patient care.
- Understand and discuss various treatment options for a stated fracture and support choice based on cost, efficiency, social and other relevant conditions.
Professionalism
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:

- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

Specific rotation goals related to this competency
- Demonstrate a respectful, concerned, non-judgmental attitude toward all patients.
- Cultivate appropriate personal traits and habits, e.g., be prompt, well groomed and courteous.

Interpersonal and Communication Skills
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a member or leader of a health care team or other professional group.

Specific rotation goals related to this competency
- Speak to patients and their families prior to and following treatments, especially surgery.
- Speak to patients frankly, on their level, without being abrupt, rushed or distracted.

PGY-3 Rotation - Veterans Affairs Medical Center
Rotation Director: V Franklin Sechriest II, MD

Medical Knowledge
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:

- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

Specific rotation goals related to this competency
- Present a Grand Rounds presentation every six weeks on a topic chosen by staff, demonstrating use of current literature and explaining current concepts or technology.
- Consistently demonstrate surgical knowledge by explaining and being prepared for each case.

Patient Care
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about their patients.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans.
- Counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Perform competently all medical and invasive procedures considered essential for the area of practice.
- Provide health care services aimed at preventing health problems or maintaining health.
• Work with health care professionals, including those from other disciplines, to provide patient-focused care.

**Specific rotation goals related to this competency**
• Be able to plan the case from admission to discharge of a hip fracture patient, total knee replacement patient and rotator cuff repair patient.
• Be able to demonstrate timely care and management of such patients and their complications.

**Practice-Based Learning and Improvement**
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:
• Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
• Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
• Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
• Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
• Use information technology to manage information, access on-line medical information; and support their own education.
• Facilitate the learning of students and other health care professionals.

**Specific rotation goals related to this competency**
• Take a complex TKA or THA with complications and analyze case. Explain how the problems could have been avoided. Explain the management options.
• Show scientific evidence to support the decisions.

**System-Based Practice**
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:
• Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
• Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
• Practice cost-effective health care and resource allocation that does not compromise quality of care.
• Advocate for quality patient care and assist patients in dealing with system complexities.
• Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

**Specific rotation goals related to this competency**
• Explain and demonstrate cost effective measures in working up a painful TKA.
• Show and explain efficient work-up of shoulder pain.

**Professionalism**
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:
• Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
• Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
• Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

**Specific rotation goals related to this competency**
• Consider, explain and act in an appropriate measure with manufacturers’ representatives. What are the ethical principles?
Interpersonal and Communication Skills
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a member or leader of a health care team or other professional group.

Specific rotation goals related to this competency
- Show and explain four ways to communicate better with patients.
- Demonstrate communication skills by listening, questioning and enlisting the patient.

PGY-4 Rotation - Foot & Ankle - TRIA / UMH
Rotation Director: James Mazzuca, DPM

Medical Knowledge
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:

- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

Specific rotation goals related to this competency
- To demonstrate understanding of the biomechanics of the foot and ankle.
- To know the pathophysiology, the most appropriate diagnostic tools and exams to diagnose and treat the most common degenerative pathology of the foot and ankle region.

Patient Care
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about their patients.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans.
- Counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Perform competently all medical and invasive procedures considered essential for the area of practice.
- Provide health care services aimed at preventing health problems or maintaining health.
- Work with health care professionals, including those from other disciplines, to provide patient-focused care.

Specific rotation goals related to this competency
- To show respect and consideration for the patient in need of care and treatment.
- To integrate within the rest of the health care staff and be able to communicate to manage and accomplish definitive treatment of foot and ankle pathology.
- To perform surgical treatment of the most common fractures of the foot and ankle.
- To perform soft tissue surgery for tendinous pathology, either acute or chronic, within the foot and ankle region.
- To perform ankle and hindfoot arthrodesis as treatment of either acute or chronic conditions.
- To manage and accomplish healing of chronic ulcers within the Foot and Ankle region.
Practice-Based Learning and Improvement

- Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:
- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
- Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Use information technology to manage information, access on-line medical information; and support their own education.
- Facilitate the learning of students and other health care professionals.

Specific rotation goals related to this competency

- To become familiar with the journal “Foot and Ankle International” as a source of scientific data to integrate into their practices.
- To assimilate and integrate into thinking process “Orthopaedic Knowledge Update, Foot and Ankle 2.”
- To establish a routine to guarantee constant learning and update to new trends and technology applied to Foot and Ankle pathology.

System-Based Practice

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:
- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- Practice cost-effective health care and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing with system complexities.
- Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency

- To understand the consequences and implications of patients being transferred or admitted to a facility for treatment of chronic conditions, i.e. non-healing ulcers.
- To establish a clear algorithm when ordering diagnostic studies to avoid unnecessary tests and therefore participate on a cost-contained style of practice.
- To be aware of the cost of implants utilized during surgical interventions performed around the foot and ankle region.

Professionalism

Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:
- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

Specific rotation goals related to this competency

- Demonstrate Professionalism in the context of foot and ankle surgery.

Interpersonal and Communication Skills
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients’ families, and professional associates. Residents are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a member or leader of a health care team or other professional group.

Specific rotation goals related to this competency
- Demonstrate effective interpersonal and communication skills in the context of foot and ankle surgery.

PGY-4 Hand Rotations – TRIA / UMH
Rotation Director: Ann Van Heest, MD

Medical Knowledge
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:

- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

Specific rotation goals related to this competency
- Demonstrate proficient knowledge of upper extremity anatomy including all muscles (origin, insertion, nerve supply, and action), nerves, arteries, and bone anatomy.
- Demonstrate proficient knowledge of the brachial plexus and all its peripheral nerve branches including normal anatomy and its variation.
- Perform focused and accurate physical examination of the shoulder, elbow, forearm, wrist, and hand.

Patient Care
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about their patients.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans.
- Counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Perform competently all medical and invasive procedures considered essential for the area of practice.
- Provide health care services aimed at preventing health problems or maintaining health.
- Work with health care professionals, including those from other disciplines, to provide patient-focused care.

Specific rotation goals related to this competency
- Diagnose and formulate treatment plans for: compartment syndrome, the acutely injured hand (fracture, nerve/artery/tendon injuries), RSD, arthritis, tenosynovitis, wound management, nerve entrapments including carpal tunnel syndrome, upper extremity fracture dislocations, trigger finger, soft tissue or bone mass, medial/lateral epicondyritis, and post-injury rehabilitation.
- Perform safely and understand indications, contra-indications, and surgical technique for: upper extremity anesthesia, joint/tendon aspiration or injection, treatment of fingertip injuries, closed reduction and splinting of upper extremity fracture/dislocations, carpal tunnel release, ganglion excision, ORIF of fractures, skin grafts, Dupytren’s contracture, fasciotomy, and extensor tendon repair.

Practice-Based Learning and Improvement
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
- Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Use information technology to manage information, access on-line medical information; and support their own education.
- Facilitate the learning of students and other health care professionals.

Specific rotation goals related to this competency
- Demonstrate Practice-Based learning in the context of hand surgery.

System-Based Practice
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:

- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- Practice cost-effective health care and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing with system complexities.
- Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency
- Demonstrate System-Based practice in the context of hand surgery, particularly in the on-going care of the outpatient hand treatment model.

Professionalism
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:

- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

Specific rotation goals related to this competency
- Demonstrate professionalism in the context of hand surgery.

Interpersonal and Communication Skills
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a member or leader of a health care team or other professional group.

Specific rotation goals related to this competency
- Demonstrate effective communication skills in the context of hand surgery.
Medical Knowledge:
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:
- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

Specific rotation goals related to this competency
- Describe the basic anatomy, development, and function of the child’s musculoskeletal system especially as it relates to infection and trauma
- Develop an understanding of and describe conditions affecting the child's musculoskeletal system especially as it relates to infection and trauma. Outline treatment plans. For example, describe the ways in which a child’s immature musculoskeletal system results in infections or injuries different than those in an adult. Satisfy the Milestones requirements for Septic Arthritis and Supracondylar Humerus Fracture.

Patient Care
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:
- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about their patients.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans.
- Counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Perform competently all medical and invasive procedures considered essential for the area of practice.
- Provide health care services aimed at preventing health problems or maintaining health.
- Work with health care professionals, including those from other disciplines, to provide patient-focused care.

Specific rotation goals related to this competency
- Complete thorough but concise histories and physical examinations of children especially in an acute care setting.
- Perform competent perioperative care of children, including fluid and electrolyte management, drug usage, resuscitation, pain management and rehabilitative plans.
- Demonstrate the ability to diagnose non-accidental injury and create treatment plan.

Practice-Based Learning and Improvement
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:
• Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
• Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
• Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
• Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
• Use information technology to manage information, access on-line medical information; and support their own education.
• Facilitate the learning of students and other health care professionals.

Specific rotation goals related to this competency
• Demonstrate the ability to obtain and master scientific knowledge (e.g. textbooks and scientific journals) specifically addressing the patient’s condition and treatment.
• Review evaluations regarding care practices (e.g. dictations, technical abilities, presentation skills, etc.) and incorporate findings to improve abilities.
• Assess and address completion of Milestones 15,17 and 18-27.

Systems Based

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:
• Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
• Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
• Practice cost-effective health care and resource allocation that does not compromise quality of care.
• Advocate for quality patient care and assist patients in dealing with system complexities.
• Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency
• Demonstrate an ability to interact with professionals outside the immediate care system to arrange and achieve timely care for children with urgent problems; e.g., be able to discuss and arrange evaluation and care for a child with non-accidental injury, fractures, limps, etc.
• Demonstrate knowledge of and participate in professional organizations and activities to foster the development of other professionals’ understanding of musculoskeletal problems in children.
• Assist with musculoskeletal education of non-orthopedic care providers (medical students, cast technicians, physicians assistants, etc.) who are participating in the team caring for children.

Professionalism

Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:
• Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
• Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical
care, confidentiality of patient information, informed consent, and business practices.

- Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

**Specific rotation goals related to this competency**

- Attend and actively participate in a breadth of learning opportunities (conferences, lectures, seminars, case presentations) to demonstrate commitment to professionalism.
- Participate in the care of children with diverse backgrounds (e.g. care for patients with physical disabilities, dysfunctional social environments, cognitive delays, financial difficulties, language or other communication barriers).

**Interpersonal and Communication Skills**

Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a member or leader of a health care team or other professional group.

**Specific rotation goals related to this competency**

- Consistently display ability to relate to and work collaboratively with professional staff, including co-residents, nurses, attending physicians, and with patients and their parents to achieve optimal outcomes for all.
- Demonstrate the ability to interact effectively through a variety of methods, such as verbal, online and written communications to achieve efficient, appropriate care.

**PGY-4 - Spine Rotation - UMH**

Rotation Director: David Polly, Jr, MD

**Medical Knowledge**

Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:

- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

**Specific rotation goals related to this competency**

- Describe the effects of aging on the spine (specifically disk degeneration, osteoporosis, sagittal contour)
- Define the non-spinal sources for patients presenting with low back pain
- Describe the locations for and effects of stenosis
- Describe the pathogenesis and presentation along with treatment options for degenerative spondylolisthesis
- Define the pathogenesis of lumbar disk herniation along with the natural history, non-surgical and surgical treatment options
- Recognize and classify transitional vertebra
- Explain the pathogenesis of Bertolotti’s syndrome

**Patient Care**

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
• Gather essential and accurate information about their patients.
• Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
• Develop and carry out patient management plans.
• Counsel and educate patients and their families.
• Use information technology to support patient care decisions and patient education.
• Perform competently all medical and invasive procedures considered essential for the area of practice.
• Provide health care services aimed at preventing health problems or maintaining health.
• Work with health care professionals, including those from other disciplines, to provide patient-focused care.

**Specific rotation goals related to this competency**

• Perform a competent history to include use of patient reported outcomes measures (Oswestry Disability Index, Visual Analog Scale), use of the pain drawing to develop a presumptive diagnosis.
• Perform a competent physical exam to include a focused neurological exam of the lower extremities, evaluation for myelopathy, assessment of the SI joint and hip joint, use of the Waddell incongruency signs.
• Counsel a patient about treatment options and outcomes for: lumbar disk herniation; spinal stenosis; degenerative spondylolisthesis; and axial predominant low back pain.

**Imaging**

• Define plain film views and expected pathology discernible on the specific views (including upright versus supine AP and lateral images, Ferguson view, flexion-extension, obliques).
• MRI/CT describe the findings of degenerative disk disease, stenosis, tethered cord, acute versus chronic compression fractures, metastatic disease, hemangioma.
• Injection based studies describe the difference between translaminar and transforaminal epidural steroids as well as selective nerve root blocks. Describe the uncertainty associated with discography.

