2025-2026
Department of Orthopaedic Surgery
Responsibilities and Policies

University of Tennessee College of Medicine Chattanooga
Department of Orthopaedic Surgery
2025 – 2026 Academic Year

Chair: Jeremy Bruce, MD
Program Director: Dirk Kiner, MD
Associate Program Directors: Rob Quigley, MD (PSQI), Mike Yee, MD (Well-being)
Residency Program Coordinator: Kim Davis, MEd, C-TAGME

Rotations are divided into two-month specialty blocks PGY 2-5.

The call responsibilities for the Department of Orthopaedic Surgery average every sixth night during PGY 2-5.

OITE – Friday, November 7, 2025 Orthopaedic Library

USMLE Step 3 must be passed before promotion to PGY-3 level. This is an institutional requirement. Formal USMLE report verifying scores must be provided to the program coordinator. If USMLE scores were not available from ERAS, a copy of an official report must also be provided.

Vacation Policy

- 2 weeks (10 week days) PGY1-5; recommendation is one week during each six-month period
- Christmas/New Year's vacation (up to four days)
- No vacations:
  - During the week preceding OITE (November 3-7, 2025)
  - Last week of June
  - First two weeks of July
  - During the two weeks of Christmas/New Year Holiday season the vacation days are determined by agreement of the resident staff and Program Director, not to exceed four work days.
- No more than *one week* of vacation in May and June
- Residents are typically off on Erlanger office holidays unless they are on call:
  July 4th
  Labor Day
  Thanksgiving and the day after
  Christmas Day
  New Year's Day
  Memorial Day
- Must have prior approval per standard process (**2 weeks in advance**)
  - Required courses take precedence
  - Approval will not be granted if adequate number of residents will not be available, including weekends. Requests should be submitted as far in advance as possible. No more than one week of vacation may be taken during PGY-1 when on rotations, with the Dept. of Surgery.

Courses/Meetings

- Required
  - PGY-1 AO Basic Fracture Course –- January 8, 2026, Charlotte, NC
  - PGY-2 AANA Arthroscopy Course –- October 2-4, 2025, Rosemont, IL
  - PGY-3 AAHKS Special Resident Course –- October 23-24, 2025, Dallas, TX
  - PGY-4 AO Advanced Fracture Course –- TBD
  - PGY-5 AAOS Annual Meeting –- March 10-14, 2025, San Diego, CA
    Miller Review Course –- May 20-24, 2026, Denver, CO (tentative)

OITE is ***November 7, 2025 .***

Do not plan any vacations or time off on this day. It will be denied.

- Other
  - PGY 1-3 receive 2 optional conference days for an approved conference of choice
  - PGY 4 receive 10 optional conference days for fellowship interviews/conference of choice
  - PGY 5 receive 8 optional conference days for fellowship/job interviews/conference of choice
  - Paper or poster presentation at regional or national meetings, if approved and time available
  - Away meetings with faculty sponsor with approval

Daily Schedule: Specific for each rotation

Call Schedule: Per schedule

ACGME Operative Experience Data Log

- Must log ***in KSB in the PROCEDURE LOG***
  - Record information weekly
  - Include procedures in the ER and clinics
  - Check box for oncology or microsurgery

Duty Hours

- Must be entered weekly on New Innovations

Core Competencies

- Patient care
- Medical knowledge
- Practice-based learning and improvement
- Interpersonal and communication skills
- Professionalism
- Systems-based practice

Conferences

- Priority and ON TIME
- Healthcare Principles (8-9/year) – 2nd Tuesday at noon; Required for PGY 1, 2 & 3 (video available)
- SVMIC – Malpractice Seminar – required for all PGY years (usually in October).
- Required unless otherwise notified of cancellation
  - Monday morning Grand Rounds
  - Morning conferences
    - Arthroplasty every 1st Tuesday & 3rd Friday
    - Pediatrics every 2nd Tuesday
    - Trauma every 1st & 3rd Thursday
    - Hand every 2nd Wednesday
    - Fracture every 3rd Wednesday
    - Musculoskeletal/Oncology every 3rd Tuesday
    - Sports – varies
    - Sports/Radiology - odd months July and March-Monday; September and January- Thursday; November and May-Wednesday
    - Thursday morning 7 – 9 AM – labs, Basic Science
    - Spine conference – 1st Friday
    - Foot & Ankle Conference – 4th Wednesday
  - M & M Conference – 3rd Monday of month; information must be documented
  - Journal Club – 3rd Wednesday evening of month, off-site, dinner included
  - Case presentations – one per class during a grand rounds slot in the fall
- Clean up your mess after completion of conference

Medical Records

- Follow consistent format (OP notes, H&P, DCS)
- OP notes – dictated immediately following surgery
- Timely completion of DCS
- Records are electronic - EPIC

Research

- Design, implement and complete at least one research project during the residency, written in publishable form and submitted to and approved by the program director by December 31 of the PGY 5 year. All residents must substantially contribute to a Quality Improvement/ Patient Safety project before graduating. Additionally, the research project will be presented at a Monday morning grand rounds conference in May of PGY 4 year.
- **½ day per week research time. To be worked out with rotation director.**
- Additional time for work on specific projects to be determined by agreement with rotation chief.
- When submitting abstracts, please list the Academic office address as the return address:

  Department of Orthopaedic Surgery
  975 East Third Street, Hospital Box 260
  Chattanooga, Tennessee 37403

Conduct

- Professional & personal
  - Faculty
  - Program office
  - Hospital employees
  - Fellow residents

Policy:

- When attending approved meeting for paper/poster presentations, the department will pay for two full days at the meeting (three night stay + three days per diem) as available from UTCOM
- Residents: Time-off maximum of 10 working days / per rotation. Exceptions will be reviewed.
- No more than one week of vacation in May/June.

PGY-1

- Two weeks vacation
- One week each half of academic year
- Two additional days to attend a conference of choice with approval
- No more than one week during General Surgery Department rotations (GS-Trauma, SICU)
- Required courses: AO Basic Fracture Management Course
- Up to one week off during Christmas Holidays (approval of ortho program director and rotation director for non-ortho rotations).

PGY-2

- Two weeks vacation
- Two additional days to attend a conference of choice with approval
- Up to one week Christmas holidays (with program director approval)
- Required courses: AANA Arthroscopy Course
- Paper/poster presentations – as approved

PGY-3

- Two weeks vacation
- Two additional days to attend a conference of choice with approval
- Up to one week Christmas holidays (with program director approval)
- Required courses: Arthroplasty course
- Paper/poster presentations – as approved

PGY-4

- Two weeks vacation
- Ten additional days are allowed to provide time for interviews for fellowship and/or practice opportunities as well as to attend a conference of choice with approval.
- Up to one week Christmas holidays (with program director approval)
- Required courses: AO Advanced Fracture Management course
- Paper/poster presentations – as approved

PGY-5

- Two weeks vacation
- Five additional days are allowed to provide time for housing search for fellowship and/or practice opportunities.
- Three additional days to attend a conference of choice with approval
- Up to one week Christmas holidays (with program director approval)
- Attend AAOS Annual Meeting, Miller's Board Review course
- Paper/poster presentations – as approved

Note: ABOS requires forty-six weeks of full-time educational activities each academic year. Time off cannot be accrued. Promotion to the next PGY level or graduation is delayed until the 46 week requirement is met.

Resident Resources Supplied by Department

Books/Journals Currently Provided

- *Journal of Bone and Joint Surgery* (PGY-1 – 5) sent to the resident's house
- *JAAOS* (PGY-1 – 5) sent to the resident's house
- *Orthopaedic Basic Science Text (PGY-1) book*
- *Skeletal Trauma & Skeletal Trauma in Children* – via UT Library
- *Primer on Rheumatic Diseases* – via UT Library
- *OKU14 (book) or Comprehensive Review 2* (PGY-1)
- *Tachjian's Pediatric Orthopaedics* – via UT Library
- *Campbell's Operative Orthopedics* – via UT Library

- Lead (PGY-1) – basic lead apron and thyroid collar

- Loupes (PGY-1) - basic set of loupes

- AAOS Res Study and ROCK provided, accessed with AAOS ID and password

- OrthoBullets subscription provided

Most texts and journals residents need are now provided online via the UT Library.

Additional texts and journals for specific rotations **must be checked out of program office. At the end of each rotation the books must be returned to the program office in good condition.**

♦ *Foot and Ankle Surgery* by Mann, 2-vol set	$427.50	Foot & Ankle
♦ *The Foot: Examination and Diagnosis* by Ian Alexander	Priceless	Foot & Ankle
♦ *Green's Hand Surgery* Text, 2-vol set	$359.10	Hand
♦ *Delee & Drez Orthopaedic Sports Medicine*, 2-vol set	$274.50	Sports/Shoulder/General

*The UT College of Medicine provides access to the American Medical Association's *Introduction to the Practice of Medicine* (IPM) online educational series. Information on this series is distributed by the Office of Graduate Medical Education.

THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER
COLLEGE of MEDICINE

Department of Orthopaedic Surgery
975 East Third Street Hospital Box 260
Chattanooga, Tennessee 37403
T (423) 778-9008
F (423) 778-9009

Memphis
Knoxville
Chattanooga
Nashville

Department of Orthopaedic Surgery
Successful Completion of USMLE as a Training Requirement

The Department of Orthopaedic Surgery accepts only candidates who have passed the United States Medical Licensing Examination (USMLE) Steps 1 and 2. Each resident must pass USMLE Step 3 prior to progression to the third year of postgraduate training (PGY-3 level). **All PGY-2 level residents must register for Step 3 no later than February 28 of the PGY-2 level.** Failure to register will result in the resident being placed on leave without pay until proof of registration is provided to the Program Director and the Director of GME. For residents on a standard cycle, they must provide proof of passing Step 3 by June 30 in order to be promoted to the PGY-3 level. Failure to pass the examination will result in non-reappointment to the program.

Any examination fees would be the responsibility of the resident. The Department reimburses the examination fee if the resident provides an official USMLE report documenting a passing score and a payment receipt.

THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER
COLLEGE of MEDICINE

Department of Orthopaedic Surgery
975 East Third Street Hospital Box 260
Chattanooga, Tennessee 37403
T (423) 778-9008
F (423) 778-9009

Memphis
Knoxville
Chattanooga
Nashville

Department of Orthopaedic Surgery
University of Tennessee College of Medicine Chattanooga
Resident Leave Policy

Annual Leave (Vacation)
Paid Annual Leave is available to each Resident during each 12-month period of training: three (3) weeks, which are comprised of **15 work days (Monday through Friday) – which would be 21 days if you include one weekend with each week of Annual Leave**. These decisions are at the discretion of the Program Director. If the program grants time off during the Christmas–New Year's holiday period, that time off must be counted as Annual Leave. Not every program grants additional time off during this period – it is dependent upon clinic and patient care schedules and must be determined by individual Program Directors. Annual Leave must be approved in writing and in advance by the Program Director. Annual Leave must be used for any time away from the program not specifically covered by other leave benefits below. Annual Leave does not carry over from year to year, and Residents may not be paid for unused leave at the end of each academic year. Residents terminating before the end of their training yearwill be paid only through their final active working day and will not be paid for unused Annual Leave.
GME disciplinary policy permits the Program Director to take up to one week of Annual Leave as a disciplinary measure (*i.e.*, up to one week of Annual Leave may be at risk for disciplinary action as wellas additional leave without pay).

Note: Interview days are considered Annual Leave unless taken during regularly scheduled days off. Also, at the discretion of each department, your program may permit a limited number of paid personal orwell-being days each year. Residents should confirm this with their specific departments and document with forms submitted to the Coordinator. They must also document this when reporting educational clinical work hours (Duty Hours) or "Time Off" forms.

Sick Leave
Residents are allotted three (3) weeks of paid Sick Leave per twelve (12) month period for absences due to personal or family (spouse, child, or parent) illness or injury. In the UT GME System, annual paid Sick Leave consists of a maximum of **15 regular "working days" (Monday through Friday)** – whichwould be up to 21 days if the program includes weekend days. Your Program Director may require a physician's statement of fitness for duty to return to work for absences beyond 3 days. If you have numerous or sporadic sick days, your Program Director may require a physician's statement before you return to work each time.

Sick Leave is non-cumulative from year to year. Residents cannot be paid for unused Sick Leave. Under certain circumstances, additional Sick Leave without pay may be granted with the written approval from the Program Director, who will send a copy of this approval to the Office of Graduate Medical Education (GME). The Resident may be required to make up any time missed (paid or unpaid) in accordance with Residency or Fellowship Program and board eligibility requirements.

Educational Leave
Educational leave may be granted at the discretion of the Program Director, but may not exceed ten (10) calendar days per twelve-month period. Residents should be advised that some Medical Boards count educational leave as time away from training and may require an extension of their training dates.

Holidays
Due to the twenty-four (24) hour nature of patient care, Residents are not entitled to holiday leave. A Program Director may approve time off on a holiday for a Resident who is assigned to a clinic or service that closes for that holiday.

Family and Medical Leave (FML)
Residents who have been employed for at least 12 months and have worked at least 1,250 hours during the previous 12 month period are eligible for qualified family and medical leave under provisions of the federal Family Medical Leave Act (FMLA). FMLA provides eligible employees up to 12 weeks of protected unpaid leave for the birth or adoption of a child or a serious health condition affecting the employee or his or her spouse, child or parent. Residents are required to use all available sick and Annual Leave days to be paid during FML leave.

- Click here to view and download the FML Request Form.
- Click here to view information about UTHSC Family Medical Leave.
- Click here to view the UT Policy on Family Medical Leave, Policy #HR0338.
- Click here to view your rights and responsibilities under FMLA.