**Specific Surgical Skills**

• Describe and perform safe patient operative positioning for: posterior approach prone on Jackson table 4 poster frame (including identifying potential positioning complications); position in lateral decubitus position for thoracoabdominal approach; and position supine for anterior approach to lower lumbar spine.
• Prepare and drape for each of the above scenarios.
• Expose the lumbar spine and confirm level of dissection.
• Safely remove dorsal elements demonstrating specific competence in the safe use of a Kerrison rongeur within the spinal canal.
• Demonstrate safe techniques for hemostasis within the spinal canal.
• Remove lumbar disk material using safe techniques to avoid injury to exiting and traversing nerve roots, avoid anterior disk perforation.
• Identify pedicle screw entry points and trajectories, interpret intra-operative imaging for adequacy of pedicle tract navigation.
• Demonstrate competency in achieving water tight fascial closure and optimal subcutaneous and cutaneous closure.

**Practice-Based Learning and Improvement**

Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:

• Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
• Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
• Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
• Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
• Use information technology to manage information, access on-line medical information; and support their own education.
• Facilitate the learning of students and other health care professionals.

**Specific rotation goals related to this competency**
For lumbar HNP review current literature and develop a detailed (10 minute narrative) for patient counseling about natural history, treatment options, outcome expectations along with surgery specific recovery and complication rates.

For degenerative spondylolisthesis review current literature and develop a detailed (10 minute narrative) for patient counseling about natural history, treatment options, outcome expectations along with surgery specific recovery and complication rates.

System-Based Practice
- Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:
  - Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
  - Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
  - Practice cost-effective health care and resource allocation that does not compromise quality of care.
  - Advocate for quality patient care and assist patients in dealing with system complexities.
  - Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency
- Review pre-op and post-op standardized orders to determine whether or not they meet national quality metric measures.
- Identify areas of attending practice variation and assess if there is a gap in evidence or what other reasons exist for this practice variation. Identify if there is an opportunity for discerning and adopting best practices.
- Review source of referral and accompanying imaging studies. Determine if the imaging studies were indicated, whether or not the studies were adequately performed, how often they establish a diagnosis or change management plans.
- Discuss costs associated with intra-operative choices.
- Review acute care hospitalization criteria versus rehabilitation facility versus nursing home

Professionalism
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:
- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

Specific rotation goals related to this competency
- Demonstrate effective professionalism within the context of spine surgery.

Interpersonal and Communication Skills
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:
- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a member or leader of a health care team or other professional group.

Specific rotation goals related to this competency
- Demonstrate effective communication skills within the context of spine surgery.
Medical Knowledge
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:

- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

Specific rotation goals related to this competency
- Understand the principles of limb salvage and reconstruction of large bony defects.
- Identify basic histologic features of normal and diseased musculoskeletal tissue.
- Preoperative surgical planning for appropriate surgical equipment and surgical treatment plan.

Patient Care
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about their patients.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans.
- Counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Perform competently all medical and invasive procedures considered essential for the area of practice.
- Provide health care services aimed at preventing health problems or maintaining health.
- Work with health care professionals, including those from other disciplines, to provide patient-focused care.

Specific rotation goals related to this competency
- Perform a succinct and accurate history and physical examination on patients with bone and soft tissue tumors.

Practice-Based Learning and Improvement
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
- Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Use information technology to manage information, access on-line medical information; and support their own education.
- Facilitate the learning of students and other health care professionals.

Specific rotation goals related to this competency
- Interpret plain radiographs of bone tumors.
- Interpret MRI scans of soft tissue tumors.
- Direct the plan for diagnosing bone and soft tissue tumors.
- Preoperative surgical planning for use of intra operative imaging, patient positioning and draping, surgical incision and surgical exposure.
- Postoperative surgical care to include diagnosing and managing postoperative complications.
System-Based Practice
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:

- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- Practice cost-effective health care and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing with system complexities.
- Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency

- Organize and lead an interdisciplinary conference.
- Understand mechanisms for providing multidisciplinary and comprehensive patient care.
- Perform effective discharge seminars; postoperative care to include medical management of surgical patients, directing physical rehabilitation, and hospital discharge planning.

Professionalism
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:

- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

Specific rotation goals related to this competency

- Organize and lead an interdisciplinary conference.
- Postoperative care to include interaction with medical consultants.

Interpersonal and Communication Skills
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a member or leader of a health care team or other professional group.

Specific rotation goals related to this competency

- Organize and lead an interdisciplinary conference.
- Make clear, concise case presentations.
- Postoperative care to include interaction with medical consultants and directing physical rehabilitation.

PGY-4 Tumor/Joint Rotation - UMH
Rotation Director: Edward Cheng, MD

Medical Knowledge
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:

- Demonstrate an investigatory and analytic thinking approach to clinical situations.
• Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

**Specific rotation goals related to this competency**

• Residents should be able to describe the historical basis for joint replacement surgery.
• Residents should be able to describe the indications, contraindications, complications, expected outcomes of adult reconstructive surgery.
• Residents should be able to describe the different types of adult reconstructive surgical procedures and their basic steps in completion.
• Residents should be able to delineate how basic science biomechanical engineering concepts translate into the medical and surgical practice of joint replacement.

**Patient Care**

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

• Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
• Gather essential and accurate information about their patients.
• Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
• Develop and carry out patient management plans.
• Counsel and educate patients and their families.
• Use information technology to support patient care decisions and patient education.
• Perform competently all medical and invasive procedures considered essential for the area of practice.
• Provide health care services aimed at preventing health problems or maintaining health.
• Work with health care professionals, including those from other disciplines, to provide patient-focused care.

**Specific rotation goals related to this competency**

• Residents should be able to perform pre-operative examinations and provide post-operative care for patients undergoing major reconstructive procedures of the lower extremity.
• Residents should be able to recite and perform the basic technical steps to performing adult reconstructive procedures of the lower extremity, such as osteotomies and joint replacement.
• Residents should be able to pre-operatively plan how to perform joint replacement procedures, understand the rationale for selection of different types of implants, and perform pre-operative templating using digital radiography and digital templating.
Practice-Based Learning and Improvement
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
- Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Use information technology to manage information, access on-line medical information; and support their own education.
- Facilitate the learning of students and other health care professionals.

Specific rotation goals related to this competency
- Residents should be able to evaluate evidence and recite the medical literature and evidence basis for the performance and outcome of adult reconstructive surgery.
- Residents should be able to use the different databases such as PubMed and OVID to identify appropriate articles related to a patient’s care.

System-Based Practice
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:

- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- Practice cost-effective health care and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing with system complexities.
- Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency
- Residents should be able to understand the economic impact of the selection of different types of joint implants and reconstructive devices.
- Residents must understand how medical decisions and performance of a surgery in both inpatient, outpatient, and transitional care settings impacts the cost of medical care.

Professionalism
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:

- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

Specific rotation goals related to this competency
- Residents must demonstrate the ability to communicate effectively with patients in both pre-operative and post-operative discussions surrounding patients’ reconstructive surgery.
- Residents must understand the importance of placing the patients’ best interests at the highest priority above all other concerns.
- Residents should understand the importance and how to communicate potential conflicts of interests and bias with both patients and other physicians and other healthcare providers.
Interpersonal and Communication Skills
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a member or leader of a health care team or other professional group.

Specific rotation goals related to this competency
- Residents must be able to communicate in a respectful manner with other healthcare team members.
- Residents should be able to resolve disputes with other healthcare personnel in an amicable manner.
- Residents should be able to demonstrate the ability to listen and understand the nature of a patient’s complaint and concerns.

PGY-4 Joint Restoration Rotation - UMH
Rotation Director: Elizabeth Arendt, MD

PGY-5 Rotations - HCMC
Rotation Director: Thomas Varecka, MD

Medical Knowledge
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:

- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

Specific rotation goals related to this competency
- Teach junior residents about more difficult and challenging orthopaedic conditions including: multiply injured patients, including the coordination of care with other services in those patients with multi-system trauma; management of more complex fractures, including periarticular fractures above the knee, hip, elbow and shoulder; choosing among various treatment options for any given orthopaedic injury and the satisfactorily execution of selected treatment technology.

Patient Care
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about their patients.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans.
- Counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Perform competently all medical and invasive procedures considered essential for the area of practice.
- Provide health care services aimed at preventing health problems or maintaining health.
- Work with health care professionals, including those from other disciplines, to provide patient-focused care.

Specific rotation goals related to this competency
- Perform competently all medical and invasive procedures considered essential for trauma service.
- Manage coordinated care with other services in those patients with multi-system trauma.
Practice-Based Learning and Improvement
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
- Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Use information technology to manage information, access on-line medical information; and support their own education.
- Facilitate the learning of students and other health care professionals.

Specific rotation goals related to this competency
- Organize and supervise weekly conferences.

System-Based Practice
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:

- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- Practice cost-effective health care and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing with system complexities.
- Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency
- Support and mentor junior residents on orthopaedic trauma teams.
- Arrange for appropriate specialty equipment to be brought to the hospital and see to it that other special needs for the operating room are properly identified and met.

Professionalism
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:

- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

Specific rotation goals related to this competency
- Support and mentor junior residents on the orthopaedic trauma teams, including: how to be respectful, concerned, and have a non-judgmental attitude toward all patients; how to cultivate appropriate personal traits and habits, e.g., be prompt, well groomed and courteous.
- Organize, administer and manage each service team, including: organizing daily rounds; overseeing daily orthopaedic operating room schedule, including logging of patients, arranging for appropriate specialty equipment to be brought to the hospital, and seeing to it that other special needs for the operating room are properly identified and met.

Interpersonal and Communication Skills
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:
• Create and sustain a therapeutic and ethically sound relationship with patients.
• Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
• Work effectively with others as a member or leader of a health care team or other professional group.

Specific rotation goals related to this competency
• Support and mentor junior residents on how to speak to patients and their families prior to and following treatments, especially surgery.
• Support and mentor junior residents on how to speak to patients frankly, on their level, without being abrupt, rushed or distracted.

PGY-5 Assistant & Chief Rotations - VAMC
Rotation Director: V Franklin Sechriest II, MD

Medical Knowledge
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:
• Demonstrate an investigatory and analytic thinking approach to clinical situations.
• Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

Specific rotation goals related to this competency
• Present complex adult reconstruction cases using current literature and be able to defend the choices.
• In clinic, demonstrate an ability to analyze a complex case or complication and plan care such as an infected TKA with skin loss.

Patient Care
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:
• Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
• Gather essential and accurate information about their patients.
• Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
• Develop and carry out patient management plans.
• Counsel and educate patients and their families.
• Use information technology to support patient care decisions and patient education.
• Perform competently all medical and invasive procedures considered essential for the area of practice.
• Provide health care services aimed at preventing health problems or maintaining health.
• Work with health care professionals, including those from other disciplines, to provide patient-focused care.

Specific rotation goals related to this competency
• Outline a treatment plan for an infected THA or similar case including admission, work-up, surgery, post operative care and rehabilitation.
• Demonstrate the understanding of complex cases and supervise junior residents’ care.

Practice-Based Learning and Improvement
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:
• Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
• Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
• Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
• Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
• Use information technology to manage information, access on-line medical information; and support their own education.
• Facilitate the learning of students and other health care professionals.

Specific rotation goals related to this competency
• Organize and take charge of complications conference. Explain case and how care could be improved.
• Assess the surgical care provided weekly by organizing the x-ray and surgical review.

System-Based Practice
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:
• Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
• Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
• Practice cost-effective health care and resource allocation that does not compromise quality of care.
• Advocate for quality patient care and assist patients in dealing with system complexities.
• Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency
• Act as chief resident. Plan the surgical schedule with the help of staff.
• Plan and organize the surgical equipment needed to carry out the scheduled cases.

Professionalism
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:
• Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
• Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
• Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

Specific rotation goals related to this competency
• Explain and demonstrate ethical principles of medicine and the AAOS. What is ethical behavior towards patients? How can it be shown?
• What is ethical behavior towards industry? Demonstrate this in your behavior.
• Demonstrate leadership with junior residents.

Interpersonal and Communication Skills
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:
• Create and sustain a therapeutic and ethically sound relationship with patients.
• Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
• Work effectively with others as a member or leader of a health care team or other professional group.

Specific rotation goals related to this competency
• Demonstrate and explain four skills which will help communication.
• Show by action the principles of engage, empathize, educate and enlist.
PGY-5 Chief Rotation - Regions Hospital
Rotation Director: Sarah Anderson, MD

**Medical Knowledge**
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:
- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

**Specific rotation goals related to this competency**

- Understand indications and timing of orthopaedic intervention for pediatric fractures.
- Understand the advance principles of fracture management for: long bone fractures (humerus, femur, tibia); pelvis and hip fractures; periarticular fractures (elbow, knee, ankle)
- Understand indications for closed reduction of various fractures: evaluation for instability; anesthesia; methods of reduction; fluoroscopy; casting; position of immobilization; follow-up
- To reinforce an understanding of the normal growth, development, and function of the musculoskeletal system gained in the PGY-2 pediatric rotation.
- To reinforce an understanding of disease and disorders of childhood which secondarily affect the musculoskeletal system gained in the PGY-2 pediatric rotation.
- Emphasis: Typical fractures or problems that lead to consultation with a community-based orthopedist, such as child with a limp, acute joint pain, febrile illness, upper and lower extremities fractures.
- To increase an understanding of childhood fractures, including their mechanism of injury, how they differ from adult fractures, how they are managed, and their long-term outcomes.

**General Orthopaedics**

- Understand the treatment options for the arthritic knee: arthroscopy, unicompartmental knee replacement, high tibial osteotomy, and total knee arthroplasty;
- Understand indications/contraindications for minimally invasive surgery
- Understand the treatment options for the arthritic hip: osteoarthritis, avascular necrosis, other; total hip arthroplasty, hemiarthroplasty, femoral osteotomy, core decompressions
- Understand the treatment of common orthopaedics injuries: shoulder pain, knee pain.
- To reinforce an understanding of evaluation, work-up, and surgical treatment of geriatric trauma.

**Patient Care**
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:
- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about their patients.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans.
- Counsel and educate patients and their families.
- Use information technology to support patient care decisions and patient education.
- Perform competently all medical and invasive procedures considered essential for the area of practice.
- Provide health care services aimed at preventing health problems or maintaining health.
- Work with health care professionals, including those from other disciplines, to provide patient-focused care.
Specific rotation goals related to this competency

Pediatric Trauma
- Understand the specific needs of the polytrauma patient: pediatric patients.
- To reinforce an understanding of common musculoskeletal development variations gained in the PGY-2 pediatric rotation.
- Understand the specific needs for postoperative management of the following fractures: long bone fractures (humerus, femur, tibia); pelvis and hip fractures; periarticular fractures (elbow, knee, ankle).

General Orthopaedics
- Understand the specific needs for postoperative management of the following: total hip arthroplasty; hemiarthroplasty; total knee replacement; unicompartmental knee replacement.
- Understanding the specific needs for preoperative and postoperative management of shoulder and knee arthroscopy.
- Understand the specific needs of the geriatric patient: treatment options appropriate for this patient population; specialized discharge planning.

Practice-Based Learning and Improvement
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:
- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
- Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Use information technology to manage information, access on-line medical information; and support their own education.
- Facilitate the learning of students and other health care professionals.
- Mentor the junior residents on the orthopaedic service.
- Attend conferences: daily morning x-ray rounds, Grand Rounds, morbidity and mortality, core lecture curriculum, monthly spine trauma conference.

Specific rotation goals related to this competency

Pediatric Trauma
- Ability to assess appropriateness and timing for management of the following: Pediatric fractures and injuries.
- Ability to interpret and critique intraoperative and postoperative radiographs for: long bone fractures (humerus, femur, tibia); pelvis and hip fractures; periarticular fractures (elbow, knee, ankle)
- Ability to interpret clinical outcomes of the following: long bone fractures (humerus, femur, tibia); pelvis and hip fractures; periarticular fractures (elbow, knee, ankle)

General Orthopaedics
- Ability to interpret and critique postoperative radiographs for the following: total hip arthroplasty; hemiarthroplasty; total knee replacement; unicompartmental knee replacement
- Ability to assess clinical and functional outcomes for the following: total hip arthroplasty; hemiarthroplasty; total knee replacement; unicompartmental knee replacement; shoulder arthroscopy; knee arthroscopy.

System-Based Practice
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:
- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- Practice cost-effective health care and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing with system complexities.
• Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency
• Ability to respond in a timely fashion to emergent needs from the Emergency Department
• Ability to develop a working relationship with the Emergency Department staff, residents, and paramedical personnel
• Ability to recognize the indications for the following consultations: Internal Medicine; Infectious Disease; TACS Service
• Ability to develop a working relationship with ER resident
• Ability to develop a working relationship with the physicians’ assistants
• Ability to develop a working relationship and mentoring role with the medical students
• Ability to respond to outside referrals for transfers and emergent needs in a timely fashion
• Ability to develop a working relationship with the Medicine service and nursing home staff

Professionalism
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:
• Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
• Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
• Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

Specific rotation goals related to this competency
• Demonstrate Professionalism in the context of Regions Hospital rotation.

Interpersonal and Communication Skills
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:
• Create and sustain a therapeutic and ethically sound relationship with patients.
• Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
• Work effectively with others as a member or leader of a health care team or other professional group.

Specific rotation goals related to this competency
• Demonstrate effective interpersonal and communication skills in the context of Regions Hospital rotation.

PGY-5 Sports Rotations - TRIA / UMH
Rotation Director: Bradley Nelson, MD

Medical Knowledge
Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:
• Demonstrate an investigatory and analytic thinking approach to clinical situations.
• Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.

Specific rotation goals related to this competency
• Understanding of clinical pathologies as they relate to shoulder and knee injuries and conditions.
• Interest in ongoing knowledge acquisition
Methods to demonstrate include
• Pre-operative and post-operative discussions with faculty
• Consistent preparation for cases pre-operatively and ability to demonstrate understanding of pathologies, anatomy, and techniques in the operating room
• Intra-operative discussions of the pathology
• Excellence in required presentations demonstrating advanced level of understanding of Sports Medicine cases and their evaluation and management
• Active and vibrant participation in journal club discussions
• Extra-curricular written work on certain pertinent pathologic conditions
• Participation in chapter writing, clinical research, or case presentation generation
• Ability to perform surgical procedures such as diagnostic arthroscopy either in the dry lab setting or the operating theatre
• Eagerness to work on areas of poor clinical skills in order to augment areas or personal inadequacy

Patient Care
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:
• Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
• Gather essential and accurate information about their patients.
• Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
• Develop and carry out patient management plans.
• Counsel and educate patients and their families.
• Use information technology to support patient care decisions and patient education.
• Perform competently all medical and invasive procedures considered essential for the area of practice.
• Provide health care services aimed at preventing health problems or maintaining health.
• Work with health care professionals, including those from other disciplines, to provide patient-focused care.

Specific rotation goals related to this competency
• Ability to perform the clinical examination of the shoulder and knee as it relates to the athletic and degenerative pathologies.
• Ability to engage patients in the outpatient, operative, and inpatient settings in compassionate and thorough evaluation and management.

Methods to demonstrate this include
• Rapport establishment with patients in clinic
• Discussions with Faculty regarding best treatment options
• Conscientiousness in patient care and handling in the clinic and the Emergency Department/On Call hours
• Demonstration of clinical skills which are likely to provide therapeutic treatment of a given patient’s problem.

Practice-Based Learning and Improvement
Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:
• Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
• Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems.
• Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
• Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
• Use information technology to manage information, access on-line medical information; and support their own education.
• Facilitate the learning of students and other health care professionals.

Specific rotation goals related to this competency
• Understanding that there are costs associated with the practice of Sports Medicine and that choices made in the care of a patient have consequences for the patient and should be driven by data whenever possible.
Methods to demonstrate this include

- Discussions with faculty regarding indications and alternatives
- Eagerness to learn in a self-directed fashion when gaps in his/her knowledge base are exposed
- Self-initiated projects regarding areas of weakness in clinical evaluation and understanding including reviews of the literature
- Chapter writing or case presentation on areas of personal interest or inadequate knowledge
- Active participation in journal club revealing an ability to synthesize and apply the knowledge from a given article or set of articles
- Self-initiated work on an arthroscopic model
- Attendance at and active participation in directed arthroscopy or surgical labs

System-Based Practice
Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:

- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- Practice cost-effective health care and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing with system complexities.
- Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

Specific rotation goals related to this competency

- Awareness that the practice of Sports Medicine has consequences not only to other patients with sports injuries, but to the whole medical system as a whole.

Methods to demonstrate this include

- Discussions with Faculty regarding the cost-effectiveness of certain alternatives to care
- Review of the literature for cost-utility analyses or related studies and incorporation of these into the decision making process
- Conscientiousness regarding the cost of implants, braces, therapy, and surgical interventions as discussions of risks and benefits are had between faculty and residents

Professionalism
Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:

- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

Specific rotation goals related to this competency

- Diligence in regards to the responsibilities of patient care as manifest by the daily care of patients in the clinic, on the hospital floor, and in the operating room for the Faculty of the Sports Medicine rotation.

Methods to demonstrate this include

- Timely and thorough completion of all documentation including clinic notes, discharge summaries, and emergency room consultations/On-Call work
- Ability to interact with patients from diverse cultural backgrounds in the clinic, ER, Floor, and operating room
- Appropriate conduct in the Operating Room, on the hospital Floor, and Clinic
- Professional and appropriate attire which is acceptable for the setting
- Professional treatment of Faculty, OR staff, clinical ancillary staff, and Hospital personnel
**Interpersonal and Communication Skills**
Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates. Residents are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a member or leader of a health care team or other professional group.

**Specific rotation goals related to this competency**

- Ability to clearly communicate between patient and provider, provider and ancillary staff, and provider to provider

Methods to demonstrate this include:

- Well-written and thorough Discharge Summaries which facilitate post-discharge patient care
- Organized, complete, and thoughtful clinic notes which adequately reflect the visit and demonstrate the ability to understand the pathology, formulate a plan of treatment, and record the findings of the examination, studies, and history
- Oral presentations which show an understanding of the pathology presented and enable peer-to-peer education
- Active participation in journal club revealing an ability to synthesize and apply the knowledge from a given article or set of articles
- Thorough patient workups which include discussions with patients and their families about the potential treatment options and yield comprehension on the patient’s behalf
**Teaching Medical Students**

Residents are an essential part of the teaching of medical students. It is critical that any resident who supervises or teaches medical students must be familiar with the educational objectives of the course or clerkship and be prepared for their roles in teaching and evaluation. Therefore, included in this manual are the clerkship objectives for Orthopaedic Surgery as well as the overall Educational Program Objectives.

**Orthopaedic Surgery ORSU 7200**

**General - Goals and Objectives**

This is a brief survey course that combines an extensive outpatient clinical experience in addition to specific didactic conferences and seminars. There will be an opportunity for participation in surgical cases for students interested in this additional experience. Specifically, students will gain exposure to the specialties of adult reconstruction, hand, foot, and ankle. Independent study of the text such as the musculoskeletal care, published by the American Academy of Orthopaedic Surgeons, and the American Academy of Pediatrics will be required.

The purpose of this course is to provide an opportunity for students to evaluate and treat common orthopaedic problems encountered in ambulatory patients. Upon completion of this course, the student should be able to do the following:

1. Perform an adequate orthopaedic history and physical examination of the musculoskeletal system, including assessment of joint motion and grading of muscle strength of the major muscle groups of the extremities.

2. Use of proper terminology to describe signs, symptoms, and treatment of common injuries and disorders of the musculoskeletal system.

3. Develop a differential diagnosis of common orthopaedic conditions and outline a treatment plan to establish the proper diagnosis, description of physical findings, and inclusion of pertinent laboratory, x-ray, and special studies.

4. Learn to apply suitable splints and casts for common extremity injuries.

**Duluth Experience - Goals and Objectives**

This is a brief course that combines an extensive outpatient clinical experience in addition to specific didactic conferences and seminars. There will be an opportunity for participation in surgical cases for students interested in this additional experience. Specifically, students will gain exposure to general orthopaedic and sports medicine experience in the Duluth region. Independent study of the text such as the musculoskeletal care, published by the American Academy of Orthopaedic Surgeons, and the American Academy of Pediatrics will be required.
The purpose of this course is to provide an opportunity for students to evaluate and treat common orthopaedic problems encountered in ambulatory patients. Upon completion of this course, the student should be able to do the following:

1. Perform an adequate orthopaedic history and physical examination of the musculoskeletal system, including assessment of joint motion and grading of muscle strength of the major muscle groups of the extremities.

2. Use of proper terminology to describe signs, symptoms, and treatment of common injuries and disorders of the musculoskeletal system.

3. Develop a differential diagnosis of common orthopaedic conditions and outline a treatment plan to establish the proper diagnosis, description of physical findings, and inclusion of pertinent laboratory, x-ray, and special studies.

4. Learn to apply suitable splints and casts of common extremity injuries.

Orthopaedic Pediatrics – Goals and Objectives

This is a brief survey course that combines an extensive outpatient clinical experience in addition to specific didactic conferences and seminars. There will be an opportunity for participation in surgical cases for students interested in this additional experience. Specifically, students will gain exposure to the specialties of pediatric orthopaedic surgery. Independent study of the text such as the musculoskeletal care, published by the American Academy of Orthopaedic Surgeons, and the American Academy of Pediatrics will be required.

The purpose of this course is to provide an opportunity for students to evaluate and treat common orthopaedic conditions encountered in pediatric patients. Upon completion of this course, the student should be able to:

1. Take an adequate orthopaedic history and physical examination in the pediatric population, including utilization of any special clinical tests to aide in the diagnoses.

2. Use of proper terminology to describe signs, symptoms, and treatment of common pediatric injuries and congenital disorders of the musculoskeletal system.

3. Develop a differential diagnosis and treatment plan and establish a proper clinical diagnosis utilizing physical findings and any laboratory, x-ray, and special studies.