The UT College of Medicine Chattanooga Graduate Medical Education Office recognizes the importance of the early development of a relationship between parent and child and supports the use of time off for Resident leave related to the recent birth or adoption of a child. Under Tennessee law, a regular fulltime employee who has been employed by the university for at least 12 consecutive months is eligible for up toa maximum of four months leave (paid or unpaid) for pregnancy and adoption. After all available paid Sick and Annual Leave has been used, unpaid leave may be approved under FML and Tennessee law provisions. The State benefit and FML benefit run concurrently with paid leave or any leave without pay.

Maternity, Parental, or Adoptive leave will be granted in conjunction with Family Medical Leave and Tennessee law. Except in case of emergency, all Maternity, Parental, or Adoptive leave should be requested at least three (3) months in advance of the expected date of birth or adoption in order to ensure adequate coverage in the program. The Program Director and Resident should verify whether the length of leave will require extending training in order to meet program or board eligibility criteria.

The UTHSC Human Resources office has administrative oversight for the FML program. The Program Coordinator or Director should notify the GME Department when it appears a Resident may qualify for FML leave. The GME Department will coordinate with UTHSC HR and the Program Coordinator/Program Director to approve or disapprove a Resident's request for FML leave. Resident rights and responsibilities under FMLA can be found on the GME website via the last bulleted link above.

In accordance with ACGME Institutional Requirements effective July 1, 2022 (IV.H.I.), the UTCOM Chattanooga GME Leave Policy includes:

- Residents will be eligible to have an additional 6 weeks of paid leave (medical, parental, or caregiver leave) ONE time during their training program.
- Must be used prior to GME annual/sick leave.
- Must be used in its consecutive entirety in one block.
- Available to mother and father for birth or adoption.
- Additional paid and unpaid leave may be added to this 6-week benefit and be used immediately following the birth/placement of the child.
- Should both parents be UT residents, each may use their concurrently or consecutively, but the total time off (paid and unpaid) can be no more than 16 weeks.

Bereavement Leave
Residents may take up to three (3) days of paid leave for the death of an immediate family member. Immediate family shall include spouse, child, parent, grandparent, grandchild, brother, or sister of the trainee. With approval of the Program Directors, additional time may be taken using Annual Leave or leave without pay.

Jury Duty
A Resident who receives a summons for jury duty, and is not excused from duty, must provide a copy to the Program Coordinator and the GME Department. The University will excuse the Resident from clinical responsibilities for each day serving on a jury. Upon returning from jury duty, the Resident will need to provide a statement from the Court Clerk each day the Resident served on a jury. This time will count as time away from the program; however, it will not be counted against Annual Leave or Sick Leave, and the Resident will continue to remain on the University Payroll. It is possible that time spent on jury duty could contribute to requiring an extension of training time depending on the specialty board'srequirements. If a Resident were to be involved a personal legal matter or prior training malpractice related matter from another institution, the Resident would have to use Annual Leave or leave without pay for court days not involving the University of Tennessee.

Military Leave
Military leaves of absence will be administered in accordance with the provisions of University of Tennessee Personnel Policy #370:
https://universitytennessee.policytech.com/dotNet/documents/?docid=129&public=true.

Residents must notify their Program Director when military leave will be required and must provide their Program Director with appropriate documentation of their military service. Depending on the length of leave and specialty board requirements, training time may be extended.

Extended Absence from Training or End of Leave
An extended absence, for any reason, may prevent a Resident from fulfilling the requirements for participation in educational and scholarly activities and achieving the residency/fellowship responsibilities (See GME Resident Agreement of Appointment). Generally, leaves of absence may be granted for a maximum of six (6) months. Residents are subject to termination upon:
a) exhaustion of all available Annual Leave, Sick Leave and other approved or statutory leave, or
b) failure to return to work as scheduled at the end of the authorized or statutory leave

An absence will be charged against any accrued Annual, Sick, or other available approved unpaid leaveprogram. If all such paid and unpaid leaves are exhausted, the absence will be unexcused, and the Resident will be subject to dismissal for job abandonment. The GME Director, in her discretion, may authorize additional leave but only in extraordinary circumstances.

Notes:
- Residency positions will be protected during the period of approved Family Medical Leave or as required by law.
- Residency positions in a prescribed AIRS Program may be protected as described in the GME AIRS Policy #320.
- An unpaid leave of absence may affect a Resident's visa status.
- A leave of absence, including paid leave, may require extension of training in order to complete the program or to meet program or board eligibility criteria.

Reporting Time Off
UT requires that all employees report time off, whether paid or unpaid, including GME Residents. Residents must report time off each month via the UT Resident Time Off Sheet, sign the form, and submit the form to the Program Director for approval. Copies will be uploaded in the New Innovations Personnel Data files each month and maintained by the program and the GME Department.

University of Tennessee College of Medicine Chattanooga
Erlanger Medical Center

House Staff Application for Leave of Absence or Vacation

Due to Coordinator **2 weeks** prior to date of time off requested

I, _____, MD, request to be absent from my duties as a member of the House Staff of the University of Tennessee College of Medicine Chattanooga, Department of Orthopaedic Surgery and Erlanger Health System from _____ to _____. (*Please include weekend dates*)

I will return to duty on _____.

The purpose of the time of is: _____

I understand that *all my records must be completed* at the time that my leave of absence or vacation starts, that in case they are not that my leave may be canceled. I also understand that *someone must be assigned or agree to cover my service during my absence.*

Clinic Missed: _____ Resident Coverage: _____

Signature of Resident Covering Clinic: _____

Resident Rounding on Patients: _____

Signature of Resident Rounding on Patients: _____

Date Submitted: _____

APPROVED:

_____ _____
Chief Resident Date

_____ _____
Rotation Director Date

_____ _____
Program Director Date

Copies of this request must be given to:

Kim Davis
Renee Crouch

Office Use Only

Total Days: 10
Days Used Previously: Days Used this time:
Days Remaining:

THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER
COLLEGE of MEDICINE

Department of Orthopaedic Surgery
975 East Third Street Hospital Box 260
Chattanooga, Tennessee 37403
T (423) 778-9008
F (423) 778-9009

Memphis
Knoxville
Chattanooga
Nashville

Department of Orthopaedic Surgery
University of Tennessee College of Medicine Chattanooga
Resident Selection Policy

The Department of Orthopaedic Surgery has adopted the institutional policy on Resident Selection and Eligibility. This policy states that all programs acknowledge and follow the selection and eligibility criteria for resident applicants stated in the *Accreditation Council for Graduate Medical Education* (ACGME) Institutional Requirements as well as the rules of the National Resident Matching Program (NRMP).

In addition to meeting the general eligibility requirements, the Orthopaedic Surgery Program expects that candidates:

1. Have passed the USMLE Step 1 (First attempt)
2. Have scored 235 or greater on USMLE Step 2 (First attempt)
3. Be a member of a current graduating medical school class
4. Be ranked within the top 25 percent of their class

Residency applications for PGY1 must be received through the Electronic Residency Application System (ERAS) and are screened according to the preferences detailed above. Screened applications are then reviewed by the Program Director to determine which candidates will be invited for personal interviews. Interviews are conducted by the selection committee which consists of the Chair, Program Director, two additional faculty members and the PGY-3 orthopaedic surgery residents. Once the interviews have been completed, each applicant is assigned a priority score based on their academic performance in medical school, Dean's letter and other faculty member's letters of recommendations, class standing, USMLE scores and the assessments of faculty and residents who are members of the selection committee.

Note: Medical students from the main medical school campus (UT, Memphis) may elect the 4-week Orthopaedic Surgery elective at the Chattanooga campus. However, to be invited for an interview they must meet criteria stated above. Medical students from other medical schools must apply for an elective rotation and, in order to be accepted, are expected to meet our criteria. Interviews will be offered to rotators who meet the above listed expectations based on data contained in the application through ERAS. Contact the Orthopaedic Residency Coordinator, Kim Davis (kim.davis@erlanger.org), to request medical student elective application forms.

THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER
COLLEGE of MEDICINE

Department of Orthopaedic Surgery
975 East Third Street Hospital Box 260
Chattanooga, Tennessee 37403
T (423) 778-9008
F (423) 778-9009

Memphis
Knoxville
Chattanooga
Nashville

Department of Orthopaedic Surgery
University of Tennessee College of Medicine Chattanooga
Guidelines for Evaluation of Orthopaedic Surgery Residents

Residents will be evaluated at least 80 times a year, equaling about twice a week by faculty members that they perform a case with. It is expected that the attending will discuss goals and expectations with the resident on the initial day of the rotation. Formal feedback should be given mid-point of rotation and again at the end of the rotation, as well as via KSB. The Orthopaedic Surgery Milestones incorporate specific surgical skills as well as:

- Clinical Judgement
- Medical Knowledge
- Clinical Skills
- Humanistic Skills
- Attitudes and Professional Behavior
- Utilization and Overall Clinical Competence

Each rotation director has complied skills and procedures unique to their rotation, so each rotation evaluation is different. The Orthopaedic Surgery Milestones may be found at www.abos.org.

The Program Director will meet with each resident in January and July to go over the individual evaluations and give feedback as to how the resident is progressing through the residency program. The resident may request a copy of his or her summary evaluation, which is kept on file.

The evaluation process will incorporate:

- Evaluations from KSB
- Milestones
- 360º Evaluations
- Procedure Logs and Duty Hours #
- OITE Scores
- Research

ABOS Knowledge, Skills, and Behavior Program

ABOS KSB Program

David F. Martin, MD, ABOS Executive Director

Mona Saniei, MPH, ABOS Graduate and Professional Education Specialist

American Board of Orthopaedic Surgery

Establishing Education & Performance Standards for Orthopaedic Surgeons

ABOS KSB Program

- ***K**nowledge*
  - Measured by the Orthopaedic In-Training Examination.
- *Surgical **S**kills*
  - Measured by O-P Surgical Skills Assessment.
- *Professional **B**ehavior*
  - Measured by ABOS Behavior Tool (ABOSBT).
    - 2 Types: End-of-Rotation & 360

ABOS KSB Requirement

- Beginning academic year 2025/26: **July 1, 2025**
- Participation is required, not specific levels of achievement
- Resident must meet ABOS participation requirements

ABOS KSB Participation Requirements

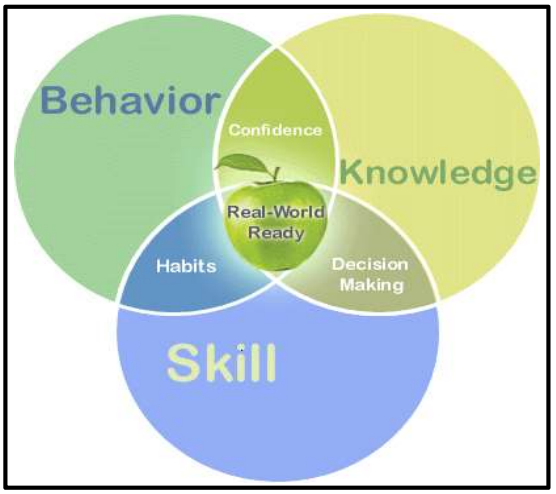
ABOS KSB participation requirements that will be effective July 1, 2025, for those residents who wish to take the ABOS Part I Examination starting in 2026:

- Knowledge
  - 3 OITE examinations completed during PGY 1-5
- Surgical Skills
  - PGY 2-5
    - 80 completed assessments per year of residency education
  - PGY 1
    - 12 completed assessments
- Professional Behavior
  - PGY 2-5
    - 6 completed end-of-rotation professional behavior assessments per year
  - PGY 1
    - 3 completed end-of-rotation professional behavior assessments

ABOS Knowledge, Skills, and Behavior Program

- Surgical Education Shift
  - Time-Based → Competency-Based
    - Goal: Time + Competency
- Deficiencies exists in:
  - Documentation
  - Measurement
  - Teaching

  } **Competence**



- ABOS Goal: provide assessment tools for the measurement of:
  - ***Knowledge***, ***Surgical Skills***, and ***Professional Behavior***

How It Works-Surgical Skills

Completed *Surgical Skills* assessments are sent back to the resident in real-time.

How it Works-Professional Behavior

Professional Behavior feedback goes directly to Program Director/Program Coordinator and/or APD.