4. Apply suitable plaster casts or splints for common pediatric injuries or disorders.

Educational Program Objectives - University of Minnesota Medical School

Graduates of the University of Minnesota Medical School should be able to:

- Competency-Based Education (Domains & Competencies)
  http://www.meded.umn.edu/curriculum/competencies/
Clinical Learning Objectives:
http://www.meded.umn.edu/handbook/curriculum/clinical_learning_objectives.php
Complete list of Patient Encounters that Medical students must complete prior to graduation from medical school: https://www.meded.umn.edu/year34/documents/UMN_PXDXlist.pdf

Medical Students on rotation are evaluated on a 4 point scale in these 15 areas:

1. Medical Knowledge: Data Gathering & Physical Exam
2. Medical Knowledge: Application of Knowledge
3. Clinical Skills and Patient Care: Data Gathering & Physical Exam
4. Clinical Skills and Patient Care: Assessment of Problems – Diagnosis
5. Interpersonal and Communication Skills: Presenting Written and Oral Data
6. Interpersonal and Communication Skills: Relationships with Patients and Families
7. Scientific and Clinical Inquiry: Management of Problems – Treatment Plan
8. Professionalism: Independent Learning
9. Professionalism: Integrity, Dependability, Altruism, Compassion, Commitment, Confidentiality, Sensitivity to/Respect for Patients
10. Professionalism: Teamwork
11. Continuous Improvement of Care Through Reflective Practice: Self-Directed Learner
12. Systems of Health Care: Patient Advocacy
13. Systems of Health Care: Cost of Care
14. Systems of Health Care: Discharge Planning
15. Overall Clinical Competence
### Anchors and Definitions for Evaluations- University of Minnesota Medical School – Clerkship Programs

<table>
<thead>
<tr>
<th>Below Expectations</th>
<th>Meets Expectations</th>
<th>Above Expectations</th>
<th>Far Exceeds Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medical Knowledge</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Gathering–History-Taking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Insufficient or inaccurate information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Makes too many assumptions or relies on history of others</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Problems generally not well prioritized</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• History often not tailored appropriately to focus on patients’ problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Complete on uncomplicated patients with past and current treatments for most problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Histories on complicated patients may be disorganized or redundant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Identifies and prioritizes most routine problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Usually tailored to be focused on patients’ problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Complete, missing less critical information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Trouble with most medically complicated or difficult patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Identifies problems and usually prioritizes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Consistently tailored to be focused on patients’ problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Consistently complete and well-organized even on complicated patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Misses only detailed historical information (e.g. side effects to uncommon drugs, rare disease complications)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Obtains pertinent information from medical record</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Identified and prioritizes problems even on complex patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Consistently tailored to be focused on patients’ problems</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Applications of Knowledge |
| • Fund of knowledge below expected |
| • Doesn’t recognize some common disease patterns |
| • Unable to apply knowledge to a clinical situation |
| • Fund of knowledge adequate |
| • Usually identifies all common patterns of signs and symptoms |
| • Usually applies knowledge correctly |
| • Fund of knowledge more than adequate |
| • Consistently identifies all common patterns of signs and symptoms |
| • Consistently applies knowledge to clinical situations correctly |
| • Extensive fund of knowledge |
| • Consistently identifies all common patterns of signs and symptoms |
| • Constructively contributes to diagnostic and treatment plans |

| Clinical Skills and Patient Care |
| Data Gathering and Physical Exam |
| • Not consistent in proper technique in core aspects of PE |
| • Can’t identify important aspects of PE to address patient’s illness |
| • Overlooks obvious abnormal findings |
| • Adopts bad habits (listening through clothes, avoids rectal exam, etc.) |
| • Consistent proper technique |
| • Confident in normal exam, not in abnormal |
| • Trouble focusing on pertinent parts of exam |
| • Occasionally misses or misinterprets findings |
| • Consistently uses proper technique and identifies major abnormalities and pertinent normal findings |
| • Identifies subtle or unusual findings |
| • Consistently tries to link exam to history |
| • Goes beyond simple description |
| • Consistently uses proper technique in performing comprehensive and appropriately focused exams |
| • Identifies subtle or more difficult findings |
| • Often first to identify changes in exam |
| • Findings related to problems, interpretation and synthesis of findings |
### Assessment of Problems - Diagnosis

<table>
<thead>
<tr>
<th>• Difficulty developing core differential dx for common disease presentations</th>
<th>• Able to generate core differential dx for common medical presentations</th>
<th>• Integrates hx, PE and labs to generate differential dx for most presentation, may have problems on complicated patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Doesn’t identify major patient problems</td>
<td>• Accurately identifies patients’ problems</td>
<td>• Accurately identifies patients’ problems</td>
</tr>
<tr>
<td>• Rationale for differential dx and plans for confirmation not reasonable</td>
<td>• Rationale and plan for confirmation of dx usually complete</td>
<td>• Rationale and plan complete</td>
</tr>
<tr>
<td>• Consistently complete, organized and thoughtful differentials in order of likelihood</td>
<td>• Integrates PE and labs to generate differential dx on complicated pts</td>
<td>• Accurately identifies patients’ problems</td>
</tr>
<tr>
<td>• Rationale and plan complete</td>
<td></td>
<td>• Rationale and plan complete</td>
</tr>
</tbody>
</table>

### Interpersonal and Communication Skills

#### Presenting Written and Oral Data

<table>
<thead>
<tr>
<th>• SOAP notes sometimes illegible, incomplete, or inaccurate</th>
<th>• SOAP notes legible, accurate and miss only minor details.</th>
<th>• SOAP notes can stand on their own without need for addendums</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Presentations disorganized</td>
<td>• Presentations organized but hesitant and unsure of how much to present</td>
<td>• Presentations include rationales and are organized, may miss minor points</td>
</tr>
<tr>
<td>• Difficulty discerning the amount of detail needed in different types of presentations</td>
<td>• Rarely misses important information. May be “too complete.”</td>
<td>• Able to balance appropriate detail with conciseness on straightforward patients.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• SOAP notes complete, focused and organized</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Presentations include rationales, are smooth and well-organized</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Able to discern important details while being concise even on complicated patients</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Information consistently complete, organized and include rationales even with complex problems</td>
</tr>
</tbody>
</table>

#### Relationships with Patients and Families

<table>
<thead>
<tr>
<th>• Trouble establishing trust and rapport with patients</th>
<th>• Establishes rapport but may use medical jargon</th>
<th>• Only has rapport trouble with most difficult patients or families</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Unaware of relevant cultural or psychosocial patient issues</td>
<td>• Aware of major cultural or psychosocial issues but may miss details that can affect the patient’s care (e.g., inquiring about home resources)</td>
<td>• Delves beyond the superficial cultural and psychosocial issues to gain a better understanding of how they affect patients’ health</td>
</tr>
<tr>
<td>• Not reassuring, empathetic, caring, supportive, respectful; may be arrogant</td>
<td>• Usually reassuring, empathetic, caring, supportive respectful</td>
<td>• Consistently reassuring, empathetic, caring, supportive respectful</td>
</tr>
<tr>
<td>• Not facilitative or educational</td>
<td>• Generally facilitative and educational</td>
<td>• Consistently facilitative and educational</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Highly effective in establishing good rapport even with difficult patients</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Goes above and beyond to convey empathy, engender confidence and make sure patients’ concerns are addressed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Consistently identifies patients’ cultural and psychosocial needs. Tires to understand how they will affect the plan of care and makes the necessary provisions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Reassuring, empathetic, caring supportive, respectful, even with patients and families considered</td>
</tr>
</tbody>
</table>
### Scientific and Clinical Inquiry

#### Data Management of Problems – Treatment Plans

<table>
<thead>
<tr>
<th>Poor Data Management</th>
<th>Good Data Management</th>
<th>Excellent Data Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Rx plans inappropriate, poorly organized, incomplete, not prioritized</td>
<td>• Formulates appropriate plans for most problems</td>
<td>• Formulates appropriate, well prioritized plans for common problems</td>
</tr>
<tr>
<td>• Doesn’t recognize need for urgent treatment</td>
<td>• Formulates appropriate priorities</td>
<td>• Recognizes need for urgent treatment and initiates appropriate action</td>
</tr>
<tr>
<td>• Irregularly monitors pt and clinical data, missing major changes</td>
<td>• Recognizes need for urgent treatment and initiates appropriate action</td>
<td>• Recognizes need for urgent treatment and initiates appropriate action</td>
</tr>
<tr>
<td>• Doesn’t record changes</td>
<td>• Monitors pt progress and reassesses need for information or management changes</td>
<td>• Continuous monitors pt progress and reassesses need for management changes</td>
</tr>
<tr>
<td>• Unable to synthesize data into assessment and plan</td>
<td>• Follows through appropriately</td>
<td>• Consistently follows-up on tests and makes adjustments in management</td>
</tr>
<tr>
<td>• Unable to exercise clinical judgment in care of patient</td>
<td>• Usually able to synthesize information into assessment and plan</td>
<td>• Prioritizes clinical problems very appropriately, even with complex pts.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Able to discuss reasons for medical judgments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Able to consistently integrate hx, PE and lab results into rx and plan</td>
</tr>
</tbody>
</table>

### Professionalism

#### Independent Learning

<table>
<thead>
<tr>
<th>Inconsistent or Superficial Reading</th>
<th>Reads about Patients’ Problems and Applies It to Patient Care, but Only Occasionally Shares Information with Others</th>
<th>Consistently Reads and Applies It to Patient Care, but Only Occasionally Shares Information with Others</th>
<th>Reads Extensively and from Most Current Sources and Shares Information with Others in an Organized Fashion</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reading inconsistent or superficial</td>
<td>• Often takes initiative in learning</td>
<td>• Generally accurate assessment and learns from experience and feedback</td>
<td>• Consistently takes initiative in learning</td>
</tr>
<tr>
<td>• Lacks initiative for learning</td>
<td>• Participates in conferences and sometimes attends conferences that are not required.</td>
<td>• Accurate self-assessment and learns from experience and feedback</td>
<td>• Actively seeks information from consultants</td>
</tr>
<tr>
<td>• Demonstrates difficulty in self-assessment</td>
<td>• Sometimes seeks information from consultants</td>
<td>• Participates in conferences and attends conferences that are not required.</td>
<td></td>
</tr>
</tbody>
</table>
### Independent Learning Integrity, Dependability, Altruism, Compassion, Commitment, Confidentiality, Sensitivity to/Respect for Patients

| Puts self-interest above patient’s | Puts patient interests above self | Dedicated to patient care beyond expected duties |
| Shows disinterest and lack of commitment to patient care | Accepts feedback well | Good self-assessment and actively seeks feedback |
| Lacks accountability | Demonstrates honesty and integrity, respect and compassion | Readily admits mistakes and tries to correct them |
| May not demonstrate honesty, integrity, respect, compassion | Usually takes initiative for learning | Treats everyone with respect and courtesy |
| Inappropriate demeanor or appearance | Respects roles of specialties and team members but may need help applying it to patient care | Enthusiastic and committed to patient care and medicine |
| Insufficient respect of roles of specialties and members of team | | Consistently demonstrates honesty, integrity, respect, and compassion |

### Teamwork

| Insufficiently aware of roles of members of the team | Understands basic roles of members of team but may need help applying to patient care | Appreciates different roles of team members and applies to enhance patient care |
| Trouble functioning effectively with team | Reliable team member but may need prompting | Valuable member of team with good initiative and enhances effectiveness |
| Trouble establishing trust and rapport with team members | Communicates all medically necessary information to nursing or other members of the team | Facilitates community among team members to optimize patient care |

### Continuous Improvement of Care Through Reflective Practice

### Self-Directed Learner

| Reading inconsistent or superficial | Reads about patients’ problems and tries to apply what is learned | Consistently reads and applies it to patient care |
| Trouble with accurate self-assessment | Performs accurate self-assessment | Reads sources more varied and in depth, uses information technology |
| Trouble critically appraising new information or applying EBM skills | Makes reasonable efforts to critically appraise new information and apply EBM to patient care | Exhibits curiosity, good self-assessment |
| | | Critically appraises new information and shares it |
| | | Routinely applies EBM to patient care |

<p>| Goes above and beyond in care for patients | Enthusiastic even in complex or difficult situations | Insightful in identifying strengths and weaknesses and seeks feedback |
| Demonstrates honesty, integrity, respect and compassion | Demeanor and appearance is a role model for other team members | Shares information with the team in organized fashion |
| Actively and respectfully involved all member of health care team to enhance patient care | Actively involves all members of health care team to enhance patient care | Highly effective team member who shows consistent enthusiasm and initiative |
| Communication among team members is enhanced by student’s involvement | | |</p>
<table>
<thead>
<tr>
<th>Systems of Healthcare</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient Advocacy</strong></td>
</tr>
</tbody>
</table>
| • Not interested or involved  
  • Doesn’t adequately follow-up on patient needs and concerns  |
| • Usually involved in identifying needs and resources for patients  
  • Attempts to follow-up  |
| • Identifies patient needs and resources to help  
  • Usually follows-up to make sure resources are adequate  
  • Sometimes advocates for systems change that will benefit patients  |
| • Consistently identifies resources and follow-up  
  • Consistently advocates for changes in systems that will benefit patients  |
| **Cost of Care**  |
| • Insufficiently aware of cost of care  
  • Has little interest in or knowledge of health care costs and resource allocation  
  • Orders many tests without consideration of cost.  |
| • Understands basic requirements and limitations of major insurers and how these affect patient care  
  • Demonstrates awareness of cost and resource allocations  
  • Orders most lab tests in a thoughtful manner  |
| • Understands and applies knowledge of insurance basics, general costs of care, and community resources.  
  • Demonstrates awareness of cost and resource allocation  
  • Consistently orders lab tests in a thoughtful manner  |
| • Uses knowledge of insurance, medication/test costs, and resources to try to optimize patient care  
  • Demonstrates awareness of costs and resource allocation  
  • Consistently shows discernment in ordering tests, even with patients with multiple problems  |
| **Discharge Planning**  |
| • Does not anticipate or become involved with the healthcare team discharge and follow-up of patients.  |
| • Assists healthcare team with discharge and follow-up of most patients.  
  • Has an awareness of needed community resources  |
| • Consistently assists in healthcare team in planning for discharge and follow-up of patients  
  • Enhances the efficiency of the discharge process overall  
  • Utilizes appropriate community resources for the patient  |
| • Actively anticipates the discharge and follow-up of patients  
  • Consistently involves appropriate healthcare team members in planning for effective, safe, patient-centered discharge of patients  
  • Utilizes appropriate community resources for the patient  |
ABOS Rules for Residency Education

The American Board of Orthopaedic Surgery has established rules for residency education. These requirements should not be interpreted as restricting programs to minimum standards. Throughout these rules, the term “accredited” denotes approval by the Accreditation Council for Graduate Medical Education. A copy of current rules and procedure can be found online at https://www.abos.org/certification/part-i-examination/rules-and-procedures.aspx.

ACGME Competencies

In accordance with the ACGME Institutional Requirements, each program must provide effective educational experiences for the trainees that lead to measurable achievement of educational outcomes in the ACGME competencies. Please see the addendum for *ACGME Program Requirements for Graduate Medical Education in Orthopaedic Surgery*. Education competency areas consist of the following.

Medical Knowledge

Medical knowledge is required for the day-to-day activity of all physicians. Didactic sessions are given nearly daily at each of the institutions in order to increase the resident’s medical knowledge base. The medical knowledge base is tested through weekly case presentation at most of the institutions. Medical knowledge base is tested yearly through the Orthopaedic In-Training Exam (OITE). Faculty assessment of the resident’s medical knowledge base is documented as part of the electronic evaluation system.

Medical knowledge includes acquisition of surgical skills. The program includes skills labs offered on a quarterly basis. Topics include: Osteotomies of the Hip and Knee, Ankle Fractures, External Fixation, Arthroscopy of the Knee and Shoulder, Plates and Screws in Fractures and Non-unions, Shoulder and Elbow Fractures, Intramedullary Nailing, THA and TKA Alignment and Preoperative Planning.

Patient care

A doctor’s job is patient care. This is carried out on a daily basis. It is the resident’s primary responsibility under the direct supervision of the faculty. The faculty provide direct feedback regarding the resident’s patient care skills, as well as documenting through the electronic evaluation system.

Practice-Based Learning and Improvement

Practice-Based learning and improvement is well taught in this program, as the resident must acclimate to six different hospital-based systems. Each system has its own aspects of medical records, radiology records, and hospital policies and procedures. This gives the resident an excellent hands-on experience. The resident’s ability to participate in each system is evaluated as part of the electronic evaluation system.
Interpersonal Communication Skills

Interpersonal and communication skills are a part of the patient care process. Patient interviewing skills, interactive skills with ancillary personnel, as well as physician-to-physician communication is a daily part of the resident routine and is supervised directly by the faculty. This competency is taught on a daily basis and evaluated as part of the electronic evaluation system.

Professionalism

Professionalism is included as part of the Core Curriculum, as well as learned through the example of the faculty. Professionalism includes timely completion of medical records and duty hour reporting and attendance at conferences and skills labs. This is evaluated as part of the electronic evaluation system and reported during annual reviews.

System-Based Practice

System-Based practice is part of the practice base learning and is offered on a very diverse basis through the six different hospital systems which are a part of the program. This is evaluated through the electronic evaluation system.

Milestones

The Orthopaedic Surgery Milestone Project is a joint initiative of The Accreditation Council for Graduate Medical Education and The American Board of Orthopaedic Surgery. The milestones provide a framework for the assessment of the development of the resident physician in key dimensions of the elements of physician competency in a specialty or subspecialty. They neither represent the entirety of the dimensions of the six domains of physician competency, nor are they designed to be relevant in any other context. Milestones are designed for programs to use in semi-annual review of resident performance and reporting to the ACGME. Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME competencies organized in a developmental framework from less to more advanced. They are descriptors and targets for resident performance as a resident moves from entry into residency through graduation. In the initial years of implementation, the Review Committee will examine milestone performance data for each program’s residents as one element in the Next Accreditation System (NAS) to determine whether residents overall are progressing.

Program Methods used for Evaluation

The methods used for evaluation of competence in this program include:

- Annual OITE scores
- Semi-annual Resident Performance Review by department chair and faculty (includes assessment of Milestones)
- Milestones
- New-Innovations Residency Management Suite (RMS) computer web-based system

5 OITE scores are only one of the factors considered in evaluating a resident’s overall performance and progress. THE USE OF OITE SCORES FOR DECIDING WHETHER A RESIDENT SHOULD BE RETAINED IN A PROGRAM OR PROMOTED IS INAPPROPRIATE (AAOS OITE 2011 Program Directors’ Report, 1/19/12, p 3.).
• Portfolio presentations (as part of semi-annual review)
• Participation in educational conferences
• Operative case logs (ACGME web-based)
• Objective Structured Assessment of Technical Skills (OSATS) and Skills Lab
• Research activities including Senior Research Project

Program Evaluation Tools

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Tools Used in Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>annual oite</td>
</tr>
<tr>
<td>Medical Knowledge</td>
<td>•</td>
</tr>
<tr>
<td>Patient Care</td>
<td>•</td>
</tr>
<tr>
<td>Practice Base Learning &amp; Improvement</td>
<td>•</td>
</tr>
<tr>
<td>Interpersonal Communication Skills</td>
<td>•</td>
</tr>
<tr>
<td>Professionalism</td>
<td>•</td>
</tr>
<tr>
<td>System-Based Practice</td>
<td>•</td>
</tr>
</tbody>
</table>

Resident Performance Review
All residents enter the program under a Residency Director Review status. If satisfactory progress is made, as reviewed by the Clinical Competency Committee (CCC) and approved by the program director, the resident is advanced to an annual review status. If satisfactory progress is made by the fifth year of residency, graduation is achieved. Remedial action can be given if satisfactory progress is not made during the educational process. The CCC reviews each resident’s performance based on: case log, OITE scores, faculty evaluations, portfolios, research activities, outcome measurements (above), and patient care skills.

Semi-annual reviews are conducted. In the fall, the resident meets with the department chair. The resident submits a reflective essay ahead of time. An assessment of the student’s current

---

6 E*Value™ contains qualitative reporting and quantitative performance analysis in the six general competency areas as well as an assessment of technical skills and overall competence.
status is reviewed, career goals are discussed and an open assessment of the residency program by the trainee is sought. The resident is also to submit a self-evaluation of the milestones. During the fall, the CCC will meet to discuss the last six months of education for each resident and make recommendations to the program director regarding the status of each resident, including milestones evaluations to be reported to the ACGME. In the spring, the CCC will meet to discuss the last six months of education for each resident and make recommendations to the program director regarding the status of each resident, including milestones evaluations to be reported to the ACGME. The spring review with each resident consists of a portfolio presentation by the resident and the results of evaluation tools used to assess status and advancement. The following criteria are used for review.

Graduation Status: (PGY-5 Level)
Completion of satisfactory annual reviews, completion of satisfactory senior research project (manuscript finalized for submission), 4.0 level or above on all milestones, and completion of minimum of surgical case procedures. Under this status, it would be the recommendation of the residency program that the resident would graduate from the program.

Semi-annual Review Status: (PGY-1 through PGY-5 Levels)
Satisfactory progress is being made as demonstrated by rotation evaluations, participation at educational activities and skill labs, timeliness of reporting, research activities, case log reporting and knowledge base as reflected by in-training scores. PGY-1 residents must submit proof no later than January 1 of their PGY-1 year of USMLE Step 3 passing scores or may be subject to contract non-renewal. This is a program policy and is stricter than the institutional policy.

Probationary Status
Any resident making unsatisfactory or marginal progress as evidenced by faculty evaluations and other assessments, in the areas of clinical diagnosis and judgment, medical knowledge, technical abilities, interpretation of data, patient management, communication skills, interactions with patients and other healthcare professionals, professionalism, research activities, time management and/or motivation and initiative or cause considerable concern that s/he may not meet the graduation requirements will be placed on probationary status. When the resident is on probationary status, immediate dismissal may be taken. The residency program will follow the Disciplinary/Grievance Procedures: Discipline/Dismissal/Non-Renewal as outlined in the Institution Policy Manual. On credentialing forms for physician certification, the resident must indicate that they have been on probation during their residency training.

---

7 At its October 2011 meeting, the USMLE Step 3 Committee decided to raise the three-digit score recommended to pass Step 3 from 187 to 190. Score reports are available to resident electronically through USMLE up to 120 days after initial reporting. After that, transcripts must be purchased by residents and sent to the residency program office.
Dismissing Status
A resident failing to make improvements in their performance, after being probationary status may be dismissed. Dismissal requires consensus of the Chairman of the department, the Director of the residency program, and the Resident Performance Review Committee.

Operative Case Logs
PGY-1 residents must prospectively log cases into the ACGME Case Log System during the entirety of their residency experience. The expectation is that only orthopaedic cases must be entered into the Case Log System.

The ACGME Review Committee has identified the procedures considered most important to use for assessing procedural competence of resident physicians who complete orthopaedic surgery education. Programs whose graduate case volumes average below the minimums listed in four of the 15 categories may be cited for non-compliance.

Orthopaedic Surgery Minimum Case Numbers
(Note: manipulations must be recorded with procedures in the Case Log System)

<table>
<thead>
<tr>
<th>Category</th>
<th>Minimum</th>
<th>Category</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knee arthroscopy</td>
<td>30</td>
<td>Ankle fracture fixation</td>
<td>15</td>
</tr>
<tr>
<td>Shoulder arthroscopy</td>
<td>20</td>
<td>Closed reduction forearm/wrist</td>
<td>20</td>
</tr>
<tr>
<td>ACL reconstruction</td>
<td>10</td>
<td>Ankle &amp; hind &amp; mid-foot arthro</td>
<td>5</td>
</tr>
<tr>
<td>THA</td>
<td>30</td>
<td>Supracondylar humerus perc</td>
<td>5</td>
</tr>
<tr>
<td>TKA</td>
<td>30</td>
<td>Femur and tibia intramedullary fixation</td>
<td>25</td>
</tr>
<tr>
<td>Hip fractures</td>
<td>30</td>
<td>All pediatric procedures</td>
<td>200</td>
</tr>
<tr>
<td>Carpal tunnel release</td>
<td>10</td>
<td>All oncology procedures</td>
<td>10</td>
</tr>
<tr>
<td>Spine decompression/posterior spine fusion</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPT Codes in Each Procedural Category</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Knee arthroscopy</strong> (29850, 29851, 29855, 29856, 29866, 29868, 29870, 29871, 29873, 29874, 29875, 29876, 29877, 29879, 29880, 29881, 29882, 29883, 29884, 29885, 29886, 29887)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shoulder arthroscopy</strong> (29805, 29806, 29807, 29819, 29820, 29821, 29822, 29823, 29824, 29825, 29826, 29827, 29828)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ACL reconstruction</strong> (29888)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>THA</strong> (27130, 27132, 27134, 27137, 27138)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TKA</strong> (27442, 27443, 27445, 27446, 27447, 27487)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hip fractures</strong> (27235, 27236, 27244, 27245)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Carpal tunnel release</strong> (64721)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spine decompression lumbar spine/posterior spine fusion thoracic or lumbar</strong> (22612, 22630, 22800, 22802, 22804, 63005, 63012, 63017, 63030, 63042, 63047)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ankle fracture fixation</strong> (27766, 27769, 27792, 27814, 27822, 27823, 27826, 27827, 27828, 27829)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Closed reduction forearm and wrist fractures</strong> (25505, 25520, 25535, 25565, 25605, 25624, 25690, 25680, 25675)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ankle and hind and mid-foot arthrodeses</strong> (27870, 28705, 28715, 28725, 28730, 28735, 28737)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Supracondylar humerus percutaneous treatment</strong> (24538, 24566, 24582)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Femur and tibia intramedullary fixation</strong> (27506, 27759)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Resident Case Log System for Operative Log Reporting is an internet based case log system available through the ACGME website. Please see the addendum to this manual for complete information.
Weekly Conferences
Weekly conferences are held at the various rotation sites.