Surgical Skills Resident Requirement

- Surgical Skills
  - 80 completed assessments for PGY 2-5/Year
  - 12 completed assessments for PGY 1/Year

Residents have 48 hours from procedure date to request assessment

Faculty will have 72 hours from request

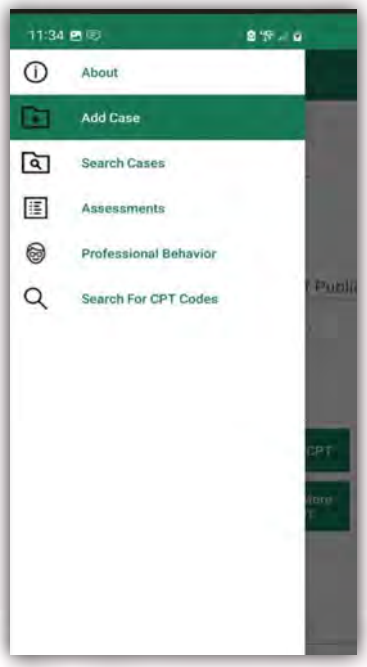
Professional Behavior Resident Requirement

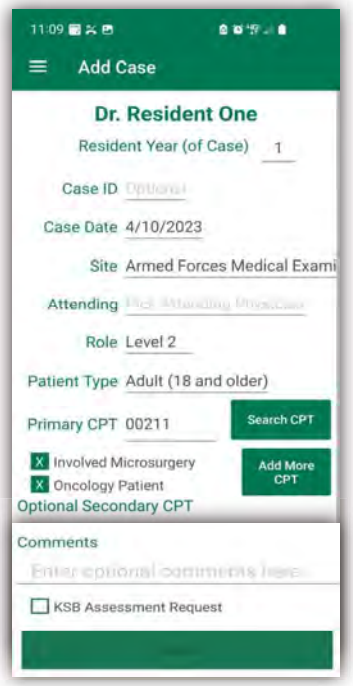
- Professional Behavior
  - 6 End-of-Rotation Assessments for PGY 2-5/Year
  - 3 completed assessments for PGY 1/Year

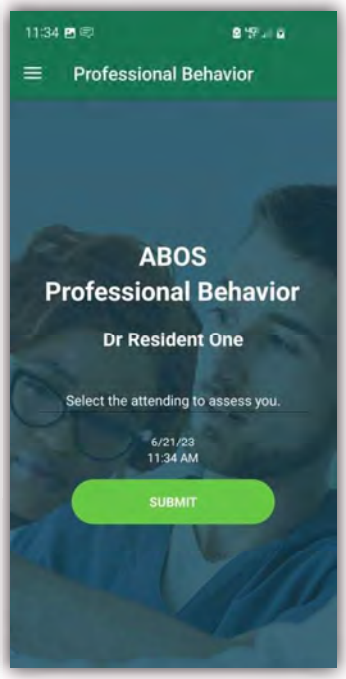
- ABOS KSB 360
  - Program Facilitates
  - Once per year in October

Faculty will have 2 weeks from request

ABOS KSB+ App/Web Portal (www.abos.org/ksb) for Residents



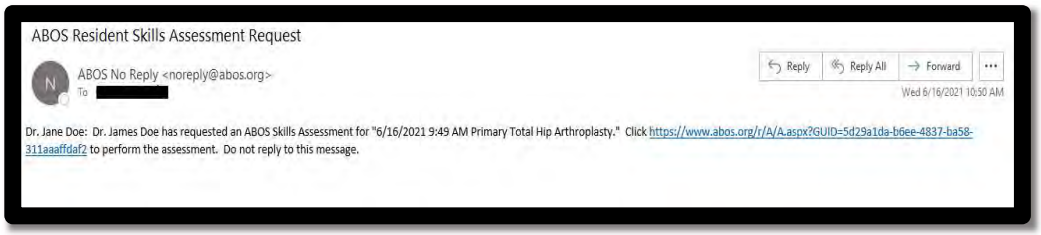


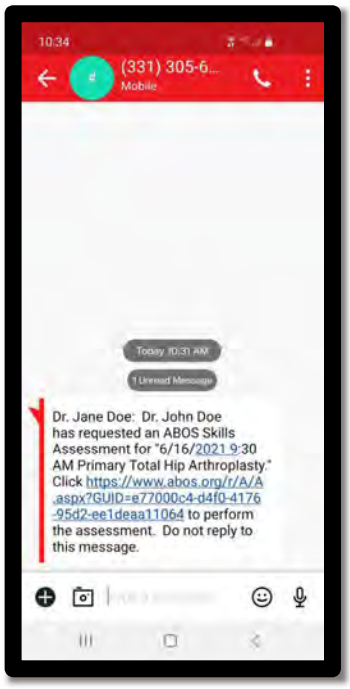


Integrated ABOS KSB App/Web Portal

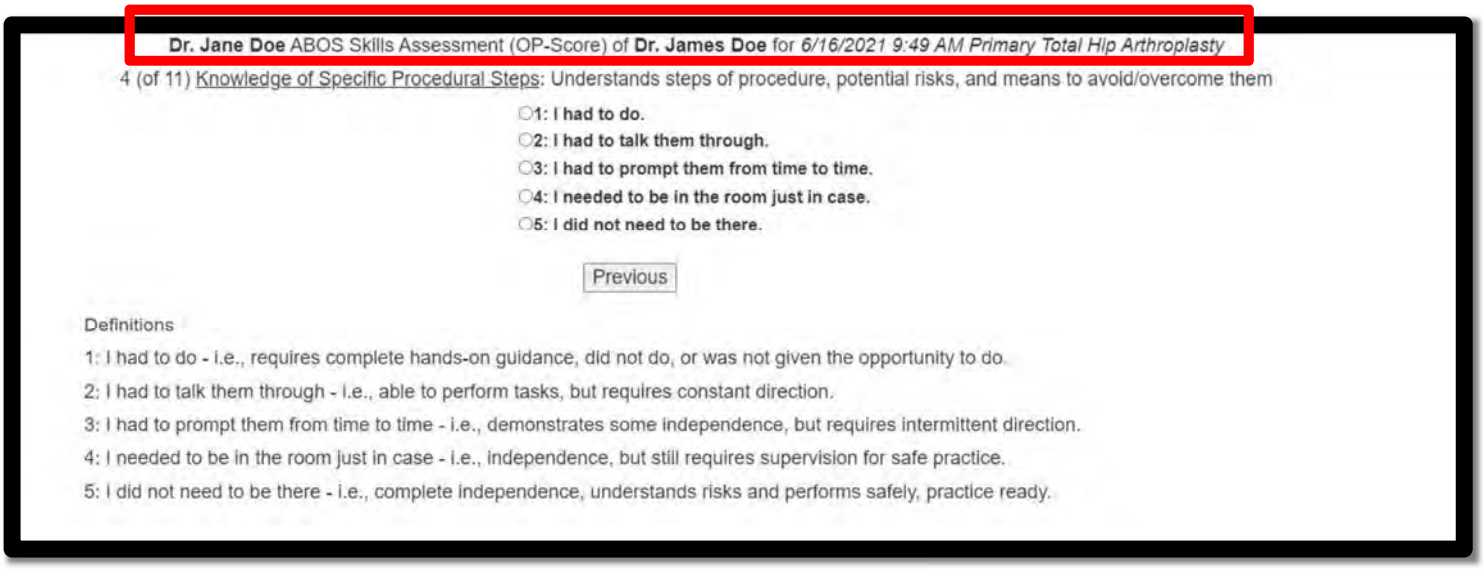
- ACGME Case Logs/ABOS KSB Platform
  - Residents submit case log for ACGME and request ABOS KSB assessment in the same place.
- **ABOS staff will contact** your residency program when the integrated platform is available. Residents will receive notice once the app is updated.
- Updates will start end of summer 2023-spanning until January 1, 2025.

Email/Text to Faculty





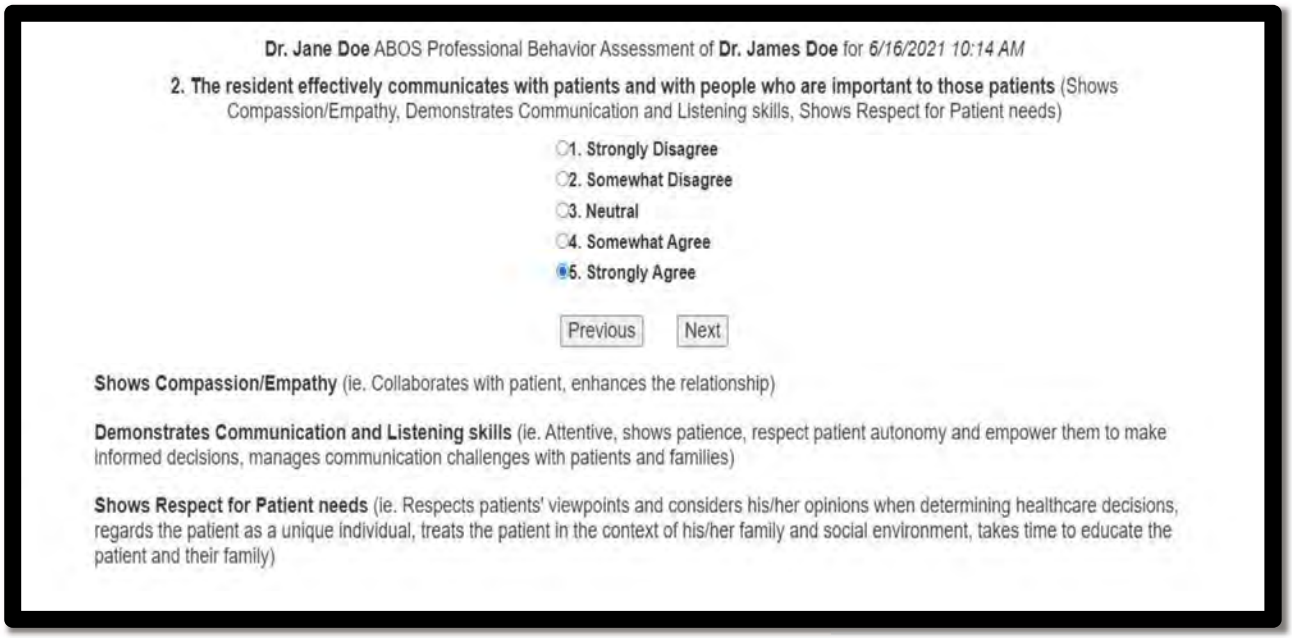
Surgical Skills Assessment



8 Facets of Surgical Procedure

1. Pre-procedure plan: Gathers/assesses required information to reach diagnosis and determine correct procedure required.
2. Case preparation: Patient correctly prepared and positioned, describes approach and lists required instruments, prepared to deal with probable complications.
3. Knowledge of specific procedural steps: Can sequence steps of procedure, articulates potential risks, and means to avoid/overcome them.
4. Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues.
5. Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended.
6. Post-procedure plan: Appropriate complete post procedure plan.
7. Efficiency and flow: Obvious planned course of procedure with economy of movement and flow.
8. Communication: Professional and effective communication/utilization of staff.

Professional Behavior Assessment



Benefits

Resident

- Identify procedures you should be competent/exposed to before graduating
- Steer assessments towards what you need and where you want to be
- Residents want more real-time feedback
- Formative & Summative
- Documentation

Program Director

- Immediate documentation
- Surgical Skills and Professional Behavior Tool maps to Milestones
- Future: Reduce administrative burden on residents
- Reports to help you identify competency of resident before signing off they are ready to sit for Part I exam

Faculty

- Text Message/Email requests
- No Portal/Login
- “Quiet Hours”-No texts at night.
- Opportunity to improve teaching/communication

MYTH VS. FACT

MYTH

- Data will be used for hiring or credentialing
  - ABOS will not share this data
- Data will follow to Fellowship
  - Data is not validated nor intended for Fellowship apps or recruitment.

FACT

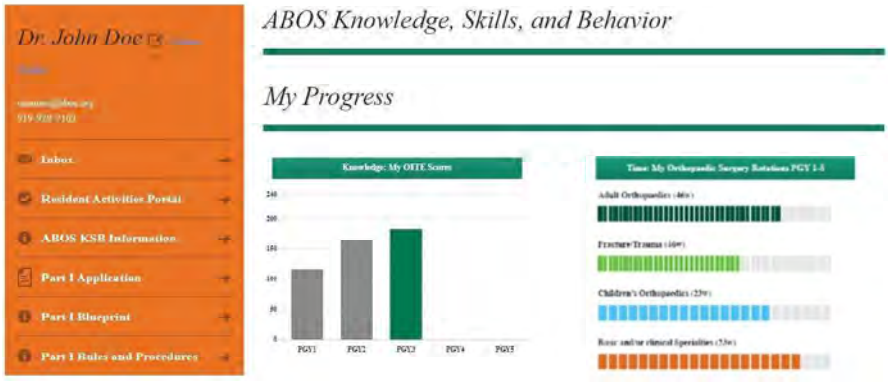
- Program Director has ultimate discretion
- Participation will be a requirement to sit for ABOS Part I.

Integrated ABOS KSB App/Web Portal

- ACGME Case Logs/ABOS KSB Platform
  - Residents submit case log for ACGME and request ABOS KSB assessment in the same place.
- **ABOS staff will contact** your residency program when the integrated platform is available. You will receive notice once your app is updated.
- Updates will start end of summer 2023-spanning several months.

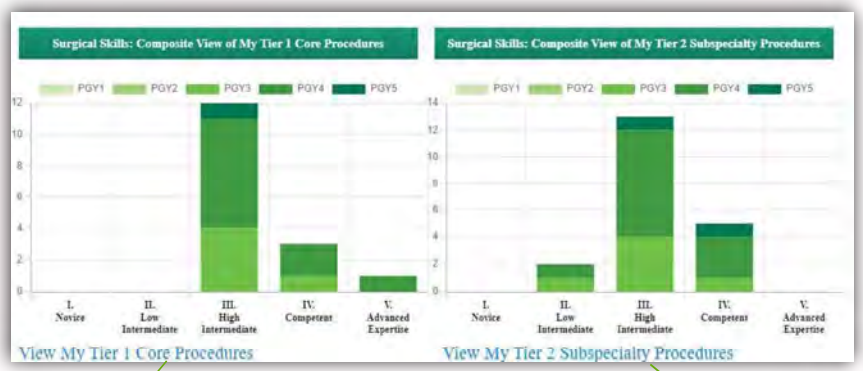
ABOS Resident Dashboard

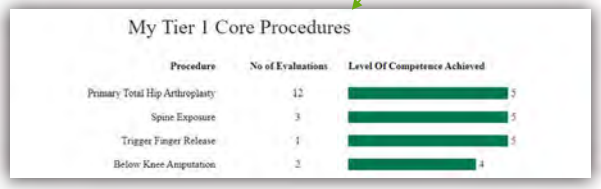
ABOS Dashboard (www.abos.org)

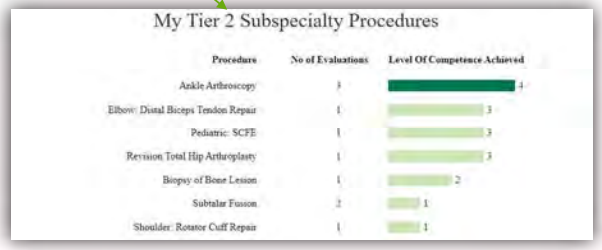


- Longitudinal Progress
  - Multi-Purpose
    - Rules and Procedures
    - Link to Resident Assessment Request Portal
    - Surgical Skills Assessment Ratings
    - Professional Behavior Assessment Ratings
    - OITE Performance
    - Part I Examination Application