Gillette Children’s Specialty Healthcare
Rounds and conferences include daily seminars on individual topics selected, organized and given by the staff. A monthly conference schedule is available through the Education Office at Gillette.

Hennepin County Medical Center
On Monday-Thursdays, from 6:30-7:00 am there is an Inpatient Fracture Care Conference. Other daily conferences are listed.

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Conference Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>7:00-8:00 am</td>
<td>Citywide Orthopaedics</td>
</tr>
<tr>
<td></td>
<td>8:00-8:30 am</td>
<td>Hand Conference</td>
</tr>
<tr>
<td>3rd Monday</td>
<td>7:00-8:00 am</td>
<td>Complications</td>
</tr>
<tr>
<td>Tuesday</td>
<td>8:00-9:00 am</td>
<td>Citywide Orthopaedics</td>
</tr>
<tr>
<td></td>
<td>8:30-9:00 am</td>
<td>Preoperative Planning and Postoperative Review</td>
</tr>
<tr>
<td></td>
<td>12:30-1:30pm</td>
<td>Journal Club</td>
</tr>
<tr>
<td>Wednesday</td>
<td>8:00-9:00 am</td>
<td>Foot and Ankle (White Team)</td>
</tr>
<tr>
<td>Thursday</td>
<td>8:00-9:00 am</td>
<td>Foot and Ankle (Purple Team)</td>
</tr>
</tbody>
</table>

Regions Hospital
Regions Hospital has a morning triaging and X-ray conference Monday through Thursday from 6:20 am to 7:00 am. Tuesday is Orthopaedic Rounds from 7:00 am to 8:00 am. Wednesday is the Didactic Conference 7:15 am to 8:00 am. Quality Assurance Rounds from 7:00 am to 8:00 am are help periodically.

University of Minnesota Medical Center
Conferences and rounds are organized on a formal basis and scheduled on Monday through Thursday, from 7:00-8:00 a.m., with emphasis on a comprehensive education in clinical and basic science knowledge. This is protected educational time, when residents are free of clinical activities. Residents on both UMH and TRIA rotations are expected to attend.

<table>
<thead>
<tr>
<th>Conference Name</th>
<th>Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot and Ankle</td>
<td>1st Monday (R-200)</td>
</tr>
<tr>
<td>Sports, Shoulder</td>
<td>2nd Monday (R-200)</td>
</tr>
<tr>
<td>Sports, Knee</td>
<td>3rd Monday (R-200)</td>
</tr>
<tr>
<td>Morbidity &amp; Mortality</td>
<td>4th Monday (R-200)</td>
</tr>
<tr>
<td>Case Management</td>
<td>1st Tuesday (R-200)</td>
</tr>
<tr>
<td>Orthopaedic Tumor Didactic</td>
<td>2nd Tuesday (R-200)</td>
</tr>
<tr>
<td>Case Presentations (Oral Boards format)</td>
<td>3rd and 5th Tuesdays (R-200)</td>
</tr>
<tr>
<td>Arthroplasty</td>
<td>4th Tuesday (R-200)</td>
</tr>
<tr>
<td>Spine</td>
<td>1st Wednesday (CSC-4.5)</td>
</tr>
<tr>
<td>Resident Research</td>
<td>3rd Wednesday (R-200)</td>
</tr>
<tr>
<td>Athletic Medicine</td>
<td>4th Wednesday (TCF Bank Stadium)</td>
</tr>
<tr>
<td>Hand</td>
<td>1st, 3rd, 5th Thursday (CSC 4.5)</td>
</tr>
<tr>
<td>Tumor - University</td>
<td>2nd and 4th / All Thursdays 8 (Mayo C-456)</td>
</tr>
</tbody>
</table>

8 Tumor Conference is mandatory for residents on Tumor rotations for all Thursdays.
Veterans Affairs Medical Center

Monday and Wednesday is a preoperative planning conference. On Wednesday there is a case presentation conference. There is a monthly grand rounds conference on Wednesday as well. On Friday, there is an X-ray rounds review, staff rounds and a journal club conference. A monthly morbidity and mortality conference is also held on Friday.

Grand Rounds

Grand Rounds are held on Fridays from 7:00-8:00 am for all trainees on orthopaedic rotations. Presenters include faculty and community and special visiting lecturers. This is protected educational time for residents and attendance is mandatory.

Core Curriculum Formal Lectures

Core Curriculum lectures are protected educational time and are one and one-half hour lectures held each Friday morning, following Grand Rounds. It is based on subject matter pertaining to both in-training exam and board exam preparation. Attendance by all residents is mandatory. This curriculum is currently being restructured to include orthobullets online curriculum.

Gross Anatomy Dissection Sessions

In the spring there are eight gross anatomy dissection sessions. These are mandatory for PGY-2 residents. All residents are invited and encouraged to attend. Dates for these sessions are March–April. These sessions consist of

- Cervical Spine, anterior and posterior
- Thoracic Spine, anterior and posterior; Lumbrosacral Spine
- Elbow and Forearm; Hand and Wrist
- Scapula and Shoulder; Brachial Plexus
- Hip and Thigh
- Pelvis and Acetabulum; Lumbrosacral Plexus
- Thigh and Knee
- Leg, Foot and Ankle

Residents are assigned to specific anatomic areas and faculty members are assigned as proctors. Dissections are performed by assigned PGY-2 residents in advance, including all pertinent muscle tendon units, neurovascular structures, and ligaments for respective section as determined by the proctor. PGY-5s are responsible for reviewing surgical approaches with the PGY2 residents with input from faculty as needed.

Arthroscopy Skills Labs

A formal arthroscopy curriculum has been developed to give residents opportunities to practice in a cadaver lab. This is a mandatory exercise for PGY-2 through PGY4 residents. PGY-5 residents are welcome and encouraged to participate in a teaching role. There will be specific knee and shoulder tasks that each resident will be expected to perform with faculty observation; tasks are specific to PGY level. These labs will be held at TRIA from 2-5 PM throughout the year. The dates of the labs and resident assignments are in Moodle.
Resident must notify Megan Reams at TRIA megan.reams@tria.com if s/he will not be attending the assigned lab more than two weeks prior to the scheduled lab date. The following is an overview of the curriculum
TRIA Orthopaedic Center – 2016-2017 Resident Lab Education

University of Minnesota Residency Arthroscopy Experience

Labs will be held: Fridays 2:00pm - 5:00pm

Eight total labs during the year (four knee, four shoulder).
One G2 from TRIA Sports; one G2 from Gillette
Two G3s from VA rotations
One G4 from Spine; one G4 from GOLD Hand
G5s on UM Sports and TRIA Sports are welcome to participate and teach.

One cadaver for each PGY level.

Two faculty for each lab
Faculty will include Dr Marc Tompkins and TRIA Sports Medicine Fellows

The expectation will be that each resident will attend one knee and one shoulder lab per year.

Resident must notify Megan Reams if he/she will not be attending their assigned lab more than two weeks before scheduled lab date.

Certain tasks, appropriate for PGY level, will be performed by each resident during the lab.

For each PGY level, the residents’ ability to participate in arthroscopic procedures with their attendings will be dependent upon their attendance and participation in the resident lab.

Megan Reams, MA, OTR/L will serve as coordinator for the program.  megan.reams@tria.com

Marc Tompkins, MD will serve as director for the program.  marc.tompkins@tria.com

---

**Arthroscopy 101 – G2 – Knee**

**Arthroscopy Introduction**
- Introduction to Knee Arthroscopy Lecture *
- Outline important knee anatomy on cadaver
- Place medial and lateral arthroscopic portals
- Perform diagnostic arthroscopy

**Arthroscopy 201 – G3 – Knee**

**Basic Arthroscopic Procedures**
- Loose body removal
- Partial meniscectomy
- Chondral debridement
- Microfracture

**Arthroscopy 301 – G4 – Knee**

**ACL Reconstruction**
- Identify tear
- Take down of ACL
- Preparation of tunnels
- Graft passage and fixation

---

**Arthroscopy 101 – G3 – Shoulder**

**Arthroscopy Introduction**
- Introduction to Shoulder Arthroscopy Lecture *
- Outline important shoulder anatomy on cadaver
- Place anterior and posterior arthroscopic portals
- Perform diagnostic arthroscopy

**Arthroscopy 201 – G4 – Shoulder**

**Basic Arthroscopic Procedures**
- Loose body removal
- Debridement
- Subacromial decompression
- Distal clavicle excision

**Arthroscopy 301 – G4 – Shoulder**

**Rotator Cuff Repair**
- Identify tear
- Footprint preparation
- Anchor placement
- Suture passage and arthroscopic knot tying

---

* Introductory lecture will discuss arthroscopic equipment, fluid management, anatomy, anatomically based portal access to the joints, and basic arthroscopic procedures.
Upper Extremity Skills Lab Competency Testing
In the spring of the year, upper extremity motor skills assessment is performed during a Hand Skills Day and includes competency testing in carpal tunnel release and trigger release. Hand surgeons serve as proctors. Each resident is assessed using a Global Operative Skills Assessment tool, as validated by the University of Toronto, for each procedure. Additionally, a 100 point check list and a web vista based pre-operative computer skills test is taken by each resident. The results of these tests provide residents feedback regarding their operative skills. Additionally, each of the plated radii is potted and biomechanical testing is reported so that each resident is graded on the biomechanical construct of the radius fracture. Adverse events are noted. Residents receive a pass/fail grade. PGY2 through -5 residents participate.

Residents’ Scholarly Activities
The goal of resident scholarly research activity is to advance residents’ knowledge of the basic principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care. Residents will participate in department-sponsored research activities as a way to develop these life-long skills. Activities include but are not limited to submission of a case report or review in the PGY-1 year and submission of a senior research manuscript by June 1 of the PGY-5 year. During the PGY2 through -5 years, quarterly reviews will be held with residents to provide an update on the status of research activities.

PGY1 year
Orientate to the research cycle of the program and participate in research curriculum during rotation at the University.

PGY2 year
Present research review at December grand rounds (evaluation on probability of success for this research; impact of research on the orthopaedic community) includes:
- Topic, senior investigator/mentor, additional personnel involved
- Generic problem, Specific problem to be studied, What does the literature say and how accessed
- Specific research question(s)
- Methodology
- Strengths / Weaknesses of Study
- Statistical methodology (what analysis, who will do it)
- Resources to Support the Study Accomplishment
- Time Line

PGY3 year
Participate in data collection and analysis and draft manuscript.

PGY4/5 year
Paper written and submitted.
Presentation at conferences and specialty societies.

PGY5 year
Final presentation at Ramón Gustilo Research Society Senior Research Competition.
Duty Hour Reporting
Duty Hours are defined as all clinical and academic activities related to the training program, i.e., patient care (both inpatient and outpatient), administrative duties related to patient care, the provision for transfer of patient care, time spent in-house during call activities and scheduled academic activities such as conferences. Duty hours DO NOT include reading and preparation or time spent away from the duty site.

Reporting of duty hours is both a professional and ethical responsibility of residents. Residents in the Department of Orthopaedic Surgery are expected to provide accurate and timely reporting. The data from this process is used to support the ACGME requirement of duty hours monitoring; the Centers for Medicare and Medicaid Services (CMS) regulations on reporting resident/fellow training related activities for reimbursement; and invoicing affiliate hospitals for residents/fellows stipends and benefits.

Updating and Approving Assignments and Hours
PGY-1 through PGY-4 residents enter and approve their hours in the New Innovations Residency Management Suite.

PGY-5 residents complete and approve by signature their hours on a weekly service sheet, provided at Friday morning Grand Rounds; all duty hours for these levels of training are due in the education office, every Friday by Noon.

Hours for Friday-Thursday must be reported and approved by Friday Noon by all residents. Duty hours are reviewed by the program weekly and residents are notified if there are hour discrepancies or need for justification or commenting on duty hour violations. Residents with violations are required to submit reporting to the program director. It is the responsibility of the resident to provide timely reporting and monitor his/her own hours.

Please see the addendum “ACGME Program Requirements for Graduate Medical Education in Orthopaedic Surgery.”

On-Call
In-house call is defined as those duty hours beyond the normal workday when trainees are required to be immediately available in the assigned institution.

In-house call must occur no more frequently than every third night, averaged over a four-week period.

On Call Schedules
Orthopaedic Residents are no longer required to stay in-house at night. The following are the expectations of call for the program.

1. Pages will be answered within the required time as specified by sites.
2. There will be no greater than a twenty minute physical response time for emergency department consultation or inpatient concerns unless arranged in advance with the nursing unit or Emergency Department.
3. For inpatients requiring evaluation every two hours or less, the resident is expected to stay in the hospital.
4. For orthopaedic inpatients requiring evaluation for new concerns (i.e., chest pain, shortness of breath), the orthopaedic resident will be responsible for the initial evaluation and then contact the attending and/or medicine consultant as necessary.
5. If there are concerns regarding the responsiveness or availability on the part of the inpatient nursing staff, Emergency Department physicians, or physicians seeking consultation, the policy will be immediately revoked.

The following are the call requirements at various rotation sites.