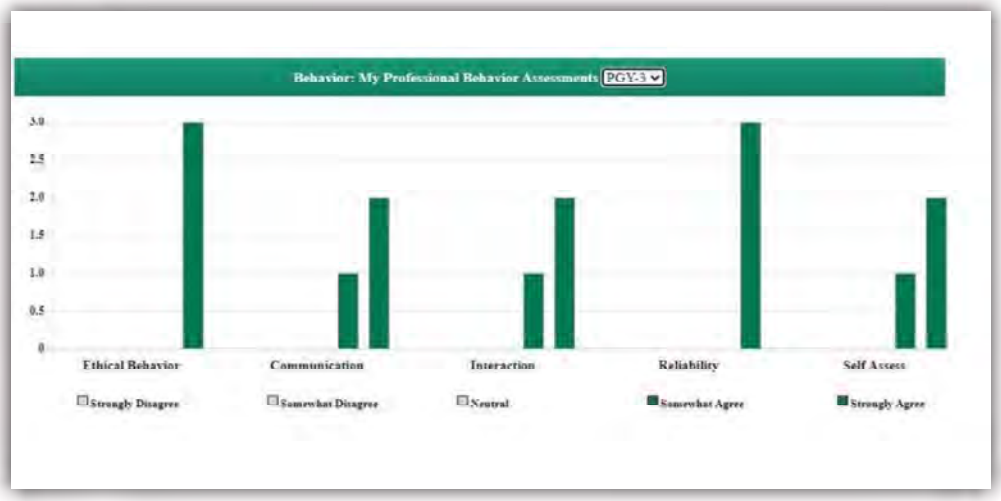
ABOS Resident Dashboard Visuals





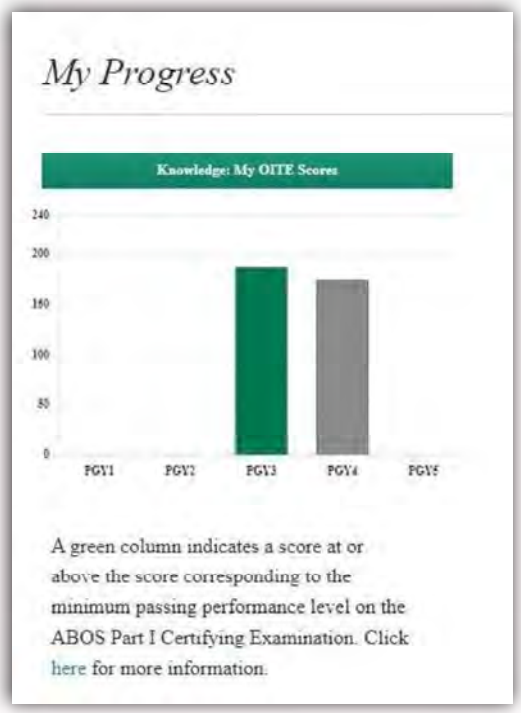


ABOS Resident Dashboard Visuals

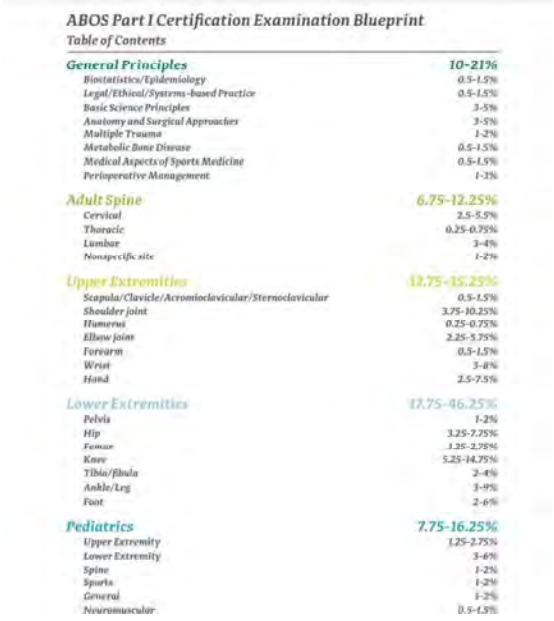


Orthopaedic Knowledge

- Scaled Orthopaedic In-Training Examination (OITE) scores
- Common set of questions on ABOS Part I Examination and AAOS OITE
- Identify a minimum OITE score that roughly corresponds to a passing score on Part I Examination



ABOS Part I Examination Blueprint



ABOS Part I Certification Examination Blueprint

Table of Contents

General Principles	**10-21%**
Biostatistics/Epidemiology	0.5-1.5%
Legal/Ethical/Systems-based Practice	0.5-1.5%
Basic Science Principles	3-5%
Anatomy and Surgical Approaches	3-5%
Multiple Trauma	1-2%
Metabolic Bone Disease	0.5-1.5%
Medical Aspects of Sports Medicine	0.5-1.5%
Perioperative Management	1-3%
Adult Spine	**6.75-12.25%**
Cervical	2.5-5.5%
Thoracic	0.25-0.75%
Lumbar	3-4%
Nonspecific site	1-2%
Upper Extremities	**12.75-15.25%**
Scapula/Clavicle/Acromioclavicular/Sternoclavicular	0.5-1.5%
Shoulder joint	3.75-10.25%
Humerus	0.25-0.75%
Elbow joint	2.25-5.75%
Forearm	0.5-1.5%
Wrist	3-8%
Hand	2.5-7.5%
Lower Extremities	**17.75-46.25%**
Pelvis	1-2%
Hip	3.25-7.75%
Femur	1.25-2.75%
Knee	5.25-14.75%
Tibia/fibula	2-4%
Ankle/Leg	3-9%
Foot	2-6%
Pediatrics	**7.75-16.25%**
Upper Extremity	1.25-2.75%
Lower Extremity	3-6%
Spine	1-2%
Sports	1-2%
General	1-2%
Neuromuscular	0.5-1.5%

ABOS Part I Certification Examination Blueprint

General Principles	**10-21%**
Biostatistics/Epidemiology	**0.5-1.5%**
Interpretation of epidemiologic information [disease prevalence and incidence, disease outcomes (eg, fatality rates), associations (eg, risk factors), health impact (eg, risk differences and ratios), sensitivity, specificity, predictive values]	
Study design and interpretation [types of experimental studies (eg, clinical trials), types of observational studies (eg, cohort, case-control), sampling and sample size, subject selection and exposure allocation (eg, randomization)]	
Hypothesis testing and statistical interference [confidence intervals, statistical significance and type I error, statistical power and type II error]	
Legal/Ethical/Systems-based Practice	**0.5-1.5%**
Consent and informed consent to treatment, physician-patient relationship, death and dying, research issues, interactions with other health professionals, cultural competence, physician wellness/burnout, safety, quality, teamwork, cost, value-based care, diversity	
Basic Science Principles	**3-5%**
Biology (fracture healing, biologics, pharmacology), biomechanics (including gait), inflammatory cascades and coagulation	
Anatomy and Surgical Approaches	**3-5%**
Anatomy, surgical approaches, and soft-tissue coverage	
Multiple Trauma	**1-2%**
Acute respiratory distress syndrome, systemic inflammatory response syndrome, fat embolism syndrome, orthopaedic management of polytrauma patient, initial assessment (ABCs, head, spine), open fractures, bone grafts/bone graft substitutes, mangled extremity, host risk factors, shock, hemopneumothorax	
Metabolic Bone Disease	**0.5-1.5%**
Osteoporosis, vitamin D, diabetes, Paget's disease, hyperparathyroidism	

How to Get Started

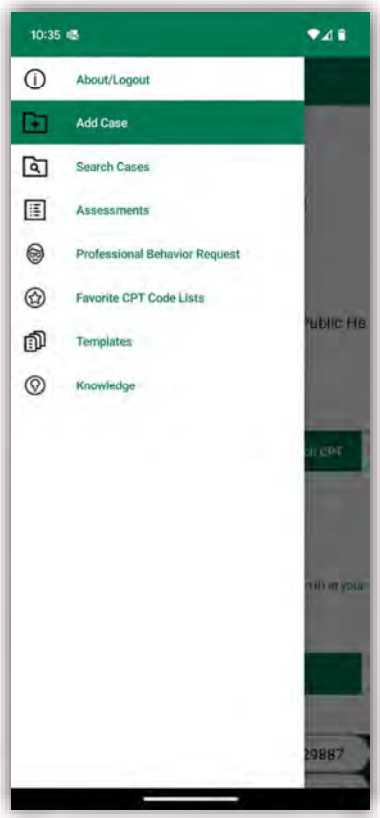
Two separate systems=passwords are independent of one another!

1. Download the ABOS KSB+ App (Android or Apple) or use the ABOS KSB+ Web Portal (www.abos.org/ksb).
   a. Username created for you and communicated via Welcome Email
      i. Create password
      ii. Forgot Username
2. Set up Access to your ABOS Resident Dashboard (www.abos.org)
   a. Click Login
   b. Username same as ABOS KSB+ App/Web Portal
   c. Create Password

When in doubt: Use the Forgot Username/Forgot Password buttons on either page or contact ksb@abos.org

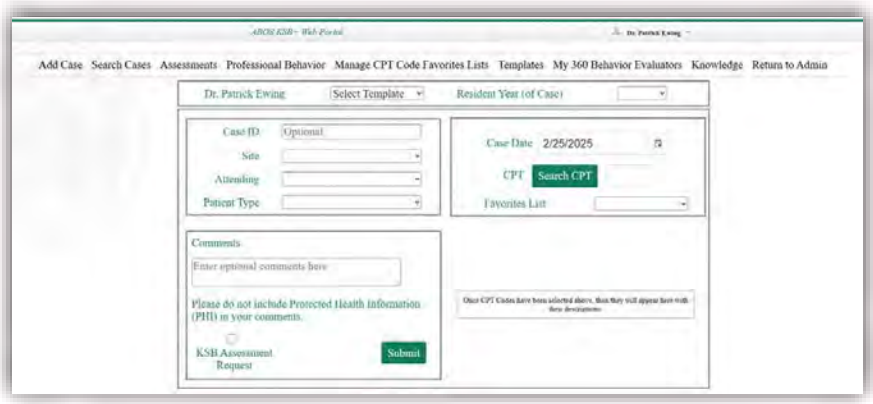
ABOS KSB+ App Features

- Add Case (Case Log with or without Surgical Skill Assessment)
  - KSB Assessment required to be within 48 hours of a case.
- End of Rotation Professional Behavior Request
- Knowledge (OITE/Part I Linking)
- Search for CPT Codes
- Search Cases
  - View/Edit Case Logs
- Assessments
- Favorites Lists
- Templates



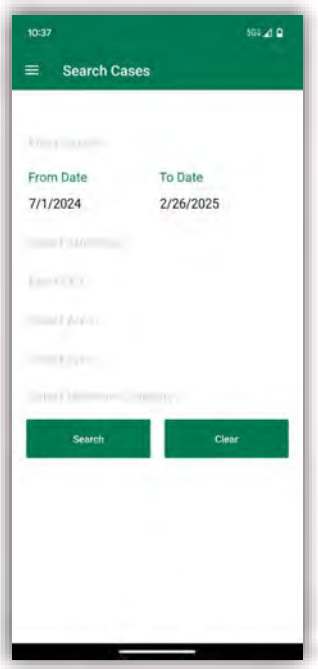
ABOS KSB+ Web Portal Features

- Add Case
  - 48-hour restriction for case logs that you want to request KSB assessment.
- Professional Behavior
- Knowledge
- Search for CPT Codes
- Search Cases
  - View/Edit Case Logs
- Assessments
- Manage CPT Code Favorite Lists
- Templates
- My 360 Behavior Evaluators
- My Profile



Video Guide

Add Case Screen



Logged Cases Search

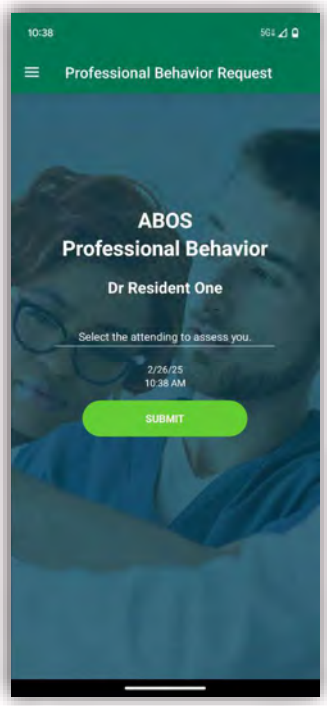
KSB Assessments

Click the photo to watch a tutorial

Video Guide Continued

Search for CPT Codes

Favorites List



Professional Behavior

Knowledge

THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER
COLLEGE of MEDICINE

Department of Orthopaedic Surgery
975 East Third Street Hospital Box 260
Chattanooga, Tennessee 37403
T (423) 778-9008
F (423) 778-9009

Memphis
Knoxville
Chattanooga
Nashville

Department of Orthopaedic Surgery
University of Tennessee College of Medicine Chattanooga
Guidelines for Evaluation of Faculty by Residents

In order to maintain a high quality teaching program, it is important for all residents to evaluate faculty members, rotations and the overall program. The Residency Review Committees of the Accreditation Council for Graduate Medical Education require that residents provide written confidential evaluations for their rotations, faculty members with whom they work, and the overall program. UTCOM Chattanooga has determined that, in order to demonstrate to the ACGME that we are taking a system-wide approach to compliance with these requirements, we utilize a web-based software program, New Innovations Residency Management Suite, to accomplish these evaluations (www.new-innov.com/suite). All residents are required to log into the New Innovations website and provide confidential, **anonymous evaluations** of rotations and faculty after each rotation and at least an annual evaluation of the overall program. Once evaluations have been logged by residents, the Chair/Program Director and institutional leadership will be able to view the summary results in order to use the information for program improvement, feedback for the faculty, etc. Again, note that the system is designed so that *no one* can identify a specific resident's comments or evaluation responses.

The summaries will allow

- feedback to the individual attending on his or her performance
- comparison to other attendings within subspecialty
- comparison among rotations

These evaluations will be an important tool for promotion, evaluation of the attendings as teachers and lecturers, and for dismissing poor teachers. Positive as well as negative comments are vital to give us the appropriate information.

Faculty evaluation should include a review of their teaching skills, commitment to the educational program, clinical knowledge, and scholarly activities. Summary reports and comments will be considered by the Chair when he/she conducts annual faculty evaluations. Rotation and program evaluations should include quality of the curriculum and the extent to which educational goals and objectives have been met by the Residents. Summary reports will be shared periodically with eh GMEC members. Results and comments from these evaluations should be considered by the program when it conducts its Annual Program Evaluation (APE) as well as by the GMEC during Special Focused Reviews.

Subject Name
Status
Employer
Program
Rotation
Evaluation Dates

Evaluated by: **Evaluator Name**
Status
Employer
Program

Confidential Resident Evaluation of Faculty

Instructions:
As a guide to your evaluation, some characteristics of the ideal role model have been suggested under the headings of the six categories. Rank the individual staff person on a scale of 1-5, with 5 being the ideal role model and 1 being totally unacceptable as a role model. Use N/A if you didn't spend enough time with the faculty member to evaluate. Please clarify response of 1 or 2 in the final space.

Personal Attributes

1 **Rate the faculty member on personal attributes that make him/her an effective role model. These may include attitude toward executing professional duties, rapport with patients and co-workers, ability to lead, etc. The ideal role model is the orthopedist who has the desirable attributes to enhance professional performance. He/she helps the resident to gain and maintain a positive attitude toward professional responsibilities, to esablish patient rapport, and to attain proficiency in leadership and decision-making.**

1Poor-Unacceptable	2Marginal	3Average	4Above Average	5Ideal Role Model	N/A
○	○	○	○	○	○

Availability

2 **Rate the faculty member according to availability when you need advice, guidance and questions answered. Ideally, the faculty member is always available in the area of responsibility or can quickly be found when needed. He/she finds the time to go over cases and related material and is available for discussions and special tutorial sessions if required.**

1Poor-Unacceptable	2Marginal	3Average	4Above Average	5Ideal Role Model	N/A
○	○	○	○	○	○

Academic Characteristics

3 **Rate the faculty member on helping you with the pursuit of your academic goals. The ideal faculty member is a consultant chosen by residents and other staff as well. He/she stimulates the Resident's intellectual curiosity, keys him/her to literature, and helps him/her to evaluate issues critically.**

1Poor-Unacceptable	2Marginal	3Average	4Above Average	5Ideal Role Model	N/A
○	○	○	○	○	○

Case-Related Teaching

4 **Rate the faculty member according to his/her contribution to your knowledge in clinical orthopaedics through case supervision and case-related teaching in the operating room, or through comments during case conferences. The ideal faculty member assists the Resident in conducting an organized, thorough patient evaluation. He/she also assists the Resident in developing rational plans and alternatives for pre- and post-operative care. He encourages follow-up and retrospective evaluation, and makes helpful clinical and technical suggestions during the conduction of the case.**

1Poor-Unacceptable	2Marginal	3Average	4Above Average	5Ideal Role Model	N/A
○	○	○	○	○	○

Clinical Skills Teaching

5 **Rate the faculty member according to his ability to teach you clinical skills. The ideal role model is able to teach the Resident his own technical ability. He/she supplies the Resident with the skills necessary to master the most difficult clinical situations.**

1Poor-Unacceptable	2Marginal	3Average	4Above Average	5Ideal Role Model	N/A
○	○	○	○	○	○

Overall Contribution to Learning

6 **Rate the faculty member's overall contribution to your education. Consider contributions made to your knowledge, clinical skills or any other positive influences on your professional development. The ideal faculty member makes an important contribution to the Resident's education. He/she creates an environment that is conducive to hearing and appreciates the special needs of the Resident at any level of training, and for the Resident as an individual.**

1Poor-Unacceptable	2Marginal	3Average	4Above Average	5Ideal Role Model	N/A
○	○	○	○	○	○

Overall Comment

Subject Name
Status
Employer
Program
Rotation
Evaluation Dates

Evaluated by: **Evaluator Name**
Status
Employer
Program

Confidential Resident Evaluation of Rotation - Orthopaedic Surgery Program

Instructions:
For each of the following criteria, please rate the rotation you have just completed, providing additional comments that would explain your answer. Your responses will remain confidential -- shared only as cummulative data and never identifying the individual evaluator. Thank you.
Rating Scale 1 - 5:
1=Poor/Unsatisfactory, 2=Below Average, 3=Average, 4=Above Average, and 5=Outstanding

1 Adequate volume of patients

1Poor/Unsatisfactory	2Below Average	3Average	4Above Average	5Outstanding	N/A
○	○	○	○	○	○

2 Variety of cases

1Poor/Unsatisfactory	2Below Average	3Average	4Above Average	5Outstanding	N/A
○	○	○	○	○	○

3 At the beginning of the rotation, I was made aware of the goals and educational objectives for the rotation.

4 The rotation provided training and opportunity to meet the established goals and objectives.

1Poor/Unsatisfactory	2Below Average	3Average	4Above Average	5Outstanding	N/A
○	○	○	○	○	○

5 Attending faculty were available for consultation for both elective and emergent cases.

1Poor/Unsatisfactory	2Below Average	3Average	4Above Average	5Outstanding	N/A
○	○	○	○	○	○

6 Teaching rounds were conducted appropriately

1Poor/Unsatisfactory	2Below Average	3Average	4Above Average	5Outstanding	N/A
○	○	○	○	○	○

7 Responsibilities and opportunities were appropriate for my PGY level.

1Poor/Unsatisfactory	2Below Average	3Average	4Above Average	5Outstanding	N/A
○	○	○	○	○	○

8 The rotation was an educational opportunity as opposed to a service function.

1Poor/Unsatisfactory	2Below Average	3Average	4Above Average	5Outstanding	N/A
○	○	○	○	○	○

9 My attending faculty were available as needed when on call.

1Poor/Unsatisfactory	2Below Average	3Average	4Above Average	5Outstanding	N/A
○	○	○	○	○	○

10 My attending faculty participated in clinics.

1Poor/Unsatisfactory	2Below Average	3Average	4Above Average	5Outstanding	N/A
○	○	○	○	○	○

11 Resident Work Hours Policies were followed.

1Poor/Unsatisfactory	2Below Average	3Average	4Above Average	5Outstanding	N/A
○	○	○	○	○	○

12 List the strengths of the rotation:

13 List areas which could be improved:

Comments

14 Comments required for ratings of 1 or 2:

Comments

Subject Name
Status
Employer
Program
Rotation
Evaluation Dates

Evaluated by: **Evaluator Name**
Status
Employer
Program

UT COLLEGE OF MEDICINE

Instructions:
The ACGME Common Program Requirements stipulate that residents be given the opportunity to evalute, in writing, the overall program on an annual basis. Please respond to the questions below considering the program's strengths and weaknesses over the past year. At the time of the site visit, the surveyor will usually review a summary report of the most recent annual program evaluations from the residents.

Overall Program Evaluation

1* The residency program adequately prepares residents for academic careers.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
○	○	○	○	○

Comment

2* The residency program adequately prepares residents for private practice careers.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
○	○	○	○	○

Comment

3* The Program Director effectively organizes and administers the program, meeting accreditation requirements and providing opportunity for faculty and residents to meet educational objectives.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
○	○	○	○	○

Comment

4* The Residency Program Coordinator is effective and works well with the Program Director, faculty, and residents to oversee the program.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
○	○	○	○	○

Comment

5* Other Orthopaedic Surgery Residency support staff are responsive and helpful to faculty and residents.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree	N/A
○	○	○	○	○	○

Comment

6* Chief Residents function appropriately, accepting increased responsibility and handling administrative issues. They work well with both faculty and more junior residents.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
○	○	○	○	○

Comment

7* The overall quality of residents in the program is good, and residents achieve educational goals and objectives.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
○	○	○	○	○

Comment

Teaching Conferences/Grand Rounds

8* The organized teaching conferences provide a comprehensive overview of the basic sciences appropriate for the residency program.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
○	○	○	○	○

Comment

9* The organized teaching conferences provide a comprehensive overview of the clinical sciences appropriate for the residency program.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
◯	◯	◯	◯	◯

Comment

Teaching Faculty

10* Teaching faculty are provided sufficient time to teach residents in the inpatient setting.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
◯	◯	◯	◯	◯

Comment

11* Faculty are provided sufficient time to teach residents in the outpatient setting.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
◯	◯	◯	◯	◯

Comment

Resident Supervision

12* Faculty provide appropriate levels of resident supervision in the inpatient setting.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
◯	◯	◯	◯	◯

Comment

13* Faculty provide appropriate levels of resident supervision in the outpatient setting.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
◯	◯	◯	◯	◯

Comment

GOALS AND OBJECTIVES

14* Faculty are supportive of the educational goals of the residency program.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
◯	◯	◯	◯	◯

Comment

15* Faculty review rotation specific goals and objectives with residents at the beginning of each rotation.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
◯	◯	◯	◯	◯

Comment

Fatigue and Sleep Deprivation

16* I am able to recognize signs of fatigue and sleep deprivation in fellow residents.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
◯	◯	◯	◯	◯

Comment

ACGME Duty Hours

17* Residents adhere to the ACGME Duty Hour Requirements within the program.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
○	○	○	○	○

Comment

Scholarly Activity and Research

18* The residency program provides opportunities for residents to participate in scholarly activities and research.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
○	○	○	○	○

Comment

19* The program encourages and provides opportunities for faculty to be involved in scholarly activity and research.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
○	○	○	○	○

Comment

Assessment and Feedback

20* I understand how to use the program's various assessment and evaluation tools to document faculty performance.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
○	○	○	○	○

Comment

21* The program is receptive to resident feedback regarding the educational program.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
◯	◯	◯	◯	◯

Comment

22* The program provides residents with timely performance feedback.

(1) Strongly Disagree(Must provide comment.)	(2) Disagree(Must provide comment.)	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
◯	◯	◯	◯	◯

Comment

SIGNIFICANT STRENGTHS

23 What are the most significant strengths of the program?

comment

Areas for Improvement

24 What are areas in the program that need improvement?

comment

OVERALL IMPRESSION

25 Additional comments and suggestions --

comment

Overall Comment

THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER
COLLEGE of MEDICINE

Department of Orthopaedic Surgery
975 East Third Street Hospital Box 260
Chattanooga, Tennessee 37403
T (423) 778-9008
F (423) 778-9009

Memphis
Knoxville
Chattanooga
Nashville

Department of Orthopaedic Surgery
University of Tennessee College of Medicine Chattanooga
Policy on Promotion

1. Philosophy
   Our program makes decisions for promotion separate from those for dismissal.

2. Policy
   Orthopaedic Surgery Residents must successfully progress within the residency program in accordance with their rotation assignments, defined skills for each rotation and level of training, and the General Competency Areas and Milestones stipulated by the Accreditation Council for Graduate Medical Education.

   If a resident does not demonstrate satisfactory performance, the Program Director/Chair may determine that promotion is not warranted. The decision as to whether or not to suggest remediation or whether or not to suggest non-reappointment, in accordance with the institution's policies, is at the discretion of the Program Director/Chair.

   A passing grade on USMLE Part 3 is required by the institution for promotion to the PGY-3 level.

   If non-reappointment is deemed appropriate, the resident has a right to appeal the decision in accordance with University procedures.

   According to the RRC, 46 weeks of educational activity are required for promotion.

THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER
COLLEGE of MEDICINE

Department of Orthopaedic Surgery
975 East Third Street Hospital Box 260
Chattanooga, Tennessee 37403
T (423) 778-9008
F (423) 778-9009

Memphis
Knoxville
Chattanooga
Nashville

Department of Orthopaedic Surgery
University of Tennessee College of Medicine Chattanooga

Policy on Dismissal

The Department of Orthopaedic Surgery can dismiss a resident for academic reasons. The Program Director/Chair will make an effort to help a resident successfully repeat rotations or an entire academic year if the resident shows evidence of cooperation and progress. Attendance at required conferences, OITE scores, performance of required procedures, completion of medical records, and faculty evaluations will be scrutinized closely to help the Clinical Competency Committee and the Program Director/Chair make this determination. If a resident fails to meet remediation requirements, the resident will be dismissed from the program.

The Program Director/Chair can dismiss a resident at any time for egregious conduct, especially in light of dereliction of professional responsibilities or non-compliance with University policies. Egregious conduct includes failure in humanistic attitudes and professional attitudes and behaviors.

If dismissal is deemed appropriate, the resident has a right to appeal the decision in accordance with University procedures.

Immediate dismissal will occur if the resident is listed as an excluded individual by any of the following:

- Department of Health and Human Services Office of the Inspector General's "List of Excluded Individuals/Entities"
- General Services Administration "List of Parties Excluded from Federal Procurement and Non-Procurement Programs"
- Convicted of a crime related to the provision of health care items or services for which one may be excluded under 42 USC 1320a-7(a)

.

THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER
COLLEGE of MEDICINE

Department of Orthopaedic Surgery
975 East Third Street Hospital Box 260
Chattanooga, Tennessee 37403
T (423) 778-9008
F (423) 778-9009

Memphis
Knoxville
Chattanooga
Nashville

Department of Orthopaedic Surgery
University of Tennessee College of Medicine Chattanooga
Resident Clinical and Educational Work Hours Policy

Resident & Fellow Clinical and Educational Work Hours in the Learning and Working Environment Clinical and educational work hours are defined as all clinical and academic activities related to the residency program; i.e., patient care (both inpatient and outpatient), administrative work related to patient care, the provision for transfer of patient care, time spent in-house during call activities, moonlighting (internal and external), and scheduled academic activities such as conferences. Clinical and educational work hours do not include reading and preparation time spent away from the work site. Graduate medical education (GME) clinical and educational work hour standards incorporate the concept of graded and progressive Resident responsibility leading to the unsupervised practice of medicine.