**Gillette Children’s Specialty Health Care**
The four University residents will share in covering the call schedule. The first call schedule of each rotation is prepared by the Education Coordinator/Orthopaedic Department. Subsequent schedules for the three-month rotations are done by the residents.

**Hennepin County Medical Center**
The chief resident call schedule is prepared by the White Team chief resident. The PGY-3 is responsible for preparing the junior call schedules.

**Regions Hospital**
The four University PGY-2 residents take first call. The residents create their own call schedule with assistance from the department staff. Call is taken from home.

**TRIA Orthopaedic Center**
Calls for U of MN TRIA patients are routed to the UMH resident on call.

**University of Minnesota Medical Center**
All residents rotating at the University of Minnesota Medical Center share in orthopaedic call. Upcoming monthly call schedules are due in the office by the 20th of each month. The PGY-5 residents at UMH will provide backup call for the PGY-4 resident covering UMH during the week. This backup call will principally be used to cover simultaneous emergencies such as surgeries and assessments and treatments in the Emergency Department. The on call PGY-4 and/or attending surgeon will make the decision to bring in the PGY-5. Residents are encouraged to generate their call schedule at the beginning of the academic year. Call is taken from home. Weekend call for PGY-4 resident is Friday/Sunday or Saturday, not the entire weekend.

**Veterans Affairs Medical Center**
The PGY-3 resident on call is the first contact. The PGY-3 has the option to contact the PGY-5 resident for assistance, who in turn contacts the staff physician. Call is taken from home.
**Patient Support Services**
Patient support services, such as intravenous services, phlebotomy services, and laboratory services, as well as messenger and transporter services, must be provided in a manner appropriate to and consistent with education objectives and patient care.

**Laboratory, Pathology, Radiology Services**
There must be appropriate laboratory, pathology, and radiology services to support timely and quality patient care in the program. This must include effective laboratory, pathology and radiologic information systems.

**Medical Records**
A medical records system that documents the course of each patient’s illness and care must be available at all times and must be adequate to support quality patient care, the education of residents, quality assurance activities, and provide a resource for scholarly activity. Orientation at each rotation site will cover information on how to access and use medical record systems.

**Security / Safety**
Appropriate security and personal safety measures must be provided to residents at all locations including but not limited to parking facilities, on-call quarters, hospital and institutional grounds, and related clinical facilities (e.g., medical office building).

**Moonlighting**
Moonlighting is *not* allowed in the Department of Orthopaedic Surgery Residency Program.

**Supervision**
At each institution, all residents are supervised by the attending physician (faculty) on-call or in charge of the clinical activity. Each institution complies with known lines of responsibility for the care of patients from junior residents, to senior residents, to attending physicians. Residents are to be provided with reliable systems for communication and interaction with supervisory physicians and residents are responsible for contacting supervisory physicians for all areas of patient care. Residents have the opportunity to assume increasing responsibility for patient care, under direct faculty supervision (as appropriate for a resident's ability and experience), as they progress through a program. Each institution is responsible for sufficient institutional oversight to ensure that residents are appropriately supervised. Residents are to be supervised by teaching staff in such a way that the residents assume progressively increasing responsibility according to their level of education, ability, and experience. On-call schedules for teaching staff ensure that supervision is readily available to residents on duty. The level of responsibility accorded to each resident is determined by the teaching staff. Faculty and residents are educated to recognize the signs of fatigue and will adopt and apply policies to prevent and counteract the potential negative effects.
A “S.A.F.E.T.Y. – S.U.P.E.R.B. Guide” is used in the program, along with a “Call If Guide” at each site.

**S A F E T Y**  
**Resident Guide for Attending Input**

**Seek attending input early**  
Involving your attending early can often prevent delays in care and provide quicker results. They are also legally responsible for patients.

**Active clinical decisions**  
Contact your attending if an active clinical decision is being made (surgery, invasive procedure, etc).

**Feel uncertain about clinical decisions**  
It is normal to feel uncertain about clinical decisions. You should contact your attending if you feel uncertain about a specific decision.

**End of life care / legal discussions**  
These complex discussions can change the course of care. Families and patients should also know that the attending is aware of the discussion.

**Transitions of care**  
Transitions are risky for patients. Contact your attending if someone is being discharged, transferred to another service or ICU, or hospital.

**You need help with the system / hierarchy**  
Despite your best efforts, system difficulties and the hierarchy may hinder care for patients. Attendings can help expedite care through direct attending involvement with consultants, etc.  
©Arona, Farnan. 2009

**S U P E R B**  
**Guide for Attending Supervision**

**Set expectations for when to be notified**  
I want you to contact me if a patient is being discharged, transferred to the ICU, going to surgery or other service, dies or leaves AMA.

**Uncertainty is a time to contact**  
It is normal to feel uncertain about clinical decisions. Please do contact me if you feel uncertain about a specific decision.

**Planned communication**  
Let’s plan on talking around 10pm on your call nights and before you leave the hospital each day. If you get busy or forget, I will contact you.

**Easily available**  
I am easy to reach by page or you can use my cell phone or my home phone.

**Reassure resident not to be afraid to call**  
Don't worry about waking me up, or that calling is a sign of weakness, or that I will think your question is stupid. I would rather know what is going on.

**Balance supervision and autonomy for resident**  
I want you to be able to make decisions about our patients, but I also know this is your first month as a resident so I will follow closely. (Tailor for more experienced residents to emphasize autonomy)  
©Arona, Farnan. 2009

---

**Graded Responsibility**

The program director and faculty must provide residents with direct experience in progressive responsibility for patient management.

**Monitoring of Resident Well-Being**

The program director is responsible for monitoring resident stress, including mental or emotional conditions inhibiting performance or learning, and drug-related or alcohol-related dysfunction. Both the program director and faculty should be sensitive to the need for timely provision of confidential counseling and psychological support services to residents. Situations that demand excessive service or that consistently produce undesirable stress on residents must be evaluated and modified. If fatigued or stressed, and especially if unable to provide safe patient care, the resident should report the situation to his or her chief resident and/or site director or residency director. Counseling for residents is available through the Residency Assistance Program (RAP), (651) 430-3383 or 1-800-632-7643. Further information is available through the GME Office at [http://www.med.umn.edu/gme/residents/rap/home.html](http://www.med.umn.edu/gme/residents/rap/home.html).
**Life Support Certification Policy**

Please see the [http://hub.med.umn.edu/resident-fellow-administration/life-support-certification](http://hub.med.umn.edu/resident-fellow-administration/life-support-certification) for the overall policy on life support certification.

CPR certification requirements are hospital-specific.

Orthopaedic Surgery residents are responsible for obtaining ACLS training certification before the start of their training. PGY-1 residents will be trained in ATLS certification before the start of their Trauma and Acute Care Surgery (TACS) rotation at Regions; there is no resident fee for this and certification may lapse after the rotation is completed. Other life support certification information is available at [https://docs.google.com/a/umn.edu/document/d/1_3sslo8Doh_3nFFMZM_TrbGqzzk38I2_esOiyi-P7E/edit?usp=sharing](https://docs.google.com/a/umn.edu/document/d/1_3sslo8Doh_3nFFMZM_TrbGqzzk38I2_esOiyi-P7E/edit?usp=sharing)
### Residency Program Governance

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department Chair</td>
<td>Denis R. Clohisy, MD</td>
<td>(612) 273-3082</td>
</tr>
<tr>
<td>Program Director</td>
<td>Ann Van Heest, MD</td>
<td>(612) 273-8059</td>
</tr>
<tr>
<td>Assistant Program Director</td>
<td>Alicia Harrison, MD</td>
<td>(612) 273-8058</td>
</tr>
<tr>
<td>Education Coordinator</td>
<td>Betsy Wehrwein</td>
<td>(612) 273-8043</td>
</tr>
<tr>
<td>Site Education Director</td>
<td>Christian Ogilvie, MD</td>
<td>(612) 273-8043</td>
</tr>
<tr>
<td>Foot and Ankle Education Director</td>
<td>James Mazzuca, DPM</td>
<td></td>
</tr>
<tr>
<td>Hand Education Director</td>
<td>Ann E. Van Heest, MD</td>
<td></td>
</tr>
<tr>
<td>Joint Restoration Director</td>
<td>Elizabeth Arendt, MD</td>
<td></td>
</tr>
<tr>
<td>Tumor Education Director</td>
<td>Christian Ogilvie, MD</td>
<td></td>
</tr>
<tr>
<td>Tumor/Joint Education Director</td>
<td>Edward Cheng, MD</td>
<td></td>
</tr>
<tr>
<td>Spine Education Director</td>
<td>David W. Polly, Jr., MD</td>
<td></td>
</tr>
<tr>
<td>Sports Medicine Education Director</td>
<td>Bradley Nelson, MD</td>
<td></td>
</tr>
<tr>
<td>Education Coordinator</td>
<td>Betsy Wehrwein</td>
<td></td>
</tr>
<tr>
<td>Gillette Children’s Specialty Healthcare</td>
<td>Steven E. Koop, MD</td>
<td>(651) 229-3948</td>
</tr>
<tr>
<td>Medical Director</td>
<td>Deborah S. Quanbeck, MD</td>
<td></td>
</tr>
<tr>
<td>Education Coordinator</td>
<td>Deb Berny</td>
<td></td>
</tr>
<tr>
<td>Hennepin County Medical Center</td>
<td>Andrew Schmidt, MD</td>
<td>(612) 873-4220</td>
</tr>
<tr>
<td>Department Chair</td>
<td>Thomas Varecka, MD</td>
<td></td>
</tr>
<tr>
<td>Education Coordinator</td>
<td>Claudia Miller</td>
<td></td>
</tr>
<tr>
<td>Regions Hospital</td>
<td>Peter Cole, MD</td>
<td>(651) 254-3799</td>
</tr>
<tr>
<td>Department Chair</td>
<td>Sarah Anderson, MD</td>
<td></td>
</tr>
<tr>
<td>Education Coordinator</td>
<td>Michelle Stepka</td>
<td></td>
</tr>
<tr>
<td>TRIA Orthopaedic Center</td>
<td>Bradley Nelson, MD</td>
<td>(952) 806-5731</td>
</tr>
<tr>
<td>Education Director</td>
<td>Megan Reams</td>
<td></td>
</tr>
<tr>
<td>Veterans Affairs Medical Center</td>
<td>V Franklin Sechriest II, MD</td>
<td>(612) 467-1780</td>
</tr>
<tr>
<td>Department Chair and Rotation Director</td>
<td>Becky Wardlow</td>
<td></td>
</tr>
</tbody>
</table>
Research Administration
Department Research Director: Marc Swiontkowski, MD
Resident Research Director: David W. Polly, MD

PGY-1 Contact Information

<table>
<thead>
<tr>
<th>Department</th>
<th>Contact</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anesthesia</td>
<td>Betsy Passe</td>
<td><a href="mailto:eppasse@umn.edu">eppasse@umn.edu</a></td>
<td>612.625.4116</td>
</tr>
<tr>
<td>UMH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>Nancy Newkumet</td>
<td><a href="mailto:nancy.newkumet@homed.org">nancy.newkumet@homed.org</a></td>
<td>612.873.4908</td>
</tr>
<tr>
<td>HCMC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>JoAnn Niemi</td>
<td><a href="mailto:joann.m.niemi@healthpartners.com">joann.m.niemi@healthpartners.com</a></td>
<td>651.254.3705</td>
</tr>
<tr>
<td>RGHP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic Surgery</td>
<td>Valery Rousseau</td>
<td><a href="mailto:valery.l.rousseau@healthpartners.com">valery.l.rousseau@healthpartners.com</a></td>
<td>651.254.0883</td>
</tr>
<tr>
<td>Regions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery</td>
<td>Cathy Larson</td>
<td><a href="mailto:larson051@umn.edu">larson051@umn.edu</a></td>
<td>612.625.6483</td>
</tr>
<tr>
<td>SICU @ UMH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TACS @ Regions</td>
<td>Michelle Stepka</td>
<td><a href="mailto:michelle.m.stepka@healthpartners.com">michelle.m.stepka@healthpartners.com</a></td>
<td>651.254.3799</td>
</tr>
<tr>
<td>Regions Ortho</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRIA Ortho</td>
<td>Ali Hemphill</td>
<td><a href="mailto:alicia.hemphill@tria.com">alicia.hemphill@tria.com</a></td>
<td>952.806.5731</td>
</tr>
<tr>
<td>VA Ortho</td>
<td>Becky Wardlow</td>
<td><a href="mailto:rebecca.wardlow@va.gov">rebecca.wardlow@va.gov</a></td>
<td>612.467.1780</td>
</tr>
<tr>
<td>UMH Ortho</td>
<td>Betsy Wehrwein</td>
<td><a href="mailto:wehrw005@umn.edu">wehrw005@umn.edu</a></td>
<td>612.273.8043</td>
</tr>
</tbody>
</table>

Core Curriculum Director
Core Curriculum Director: Ann Van Heest, MD

Clinical Competency Committee (formerly the Residency Performance Review Committees)