Clinical and Educational Work Hours Oversight
Clinical and educational work hour compliance is a collective responsibility of GME leadership, Faculty, and Residents. Each program is required to use the Duty Hour Module in New Innovations to monitor compliance with ACGME requirements, particularly in accordance with the revised Common Program Requirements (Section VI), effective July 1, 2017. Program Directors must monitor Resident clinical and educational work hours and adjust Resident schedules as needed to mitigate excessive service demands and/or fatigue and to prevent negative effects of clinical and educational work hours on learning and patient care. This includes monitoring the need for and ensuring the provision of back up support systems when patient care responsibilities are unusually difficult or prolonged. Residents and Faculty have a personal role and professional responsibility in the honest and accurate reporting of Resident clinical and educational work hours. Duty Hour logs reported in New Innovations must accurately and truthfully reflect hours counted as part of the clinical and educational work hours reported and documented. Failure to report truthful information about duty hours is a violation of ethical and professional standards and may impact a Resident's evaluations and recommendations.

Clinical and educational work hour reports will be submitted by all our GME programs as requested by the GME Department with a frequency to ensure compliance with requirements. Reports will be reviewed by the GMEC and compliance issues addressed as needed.

Maximum Hours of Clinical and Educational Work per Week
Clinical and educational work hours must be limited to no more than 80 hours per week, averaged over a four-week period, inclusive of all in-house call clinical and educational activities, clinical work done from home, and all moonlighting.

Mandatory Time Free of Clinical Work and Education
The program must design an effective program structure that is configured to provide Residents with educational opportunities, as well as reasonable opportunities for rest and personal well- being. Residents should have eight hours off between scheduled clinical work and education periods.

There may be circumstances when Residents choose to stay to care for their patients or return to the hospital with fewer than eight hours free of clinical experience and education. This must occur within the context of the 80-hour and the one-day-off-in-seven requirements.

Residents must have at least 14 hours free of clinical work and education after 24 hours of in-house call.

Residents must be scheduled for a minimum of one day in seven free of clinical work and required education (when averaged over four weeks). At-home call cannot be assigned on these free days.

Clinical Work and Education Period Length

Clinical and educational work periods for Residents must not exceed 24 hours of continuous scheduled clinical assignments.

Up to four hours of additional time may be used for activities related to patient safety, such as providing effective transitions of care, and/or Resident education.

Clinical and Educational Work Hour Exceptions

In rare circumstances, after handing off all other responsibilities, a Resident, on his/her own initiative, may elect to remain or return to the clinical site in the following circumstances:

· to continue to provide care to a single severely ill or unstable patient;
· humanistic attention to the needs of a patient or family; or,
· to attend unique educational events.

These additional hours of care or education will be counted toward the 80-hour weekly limit.

Maximum In-House Night Float

Residents & Fellows must not be scheduled for more than six consecutive nights of night float. Night float must occur within the context of the 80-hour and one-day-off-in-seven requirements.

Maximum In-House On-Call Frequency

PGY-2 Residents and above (including fellows) must be scheduled for in-house call no more frequently than every third night (when averaged over a four-week period).

At-Home Call

Time spent in the hospital by Residents & Fellows on at-home call must count towards the 80-hour maximum weekly hour limit. PGY-1 Residents are not allowed to take at-home call.

The frequency of at-home call is not subject to the every-third- night limitation, but must satisfy the requirement for one day in seven free of clinical work and education, when averaged over four weeks.

Residents & Fellows are permitted to return to the hospital while on at-home call to provide direct care for new or established patients. These hours of inpatient care must be included in the 80-hour maximum weekly limit.

Moonlighting

Moonlighting must not interfere with the ability of the Resident to achieve the goals and objectives of the educational program, and must not interfere with the Resident's fitness for work nor compromise patient safety.Time spent by Residents in internal and external moonlighting (as defined in the ACGME Glossary of Terms) must be counted toward the 80-hour maximum weekly limit.

PGY-1 Residents are not permitted to moonlight.

Moonlighting is strongly discouraged and must be approved in advance by the Program Director. Before seeking permission to moonlight, Residents should closely review the UT College of Medicine Chattanooga GME Policy on Moonlighting.

Professionalism, Personal Responsibility, Patient Safety and Quality Improvement
Residents, Fellows, & Faculty must be educated concerning the professional responsibilities of physicians, including their obligation to appear for duty be appropriately rested and fit to provide the care required by their patients. The GME program must be committed to and responsible for promoting patient safety and Resident well-being in a supportive educational environment. The Program Director must ensure that Residents are integrated and actively participate in interdisciplinary clinical quality improvement and patient safety programs.

The learning objectives of the program must be accomplished through an appropriate blend of supervised patient care responsibilities, clinical teaching, and didactic educational events; accomplished without excessive reliance on Residents to fulfill non-physician obligations; and, ensure manageable patient care responsibilities.

Residents and Faculty must demonstrate an understanding and acceptance of their personal role in the following:

· provision of patient- and family-centered care;
· safety and welfare of patients entrusted to their care; including the ability to report unsafe conditions and adverse events;
· assurance of their fitness for work
· management of their time before, during, and after clinical assignments;
· recognition of impairment, including illness and fatigue, and substance abuse, in themselves, their peers, and other members of the health care team;
· commitment to lifelong learning;
· monitoring of their patient care performance improvement indicators; and,
· accurate reporting of clinical and educational work hours, patient outcomes, and clinical experience data.

All Residents, Fellows, & Faculty must demonstrate responsiveness to patient needs that supersedes self- interest. This includes the recognition that under certain circumstances, the best interests of the patient may be served by transitioning that patient’s care to another qualified and rested provider.

Reviewed and Approved by the GMEC 5/16/2017. Administrative edits 6/12/2019.

Logging Duty Hours

Go to the New Innovations website: http://www.new-innov.com/login/

The Institution login is: UTC (all caps)

Your username is: first initial last name (lower case with no spaces)

Your password: same as your username (may be changed after initial login)

This brings you to your *Welcome Screen*.

Across the top menu bar, click on the *Duty Hours* link

This will bring up the Duty Hours screen so you can enter your hours that have already been worked.

Identify the type of hours being entered:

Regular Duty Hours (most of the hours you work, even if you are on Night Float)
Call (meaning overnight call in-house at the hospital)
Home Call (called in or not called in)
Post Call/Transitions in duty (hours you work from when your overnight call ends until you go home)
Moonlighting (only with Program Director approval)

Location: The system is set to automatically select Erlanger Health System. If you are in a physician office, Erlanger East, Tennova or Children's, select the correct facility from the drop down menu.

You can click and drag the bar down to fill the appropriate hours. If you wish to remove a cell, simply click on it again. You may also right click a cell to enter a range of hours.

Click *Save* and you are done!

If your hours trigger an exception, please enter an explanation.

Please do not enter hours ahead of time, but do keep them caught up as reports must be run monthly.

New Innovations (330) 899-9954 M-F 8 am – 5 pm

You can also click the Help tab in the upper right corner and enter a ticket for help.

THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER
COLLEGE of MEDICINE

Department of Orthopaedic Surgery
975 East Third Street Hospital Box 260
Chattanooga, Tennessee 37403
T (423) 778-9008
F (423) 778-9009

Memphis
Knoxville
Chattanooga
Nashville

Department of Orthopaedic Surgery
University of Tennessee College of Medicine Chattanooga
Resident Supervision Policy

The Department of Orthopaedic Surgery has adopted the institutional policy on resident supervision. The general policy states that, the Chair of the department to whom the resident is assigned and/or the resident's Program Director is responsible for supervision of the resident. Responsibility for specific supervision may be assigned to a faculty member supervising the resident on various academic rotations. Residents are not members of the hospital's Medical Staff but are recognized as health care providers who will be involved in patient care under the supervision of an appropriate Medical Staff/Faculty Member, as defined in the hospital's Medical Staff Bylaws and Rules and Regulations. Residents may provide assistance in the care of patients of physicians on the service to which they are assigned.

All patients receiving care at the participating hospital facilities are assigned to a member of the hospital's Medical Staff, designated as that patient's attending physician. The attending physician responsible for the care of patients with whom residents are involved will provide the appropriate level of supervision based on the nature of the patient's condition, the likelihood of major changes in the management plan, the complexity of care, and the experience and judgment demonstrated by the residents being supervised. The Medical Staff/Faculty Member, within the limits of his clinical privileges and with continued supervision, may extend specific patient care responsibilities to the resident, commensurate with the resident's demonstrated competence.

As part of the training program, residents should be given progressive responsibility for the care of patients and to act in a teaching capacity themselves and provide supervision to less experienced residents and students. It is the decision of the Medical Staff/Faculty Member, with advice from the Program Director and/or Chair, as to which activities the resident will be allowed to perform within the context of the assigned levels of responsibility. The overriding consideration must be the safe and effective care of the patient.

Documentation of supervision will be by progress note or signature from the attending physician or reflected within the resident's progress notes at a frequency appropriate to the patient's condition."

(a) The institution and the Orthopaedic Department require a high level of supervision of residents throughout the training program. The clinics are not allowed to process patients unless a teaching staff member is present. Teaching staff are required to be present for the significant portions of all major operative procedures, and all procedures must be supervised in a manner consistent with the level of supervision mandated by the supervision form on file with the department.

(b) Progression of level of responsibility for patient care is inherent in the educational system at this institution. During the training program as a resident's professional maturity and skills increase, the teaching staff gives him increasing patient care responsibility for the medical and surgical management of the patients. Responsibility steadily increases over their five years so that at the end of their training they are making the majority of the decision with minimal amount of supervision to encourage the development of surgical and medical independence.

(1) Outpatient: In the earlier phases of training, the residents see new patients in the clinics and private offices and are taught basic examination techniques in addition to general educational information. Management plans for new patients or revision of management plans will be reviewed by the end of the clinic session. As the residents progress with their experience, they are allowed to assume more of the actual management decisions and technical requirements for the patient.

(2) Inpatient: Typically, residents caring for patients admitted to the hospital who are in stable condition will receive general, direct and/or personal supervision. The supervising teaching staff member is considered the patient's attending physician. No patient shall be admitted to the hospital without the approval of an attending physician. The attending physician will be expected to see the patient and/or review the management plan with 24 hours and at appropriate intervals during the patient's hospitalization. Responsibility starts with supervised evaluation of the patient. As experience is gained, the responsibility of the resident increases regarding management and treatment measures, and they are allowed more opportunities to address more difficult problems.

(3) Operative: Operative experience is extensive for each resident. This starts with the basic surgical techniques that can be learned in PGY-1 year on a busy Trauma service. Since all operative procedures are supervised, residents are allowed to participate more and more as the resident surgeon rather than an assistant as they gain experience. Usually, the resident's increase in responsibilities is related to their personal skills and level of development.

(4) Emergency: Emergency Department experience is gained under supervision primarily by the Emergency Department teaching staff, both in the adult and the pediatric emergency rooms. In the earlier phases of training, frequently a senior resident will assist a junior resident in evaluation and management of an emergency room patient. With progression through the various levels of training and levels of experience, these opportunities steadily increase.

Definitions:

Faculty Member: refers to a physician who has been appointed to the faculty of the University of Tennessee College of Medicine Chattanooga and is also a member of the Medical Staff of the affiliated hospital facilities in which our residents train.

Supervision will consist of four levels:

- Direct supervision- the supervising physician is physically present with the resident and patient.
- Indirect supervision with direct supervision immediately available- the supervising physician is physically within the hospital or other site of patient care, and is immediately available to provide direct supervision.
- Indirect supervision with direct supervision available- the supervising physician is not physically present within the hospital or other site of patient care, but is immediately available by means of telephonic and/or electronic modalities, and is available to provide direct supervision.
- Oversight- the supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered.

THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER
COLLEGE of MEDICINE

Department of Orthopaedic Surgery
975 East Third Street Hospital Box 260
Chattanooga, Tennessee 37403
T (423) 778-9008
F (423) 778-9009

Memphis
Knoxville
Chattanooga
Nashville

Department of Orthopaedic Surgery
University of Tennessee College of Medicine Chattanooga
Social Networking Guidelines

The Office of Graduate Medical Education recommends that Residents and Fellows exercise caution in using social networking sites such as Facebook, Twitter, Instagram, LinkedIn, etc. Items that represent unprofessional behavior posted by Residents and Fellows on such networking sites are not in the best interest of the University and may result in disciplinary action up to and including termination. All Residents and Fellows in the University of Tennessee Graduate Medical Education (GME) Program are student employees of the University of Tennessee. As such, they are responsible for adhering to all University policies, including the University's Code of Conduct as set forth in UT Policy No. HR0580.

This policy states that, "Each member of the university community is expected to exhibit a high degree of professionalism and personal integrity consistent with the pursuit of excellence in the conduct of his or her responsibilities."

The policy can be accessed in its entirety on the UTHSC and UT College of Medicine Chattanooga (UTCOMC) GME websites and identifies certain commonly held values and associated behaviors by which the University as a community is measured and governed. Residents and Fellows must avoid identifying their connection to the University if their online activities are inconsistent with these values or could negatively impact the University's reputation. If using social networking sites, Residents and Fellows should use a personal email address as their primary means of identification. University and hospital email addresses should never be used for identification on these social networking sites or when expressing personal views. Residents and Fellows who use these websites or applications must be aware of the critical importance of privatizing their webpages or posts so that only trustworthy "friends" have access to the websites and applications. In posting information on personal social networking sites, Residents and Fellows may not present themselves as an official representative or spokesperson for a Residency or Fellowship program, hospital, or the University.