Sarah Anderson, MD         Joan Bechtold, PhD
V Franklin Sechriest II, MD Alicia Harrison, MD
Sarah Anderson, MD         Christian Ogilvie, MD
Deborah Quanbeck, MD       Bradley Nelson, MD
Tom Varecka, MD
Resident Selection Committee (2017)
(Will be updated over the course of the year)

Department Chair                Denis Clohisy, MD
Program Director                Ann Van Heest, MD
Resident Selection Committee Chair
Assistant Program Director      Alicia Harrison, MD
Gillette Children’s Specialty Healthcare Walter Truong, MD
Hennepin County Medical Center Jacqueline Geissler, MD
Regions Hospital
TRIA Orthopaedic Center         Deborah Bohn, MD
University of Minnesota Medical Center
Veterans Affairs Medical Center
Residents
Faculty

Gillette Children’s Specialty Healthcare
Bruce Bartie, MD
Deb Bohn, MD
Mark Dahl, MD
Stephen P. England, MD
Tenner Guillaume, MD
Michael Healy, MD
F. Stig Jacobsen, MD
Steven E. Koop, MD
Jennifer Laine, MD
Tom F. Novacheck, MD
Benjamin Novak, MD
David Palmer, MD
Joseph Perra, MD
Deborah S. Quanbeck, MD
Alison Schiffern, MD
Stephen B. Sundberg, MD
Walter Truong, MD
Ann E. Van Heest, MD
Kevin R. Walker, MD
Elizabeth Weber, MD

Regions Hospital
Sarah A. Anderson, MD
Peter A. Cole, MD
Jonathan Cooper, DO
Todd C Johnson, MD
Paul M. Lafferty, MD
Mengnai Li, MD
Thuan Ly, MD
Scott B. Marston, MD
Kevin O’Halloran, MD
Katharine Pico, MD
Julie A. Switzer, MD
Christina M. Ward, MD

Hennepin County Medical Center
Jacqueline A. Geissler, MD
Nancy M. Luger, MD
Richard F. Kyle, MD
Gudrun Mirick, MD
Andrew H. Schmidt, MD
David Templeman, MD
Thomas F. Varecka, MD
Patrick Yoon, MD

TRIA Orthopaedic Center
Kirk Aadalen, MD
Elizabeth Arendt, MD
Deborah Bohn, MD
Joel Boyd, MD
Jonathan Braman, MD
Edward Craig, MD
Gary Fetzer, MD
David Fischer, MD
Yvonne Grierson, MD
Jeffrey Husband, MD
Allan Hunt, MD
Alan Markman, MD
James W. Mazzuca, DPM
Bradley Nelson, MD
Ross Paskoff, MD
Fernando Peña, MD
Kathleen Peter, MD
John Steubs, MD
Marc F. Swiontkowski, MD
Marc Tompkins, MD
Michael Walsh, MD
University of Minnesota Medical Center
Elizabeth A. Arendt, MD
Jonathan Braman, MD
Edward Cheng, MD
Denis R. Clohisy, MD
Alicia Harrison, MD
Jeffrey Macalena, MD
Amy Moeller, MD
Patrick Morgan, MD
Bradley Nelson, MD
Christian M. Ogilvie, MD
Fernando A. Peña, MD
David W. Polly, Jr., MD
Joseph Schuster, D.P.M.
Jonathan N. Sembrano, MD
Ann E. Van Heest, MD

Veterans Affairs Medical Center
Adam Bakker, MD
Brian Bjerke, MD
Douglas Drake, MD
James Gannon, MD
Paul Hartleben, MD
Jason Holm, MD
James House, MD
Allan Hunt, MD
Jeffrey Husband, MD
Randall Lewis, MD
Jeffrey Luna, MD
Daniel Marek, MD
Charles Moser, MD
David Nordin, MD
Matthew Putnam, MD
V. Franklin Sechriest, MD
Jonathan Sembrano, MD
Loren Vorlicky, MD

SAC
Surgical Administrative Center is an administrative cluster for the Departments of Surgery, Orthopaedic Surgery, Otolaryngology and Urologic Surgery.

Education
Emily Langerak
Administrative Director
(612) 625-4914
lange274@umn.edu

Accounting
Sanoa Hagen
Accountant II
Phone: 612-625-5964
Email: s-hage@umn.edu

Payroll
Kirk Skogen
Payroll Manager
(612) 625-3954
k-skog@umn.edu
Risk Management and Insurance

The Office of Risk Management & Insurance is part of the Controller's Office and strives to protect the assets of the University from various sources of loss or damage that could affect overall financial stability. Responsibilities include directing insurance programs and loss control activities, identifying exposures, recommending solutions, and promoting loss prevention. This office manages most of the insurance programs at the University.

Proof of Professional Liability coverage for residents can be obtained from the Office of Risk Management. A pdf is available at http://www.finsys.umn.edu/riskmgmt/CredentialingCertificateofInsurance.pdf. Follow up questions should be directed to

Pam Ubel  
Office of Risk Management  
612-624-5884  
novic002@umn.edu

For general insurance information and claims history to health plans or hospitals who are credentialing current or former residents, please contact

Krista Ostrum  
Office of the General Counsel  
Academic Health Center  
MMC 501 Mayo  
420 Delaware Street SE  
Minneapolis, MN 55455-0374  
Phone: 612-625-9995  
Fax: 612-626-2111  
kcozine@umn.edu

For further information, please contact

Betsy Wehrwein  
Program Associate, Education Coordinator  
Phone: (612) 273-8043  
Fax: (612) 273-8099  
wehrw005@umn.edu
<table>
<thead>
<tr>
<th>INDEX</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AAOS Annual Meeting, 13</td>
<td>Meal Tickets/Food Services, 16</td>
</tr>
<tr>
<td>ABOS, 16</td>
<td>Medical Records, 89</td>
</tr>
<tr>
<td>ABOS Rules for Residency Education, 76</td>
<td>Minnesota Orthopaedic Society Annual Meeting, 13</td>
</tr>
<tr>
<td>ACGME Competencies, 76</td>
<td>Minnesota Pediatric Conference, 13</td>
</tr>
<tr>
<td>ACGME Surgical Case Logs, 78, 80</td>
<td>Monitoring of Resident Well-Being, 90</td>
</tr>
<tr>
<td>Arthroscopy Labs at TRIA, 13</td>
<td>Moonlighting, 89</td>
</tr>
<tr>
<td>Arthroscopy Skills Labs, 83</td>
<td>Needle Stick/Bloodborne Pathogen Exposure, 20</td>
</tr>
<tr>
<td>Book and Education Fund, 13</td>
<td>OITE, 13, 77</td>
</tr>
<tr>
<td>Campus Mail, 9</td>
<td>On Call Schedules, 87</td>
</tr>
<tr>
<td>Core Curriculum, 83, 93</td>
<td>On-Call, 87</td>
</tr>
<tr>
<td>CPR Certification Policy, 91</td>
<td>ORSU 7200, 68</td>
</tr>
<tr>
<td>Department Mission Statement, 3</td>
<td>OSATS, 78</td>
</tr>
<tr>
<td>Dismissal Status, 80</td>
<td>Pagers, 11</td>
</tr>
<tr>
<td>Duty Hours, 87</td>
<td>Parking, 17</td>
</tr>
<tr>
<td>Education Coordinator, 92</td>
<td>Patient Support Services, 89</td>
</tr>
<tr>
<td>Education Director, 92</td>
<td>Paychecks, 18</td>
</tr>
<tr>
<td>Educational Activities, Department-Sponsored, 13</td>
<td>Pediatric Trauma, 62</td>
</tr>
<tr>
<td>Email and Internet Access, 9</td>
<td>Personal Time Off, 18</td>
</tr>
<tr>
<td>Evaluation, 77, 78</td>
<td>PGY-1, 3, 21</td>
</tr>
<tr>
<td>Faculty, 95</td>
<td>PGY-1 Anesthesiology Rotation, 23</td>
</tr>
<tr>
<td>G2 Bootcamp, 14</td>
<td>PGY-1 Contact Information, 93</td>
</tr>
<tr>
<td>General Orthopaedics, 62</td>
<td>PGY-1 Rotation – Emergency Medicine, 25</td>
</tr>
<tr>
<td>Geriatric Fracture Conference, 13</td>
<td>PGY1 Rotation – Neurosurgery, 27</td>
</tr>
<tr>
<td>Gillette, 16, 17, 19, 33, 82, 88, 92, 95</td>
<td>PGY-1 Rotation – Orthopaedic Surgery, 28</td>
</tr>
<tr>
<td>Governance, 92</td>
<td>PGY-1 Rotation - Plastic Surgery, 30</td>
</tr>
<tr>
<td>Graded Responsibility, 90</td>
<td>PGY-1 Rotation - Surgical Intensive Care, 31</td>
</tr>
<tr>
<td>Graduation Status: (PGY-5 Level), 79</td>
<td>PGY-1 Rotation – Trauma and Acute Care Surgery, 32</td>
</tr>
<tr>
<td>Grand Rounds, 13, 83</td>
<td>PGY-1 Skills Labs, 13</td>
</tr>
<tr>
<td>Gross Anatomy Dissection Sessions, 13, 83</td>
<td>PGY-2 Rotation - GCSH, 33</td>
</tr>
<tr>
<td>HCMC Trauma Conference, 13</td>
<td>PGY-2 Rotation - RGHP, 36</td>
</tr>
<tr>
<td>Hennepin County Medical Center, 16, 17, 25, 41, 58, 82, 88, 92, 94, 95</td>
<td>PGY-3 Rotation - HCMC, 41</td>
</tr>
<tr>
<td>HIPAA Training, 10</td>
<td>PGY-3 Rotation - VAMC, 43</td>
</tr>
<tr>
<td>Holidays, 14</td>
<td>PGY-3 Rotation - Veterans Affairs Medical Center, 28</td>
</tr>
<tr>
<td>In-house, 87</td>
<td>PGY-4 - Spine Rotation, 49, 51</td>
</tr>
<tr>
<td>Insurance, 14, 97</td>
<td>PGY-4 Rotation - Foot &amp; Ankle, 45</td>
</tr>
<tr>
<td>Joint Reconstruction, 36</td>
<td>PGY-4 Rotation - Hand, 47</td>
</tr>
<tr>
<td>Lab Coats, 15</td>
<td>PGY-4 Rotation - Musculoskeletal Tumor, 54, 58</td>
</tr>
<tr>
<td>Laboratory, Pathology, Radiology Services, 89</td>
<td></td>
</tr>
</tbody>
</table>
PGY-4 Rotation - Sports, 38
PGY-4 Rotation - Tumor/Fracture/Adult Reconstruction, 55
PGY-5 Rotation - Assistant & Chief - HCMC, 58
PGY-5 Rotation - Assistant & Chief - VAMC, 60
PGY-5 Rotation - RGHP, 62
PGY-5 Rotation - Sports, 64
Photo Id Badges, 11
Probationary Status, 79
Professional and Academic Leave, 15
Professional Liability Insurance, 14
Program Curriculum, 21
Program Mission Statement, 3
Regions Hospital, 16, 17, 19, 27, 30, 32, 36, 62, 82, 88, 92, 94, 95
Research Administration, 93
Residency Performance Review, 93
Residency Program Goals and Objectives, 23
Residency Program Governance, 92
Resident Performance Review, 78
Resident Selection Committee, 94
Residents Visiting Professor, 13
Residents’ Scholarly Activities, 86
Risk Management, 97
Rotation Schedule, 22
Rotation Site Administration, 92
SAC, 12, 96
Security / Safety, 89
Semi-annual Resident Performance Review, 77
Senior Research Project, 78, 79
Stipends, 20
Supervision, 89
Teaching Medical Students, 68
The Office of Technology, 10
Trauma, 36
Travel, 13
TRIA Orthopaedic Center, 16, 17, 19, 92, 94, 95
TRIA Sports Medicine and Orthopaedic Conference, 13
Tuition and Fees, 12
University of Minnesota Medical Center, 16, 17, 19, 23, 31, 38, 45, 47, 54, 58, 64, 82, 88, 92, 94
Upper Extremity Skills Lab Competency Testing, 86
USMLE Step 3, 13, 79
Veterans Affairs Medical Center, 17, 20, 28, 43, 60, 83, 88, 92, 94, 96
Visiting Hand Professor and Hand Skills Lab, 13
Weekly Conferences, 82
Worker’s Compensation, 20
CONFIRMATION OF RECEIPT OF POLICY MANUAL

Confirmation of Availability and Responsibility of your Program Policy Manual for Academic Year 2016 - 2017

By signing this document you are confirming that you are aware of the availability of your Program Policy Manual for this academic year and acknowledge your responsibility in knowing its content.

This manual is available electronically on the Department of Orthopaedic Surgery’s Medical Education webpage. This policy manual contains policies and procedures pertinent to your training program. You are responsible to knowing the content of this manual. This receipt will be kept in your personnel file.

Resident Name (Please print)

Resident Signature                                      Date

Coordinator’s Initials                                      Date