Patient privacy must be maintained, and confidential or proprietary information about the University or hospitals must not be shared online. Patient information is protected under the Health Insurance Portability and Accountability Act (HIPAA). Residents and Fellows have an ethical and legal obligation to safeguard protected health information. **Posting or emailing patient photographs is a violation of the HIPAA statute.**

Any social media site developed to promote the UTCOM Chattanooga GME Program must adhere to both University and Erlanger (or other affiliated hospital) guidelines and must be approved though the appropriate officials on the main UTHSC Campus.

THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER
COLLEGE of MEDICINE

Department of Orthopaedic Surgery
975 East Third Street Hospital Box 260
Chattanooga, Tennessee 37403
T (423) 778-9008
F (423) 778-9009

Memphis
Knoxville
Chattanooga
Nashville

Department of Orthopaedic Surgery
University of Tennessee College of Medicine Chattanooga
Policy on Patient Handoffs

Patient handoffs are an important patient safety measure which our department takes seriously. Our protocol is during weekdays Monday through Friday there is a morning checkout round where all new patient admissions are reviewed and a plan established with attendings present. The handoff tool includes the patient's name, room number, orthopaedic diagnosis, past medical history and other comorbidities, review of medications and pertinent past family and social history. Any significant allergies that relate to orthopaedic treatment are also reviewed. The action plan for the day and master plan is also reviewed.

For admissions that occur on subspecialty services not related to orthopaedic trauma, the on-call resident has direct communication reviewing the same information with the appropriate attending on that service.

If a subspecialty in-patient is being care for by residents on that service, then there is no handoff necessary on a day-to-day basis because the same residents are caring for their patient through their stay. If for any reason those residents are going to be away, then that resident signs his in-patients out to a resident who will cover for him and the handoff procedure with all pertinent information is directly discussed. Residents sign a vacation form which is co-signed by the resident who will assume care for his patients.

For weekend continuity of patient care, there is a morning conference prior to commencement of weekend surgical procedures whereby the same methodology of review of in-patients is covered with the appropriate attendings for the weekend.

Our faculty have direct conversations with both junior and senior level residents so that the competency of each resident regarding the material presented and conveyed can be determined. These evaluations are included on their routine rotation evaluations. As appropriate, their competency is also evaluated in the orthopaedic milestone evaluations.

1/2014

Orthopaedic Surgery Handoff Checklist

Patient Name:
Location/Room #:
Diagnosis- Orthopaedic:
Date of Surgery:
Medical Comorbidities:
Labs:
Hospital course:
Allergies:
Meds:
Weight bearing status:
To do:

Curriculum

PGY1 Rotations Goals and Objectives: Guide to your first year

ACGME requirements: Curriculum Development

- 6 months max of orthopedics – we have done everything we can to get as much ortho exposure as we can, while obeying these requirements, while ensuring an appropriate underlying training in General Surgery
- 6 months non ortho = may consist of – Gen Surg Trauma, Plastics, Neurosurgery, Vascular Surgery, Rheumatology, Anesthesia, Pediatric Surgery, General Surgery, etc….
    - ICU month in last 3 months of intern year

1. General Surgery Trauma

- 2 month blocks in first half of intern year
- Goals:
  Learn management of trauma work up and treatment plans
  Learn team communication with GS trauma team as you will be spending a lot of time working together in future for the overall care of trauma patients
  Report to GS team for call and duties
- Dr. Robert Maxwell is rotation director

2. Plastics Surgery

- One-month block with focus on Plastic surgery flaps/coverage education (per ACGME)
- It is OK to cover hand cases/clinics when no plastic surgery cases going on and to help on hand service as prepare for hand call on 1st call
- Seeing consults with hand resident during day
- Ortho buddy call will be expected during this rotation
- Dr. Jason Rehm is rotation director

3. Neurosurgery

- One-month block with focus on management of neurosurgical emergent coverage including brain and spine trauma as prepare for spine call on 1st call
- Ortho buddy call will be expected during this rotation
- Jodi Miller is rotation director

4. Rheumatology

- One-month office focused block where time is spent learning work up and treatment of rheumatologic disorders with Dr. Britt (rotation Director) and Erlanger Rheumatology 3 days/wk

- Other office days with Dr Cunningham and Dr. Freeman to get more ortho office exposure and prepare you for follow up and management of ortho patients
- Use this time to learn Arthroplasty work up for infections/loosening/dislocation for preparation of handling arthroplasty pt work ups in OR on 1st call
- Ortho buddy call will be expected during this rotation

5. SICU

- ACGME one-month requirement to learn the management of critical care issues to ensure training in future of orthopedic patients in ICU and critical care issues
- As chiefs on ortho rotations you will be expected to round on ortho patients in the ICU, this rotation will help prepare you to understand management of such patients as well as making appropriate recommendations on appropriate resuscitation of orthopedic patients prior to surgical fixation
- Dr. Robert Maxwell is rotation director

6. Ortho ED

- 430pm to 7am Su-Th – ortho night float – 5 nights – report to ortho trauma check out rounds at 630 for educational follow up of previous night's pts
- Goal is to manage on call ortho consults, ER management and communication, splinting/casting techniques
- Dr. Dirk Kiner is rotation director

7. Ortho Trauma

- Report to ortho trauma team with expectations of carrying the 6291 pager (or working the EPIC consult chat when that comes online) and first line for covering consults, floor duties, learning work up and management of ortho trauma pts
- One month that there is only one Peds resident the PGY1 will be expected to see peds consults during the day as this will allow the upper level solo resident to focus on OR/office (this is attached to your ortho peds block and designated as Ortho Tr/Peds)
- Ortho buddy call will be expected these months
- Dr. Dirk Kiner is rotation director

8. Ortho Peds

- Report to ortho peds team with expectations of carrying 6292 pager (or the EPIC chat line when that comes online) and first line for covering consults, floor duties and learning work up and management of ortho peds pts
- OR/office exposure with Dr. Moses/Quigley/Gomez with the goal of establishing early peds education for on call management of ortho peds pts
- Ortho buddy call will be expected these months

- Dr. Robert Quigley is rotation director

Consult Work up Expectations:

- Run it up the Chain of Command:
    - Please note that this first year we do not expect you to know all diagnosis/treatment plans but we do expect you to always do what is right for your patient.
    - You must run consults up the chain to your upper level residents – this is good for patient care and appropriate treatment plan establishment but also critical for your education.
    - Our program prides itself on teaching within, every case is an opportunity to learn and hone your skills from your upper levels.
    - All faculty will have this expectation before you call them to present a case (especially multi trauma pts, open fractures, compartment syndrome, total joint infection work ups, etc) so start good habits here.

Vacation Time:

- Please *try* to take when on less busy rotations such as Rheum, NS, Plastics and not when on SICU. OK to take a week on GS trauma just please try to give as much notice as possible for planning of call/work schedules.
- If circumstances are needed to take during SICU just let me know and we can approve (example – sibling getting married on set date or baby due) and I will speak to Dr. Giles or Maxwell if needed.

Summary:

We have worked very hard to make this year ortho focused to prepare you for first call. This schedule also functions to give you a “head start” over most ortho residents across the country to allow you to hit the ground running into your PGY2 year.

As always, I am available year round for questions/concerns about specifics of each rotation or other administrative matters.

Dirk Kiner – Program Director

ER Night Float

Director: Dirk Kiner

PGY-1 = 1 month
- **ACGME requirement 1 of the 6 months of non-orthopedic requirement**

Schedule:
Th-Su 5pm – 8am (after trauma check outs and ortho conference)

Goals/Objectives:

This rotation meets one of our non-ortho month requirements for our intern year. This is a time to hone your on-call skills taking buddy call with the first call resident. Check in with first call resident 430-5 ish and work up all floor/ER consults. This is not a time to fly solo but to work under the first call resident and learn. All consults should be run up the chain first call>second call>on call physician. Try to come to as many conferences as possible to expand your orthopedic knowledge and prepare yourself for your orthopedic years on service. Shift ends after conference. Please ensure you log all Peds reductions because they count toward your peds cases for ACGME case log minimums.

Goals:
1. Proficiency in common ortho trauma work up in ER including radiologic reading and appropriate exam and procedures
2. Basic understanding for appropriate consult work up, presentation and management

Recommended Readings:

1. Skeletal Trauma
2. Handbook of Fractures
3. Operative Techniques in Orthopaedic surgery
4. JOT

Common Procedures/Work ups to ensure competency by end of month:

Adult:
Traction/stress view xrays
Distal Femur/Prox Tibia/Calcaneus traction pin
Hematoma block
Closed reduction/splinting of UE, LE injuries
Pelvic binder/ sheet
Revision amputation (hand)
Joint aspiration (shoulder, knee, ankle, wrist)
Compartment Checks

Peds:
CR/splinting/casting: Common UE/LE fractures
Septic joint/ OM workup
Physeal fx's
Elbow radiograph reading

Neurosurgery

Director: Jodi Miller (cell x 205-480-9186: josephmillermd@gmail.com)

PGY-1 = 1 month

- **ACGME requirement 1 of the 6 months of non-orthopedic requirement**

Schedule:
M/W/F – Miller OR
Tu and Th – Mark Freeman Office

Goals/Objectives:

This rotation meets one of our non-ortho month requirements for our intern year. This is a time where you will also be taking 6-8 nights of buddy call with the first call team (post-call expectations the following day). This rotation gives early exposure to spine trauma work up, ER evaluations and surgical decision making and OR experience.

Courtesy note: Please communicate with above staff when you will or will not be there so they can always plan/prepare accordingly to allow for your best exposure/experience.

Goals:

1. Proficiency in common spinal trauma work up in ER including radiologic reading and appropriate spine/neuro exam
2. Basic understanding of spine surgical approaches and surgical options for spinal pathology

Recommended Readings:

1. Skeletal Trauma
2. Handbook of Fractures
3. Operative Techniques in Orthopaedic surgery
4. The Spine

Rheumatology

Director: Michael Brit (cell 423-991-9701)
Faculty: Mark Freeman (cell 423-718-4008)
Andrew Hill (cell 706-461-3659)

PGY-1 = 1 month
- **ACGME requirement 1 of the 6 months of non-orthopedic requirement**

Schedule:
M/W/F – Dr Britt's Office
Tu – Andrew Hill – Radiology
Th – Mark Freeman Office

Goals/Objectives:

This rotation meets one of our non-ortho month requirements for our intern year. This is a time where you will also be taking 6-8 nights of buddy call with the first call team [post-call duty hour limits the following day (preferably Rheumatology post-call)]. Many have requested early exposure to MSK radiology and Arthroplasty so we have added one day per week in the requested areas to expand intern knowledge base for orthopedics. Courtesy note, please communicate with above staff when you will or will not be there so they can always plan/prepare accordingly to allow for your best exposure/experience.

Rheumatology:
Working alongside our Erlanger Rheumatology partners to get exposure to various inflammatory disorders that often can often present with orthopedic related symptoms.

Goals:
1. Proficiency in common joint injections and explain medication options for injection usage.
2. Basic understanding of common DMARDs used for rheumatologic conditions and be able to explain the medications MOA, side effects and usage/stoppage requirement in relation to orthopedic surgeries

Reading Recommendations:
1. AAOS Comprehensive Orthopaedic Review
2. Miller's Review
3. Orthopaedic Basic Science

Radiology:
Working alongside Dr. Andrew Hill, MSK radiologist to improve ability to read xrays, MRI, CTs. Main hope is to get early exposure to MSK MRI reading however understand Dr. Hill will also have duties of reading non-MSK related images as well. Please let him know before your rotation begins so he can try to ensure best experience.

Goals:

1. Proficiency in MSK MRI reading most specifically shoulder and MRI reads
2. Proficiency in Xray and CT scans in relation to orthopedic work-ups
3. Understanding on various sequences on MRI and when/when not to order IV/intra-articular contrast

Arthroplasty:

Early exposure to Dr. Mark Freeman's practice and management of arthroplasty patients. Common concern is that residents first arthroplasty rotation is not until 3rd year so this gives some early exposure to ensure appropriate knowledge for first call when it comes to arthroplasty patient workup of various complications.

Goals:

1. Be able to demonstrate evaluation of patients with possible septic native/total joint including lab workup/radiologic workup
2. Be able to demonstrate evaluation of patient with hip dislocation including radiographic reading to explain difference in anterior vs posterior dislocation and treatment thereof
3. Be able to name differentials for painful total knee/hip and explain appropriate radiologic evaluation for aseptic loosening and be able to order/interpret appropriate lab/imaging.

Arthroplasty Rotation Educational Goals and Objectives
Department of Orthopaedic Surgery Curriculum

Director: Mark G. Freeman, MD, Assistant Professor
Faculty: Matthew D. Higgins, MD, Assistant Professor
Case Sanders, MD, Assistant Professor

Levels in which the rotation occurs for each Orthopaedic Surgery Resident:
PGY-3 (2 months)

Overall Goal and Objective for the Arthroplasty Rotation at the PGY-3 level:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	The goal of the adult reconstructive rotation is to prepare the orthopedic resident in the evaluation and treatment of patients with diseases of the joints of the upper and lower extremities

.

Education Goals and Objectives

1. Provide a fundamental knowledge of hip, knee, and shoulder anatomy
2. Provide a fundamental knowledge of hip, knee, and shoulder biomechanics
3. Provide a broad exposure to hip, knee, and shoulder disease processes
4. Discuss some of the hip, knee, and shoulder literature in an organized fashion
5. Develop understanding of hip, knee, and shoulder diagnostic evaluation including history, exam, imaging, aspirations, and other testing modalities
6. Develop appropriate conservative treatment algorithms including specific physical therapy, activity modification, bracing, and medications for the hip, knee, and shoulder
7. Develop appropriate procedure selection for surgical intervention when conservative treatment fails to provide satisfaction and participate in the execution of procedures
8. Determine and begin urgent or emergent interventions when medically necessary

PGY-3 Arthroplasty Rotation

By the end of the PGY-3 Arthroplasty Rotation, the resident is able to demonstrate the following:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Obtain a history, physically examine, and interpret initial x-rays of the patient.
Medical Knowledge and Patient Care	Be skilled in the preoperative planning and postoperative evaluation of the joint implant patient.
Medical Knowledge and Patient Care	Be knowledgeable in the nonoperative treatment of arthritis.

Implementation

The educational objectives are met through a combination of resources:

COMPETENCY	DESCRIPTION

Medical Knowledge, Practice-Based Learning and Improvement, and Patient Care	Residents must participate in a biweekly Arthroplasty Conference. Each conference includes case presentations to specifically review classifications, indications for treatment, treatment modalities, and outcomes. At this conference, residents and faculty review the specific topics within the adult reconstruction realm, including but not limited to: • Preservation Interventions • Joint Arthroplasty: indications and techniques • Osteotomies • Non-surgical means for treatment with debilitating arthritic disease

Implementation (Continued)

COMPETENCY	DESCRIPTION
Medical Knowledge, Practice-Based Learning and Improvement, and Patient Care	A Basic Science lecture pertaining to joint implants, the biomechanics of the hip joint, knee joint, and shoulder. The resident learns to identify the material properties of metals used in Arthroplasty as well as review polyethylene in various types available for adult joint reconstruction.
Medical Knowledge, Practice-Based Learning and Improvement, Patient Care, and Interpersonal and Communication Skills	A Grand Rounds on Arthroplasty is presented twice each year, one presented by the attending surgeon, and the other presented by a visiting lecturer. The purpose of each Arthroplasty Grand Rounds is to provide a presentation to review one specific area of adult or joint reconstruction.

Weekly Schedule

First Month

- Monday Surgery with Dr. Freeman
- Tuesday Office with Dr. Freeman, options for research
- Wednesday Surgery with Dr. Freeman
- Thursday Office with Dr. Freeman, options for research
- Friday Surgery with Dr. Freeman

Second Month

- Monday Surgery with Dr. Sanders
- Tuesday Surgery with Dr. Higgins
- Wednesday Surgery with Dr. Sanders
- Thursday Surgery with Dr. Higgins
- Friday Surgery with either

*Office with Drs. Higgins and Sanders TBD

Resident Responsibilities

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Each resident participates in an orthopaedic clinic or orthopaedic office approximately two days per week. During this experience the resident must demonstrate understanding of and be able to perform techniques of history taking, visual inspection, physical examination, initial x- ray interpretation, and pre-operative planning
Patient Care and Interpersonal and Communication Skills	In addition, the resident observes the technique of informed consent and be able to obtain appropriate informed consent from patients.
Patient Care and Interpersonal and Communication Skills	The resident also observes post-operative period of convalescence following adult reconstructive surgery for arthritis of the upper and lower extremity ranging from one week to many years post-op, including evaluation of the patient using nationally

	recognized scoring systems as well as radiographic interpretation and physical examination.

Assistance in Surgery

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Junior residents (PGY-3) assist the more senior residents and faculty in all joint reconstructive procedures. The volume of operative treatment of joint reconstruction is approximately 10-20 per week. The junior resident functions as a first assistant or operating surgeon commensurate with his/her level of skill and training.
Medical Knowledge and Patient Care	The operative experience includes positioning the patient on the table, surgical exposures, surgically placing implants (both cemented and non-cemented), and wound closure. All operative experiences occur under direct supervision. The cases vary from shoulder joint reconstructive procedures to primary and revision hip and knee reconstructive procedures including fractures and infections.
Medical Knowledge and Practice-Based Learning and Improvement	The residents must review current medical literature prior to each procedure in order to obtain maximum educational experience from the operation. Required reading and review of evidence-based medicine includes, but is not limited to the following textbooks:

Medical Knowledge and Practice-Based Learning and Improvement	• *Hip and Knee Reconstruction Orthopaedic Knowledge Update*
	• *Reconstructive Surgery of the Joints* edited by Bernard. Morrey, 2nd edition: Chapters 66, 67, 68, 70, 71, 72, & 73
	• *Revision Total Knee Arthroplasty* by Gerald Engh and Cecil Rorabeck: Chapter 3,6,7,10,11, 17,19,&20
	• *The Art of Total Hip Arthroplasty* by William Thomas Stillwell:
	  ○ *Part I – The Fundamentals*
	  ○ *Part II – Primary Total hip Arthroplasty*
	• *Shoulder* by Rockwood and Green

Skills List for PGY-3 Residents assigned to the Arthroplasty Rotation

At the end of this rotation, the resident(s) must be able to:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Perform a thorough musculoskeletal exam of patients being evaluated for degenerative disease of shoulder, hip, and knee.
Medical Knowledge and Patient Care	Evaluate radiographs of patients with degenerative disease of these previously stated joints.
Medical Knowledge and Patient Care	Interpret the radiographs of the shoulder, hip, and knee for decision-making process including treatment algorithms.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Understand and describe surgical exposures, surgical exposures to the shoulder, to the hip, and to the knee.
Medical Knowledge and Patient Care	Perform an direct anterior, anterior-lateral, and posterior approach to the hip, an anterior approach to the knee, an anterior approach to the shoulder and possible other rarer approaches.

General Educational Objectives:

During the rotation, the Resident continues to demonstrate competence as follows:

COMPETENCY	DESCRIPTION
Patient Care, Interpersonal & Communication Skills	Perform history and physical examinations on clinic and inpatients under faculty supervision.

Patient Care, Interpersonal & Communication Skills, and Systems-Based Practice	Communicate effectively with patients, faculty, other residents, and multi-disciplinary ancillary staff in order to deliver quality patient care.
Medical Knowledge and Patient Care	Organize a treatment plan to include appropriate therapies, medications and studies for both operative and non-operative patients.
Patient Care	Demonstrate increased surgical skills over the course of the rotation.
Patient Care and Professionalism	Maintain accurate and timely patient care records
Practice-Based Learning & Improvement	Demonstrate investigative skills and analytical thinking in problem solving. Develop skills in the use of information technology (literature searches, etc.)
Medical Knowledge and Practice-Based Learning & Improvement	Present clear, organized didactic cases in one-on-one faculty encounters as well as conferences.
Medical Knowledge, Patient Care, and Practice-Based Learning & Improvement	Demonstrate current knowledge about surgical procedures and conditions, based upon review of medical textbooks, journals, and critical evaluation of evidence-based articles prior to seeing patients in the office or the Operating Room setting.

General Educational Objectives (Continued)

COMPETENCY	DESCRIPTION
Patient Care, Professionalism, and Systems-Based Practice	1. Demonstrate an awareness of cost-effective care and external patient care resources in day-to-day management and treatment of patients.
Patient Care and Professionalism	2. Treat patients and staff with high ethical standards and sensitivity regardless of culture, age, gender, or disabilities.
Patient Care and Professionalism	3. Demonstrate a commitment to excellence and professional development by being on time for clinics, patient rounds, and surgical procedures.

Routines and Protocols

COMPETENCY	DESCRIPTION
Patient Care and Professionalism	In order to maintain a level of quality care consistent with current national standards, residents assigned to the Arthroplasty Rotation implement, whenever possible, the current protocols for hip and knee arthroplasty procedures as directed by Elective Surgical Steering Committee.

Current Medical Literature/Evidence-Based Medicine

By the end of the PGY-3 level rotation, the Orthopaedic Surgery resident must review and understand concepts and patient care techniques included in the following**:**

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Practice-Based Learning and Improvement	*Orthopaedic Knowledge Update #5* Chapter 36, *Hip and Pelvic Reconstruction*
	Orthopaedic Knowledge Update #5 Chapter 41, *Knee Reconstruction*
	Orthopaedic Knowledge Update #6: Chapter 38, *Hip and Pelvic Reconstruction*
	Orthopaedic Knowledge Update #6: Chapter 43, *Knee Reconstruction*
	Hip and Knee Reconstruction Orthopaedic Knowledge Update #6
	Reconstructive Surgery of the Joints edited by Bernard Morrey, Second Edition: Chapters 66, 67, 68, 70, 71, 72, & 73

	Revision Total Knee Arthroplasty by Gerald Engh and Cecil Rorabeck: Chapters 3, 6, 7, 10, 11, 17, 19, & 20
	The Art of Total Hip Arthroplasty by William Thomas Stillwell Part I - *The Fundamentals*
	The Art of Total Hip Arthroplasty by William Thomas Stillwell Part II - *Primary Total Hip Arthroplasty*
	Hoppenfeld's *Surgical Exposures In Orthopaedics: The Anatomic Approach*
	Rockwood's *Shoulder* textbook

Assistance in Clinic

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Junior level residents assist the attending in evaluation of patients in the orthopaedic private office.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	As the resident examines patients in the clinic, the faculty provide supervision through review of orthopaedic fundamentals in conjunction with patient examination.
Medical Knowledge and Patient Care	The resident develops a patient care plan with the assistance of the attending physician after the resident has made pertinent physical exam findings and diagnoses.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	The resident reviews and discusses non- surgical and surgical treatment options in detail with more senior residents and the attending surgeon to clearly demonstrate that the resident understands the disease process and all treatment alternatives.

Morning Rounds

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	The resident participates in rounds for all patients on the Arthroplasty Service, under the supervision of the attending physician.
Medical Knowledge, patient Care, and Interpersonal and Communication Skills	Residents participate in post-operative management of joint arthroplasty of adult reconstructive procedures, under the supervision of the attending surgeon of record.
Patient Care and Interpersonal and Communication Skills	Residents who have assisted in performing an arthroplasty procedure are responsible for entering and maintaining daily notes in the patient's chart.
Patient Care, Interpersonal and Communication Skills, Professionalism, and Systems-Based Practice	Residents engage in appropriate consultation with other medical doctors and health care professionals regarding common liabilities and discuss them with the attending in detail.
Medical Knowledge, Patient Care, Interpersonal and Communication Skills, and Practice-Based Learning and Improvement	Residents aggressively treat post-operative complications and review these at monthly Morbidity and Mortality Conferences.

Arthroplasty Rotation Educational Goals and Objectives
Department of Orthopaedic Surgery Curriculum

Director: Mark G. Freeman, MD, Assistant Professor
Faculty: Matthew D. Higgins, MD, Assistant Professor
Case Sanders, MD, Assistant Professor

Levels in which the rotation occurs for each Orthopaedic Surgery Resident:
PGY-5 (2 months)

Overall Goal and Objective for the Arthroplasty Rotation at the PGY-5 level:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	The goal of the adult reconstructive rotation is to prepare the orthopedic resident in the evaluation and treatment of patients with diseases of the joints of the upper and lower extremities

Education Goals and Objectives

1. Provide a more comprehensive knowledge of hip, knee, and shoulder anatomy
2. Provide a more comprehensive knowledge of hip, knee, and shoulder biomechanics
3. Continue a broad exposure to hip, knee, and shoulder disease processes
4. Review further the hip, knee, and shoulder literature in an organized fashion
5. Further develop skills of hip, knee, and shoulder diagnostic evaluation including history, exam, imaging, aspirations, and other testing modalities
6. Develop appropriate conservative treatment algorithms including specific physical therapy, activity modification, bracing, and medications for the hip, knee, and shoulder
7. Develop appropriate procedure selection for surgical intervention when conservative treatment fails to provide satisfaction and facilitate the execution of these procedures
8. Determine and begin urgent or emergent interventions when medically necessary

PGY-5 Level Arthroplasty Rotation

By the end of the PGY-5 level rotation, residents continue to demonstrate knowledge and skills previously acquired during the PGY-3 level rotation:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Obtain a history, physically examine, and interpret initial x-rays of the patient.
Medical Knowledge and Patient Care	Be skilled in the preoperative planning and postoperative evaluation of the joint implant patient.
Medical Knowledge and Patient Care	Be knowledgeable in the non-operative treatment of arthritis.

By the end of the PGY-5 level rotation, residents also demonstrate competence as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Be skilled as the primary joint replacement surgeon, familiar with both techniques and surgical approaches for arthroplasty.
Medical Knowledge and Patient Care	Be familiar with the variety of implants available for hip, knee, and shoulder arthroplasty.

Medical Knowledge, Patient Care, and Practice-Based Learning and Improvement	Have a solid foundation of current orthopaedic literature regarding arthroplasty and growing knowledge of new techniques and technology.

Implementation

The educational objectives are met through a combination of resources:

COMPETENCY	DESCRIPTION
Medical Knowledge, Practice-Based Learning and Improvement, and Patient Care	Residents must participate in a biweekly Arthroplasty Conference. Each conference includes case presentations to specifically review classifications, indications for treatment, treatment modalities, and outcomes. At this conference, residents and faculty review the specific topics within the adult reconstruction realm, including but not limited to: • Preservation Interventions • Joint Arthroplasty • Osteotomies • Non-surgical means for treatment with debilitating arthritic disease
Medical Knowledge, Practice-Based Learning and Improvement, and Patient Care	A Basic Science lecture pertaining to joint implants, the biomechanics of the hip joint, knee joint, and shoulder and elbow joint. The resident learns to identify the material properties of metals used in Arthroplasty, as well as review polyethylene in various types available for adult joint reconstruction.
Medical Knowledge, Practice-Based Learning and Improvement, Patient Care, and Interpersonal and Communication Skills	A Grand Rounds on Arthroplasty is presented twice each year, one presented by the attending surgeon, and the other presented by a visiting lecturer. The purpose of each Arthroplasty Grand Rounds is to provide a presentation to review one specific area of adult or joint reconstruction.

Weekly Schedule

First Month

- Monday Surgery with Dr. Freeman
- Tuesday Office with Dr. Freeman, options for research / self-study
- Wednesday Surgery with Dr. Freeman
- Thursday Office with Dr. Freeman, options for research / self-study
- Friday Surgery with Dr. Freeman, options for research / self-study

Second Month

- Monday Surgery with Dr. Sanders
- Tuesday Surgery with Dr. Higgins
- Wednesday Surgery with Dr. Sanders
- Thursday Surgery with Dr. Higgins
- Friday Surgery

*Office with Drs. Higgins and Sanders TBD

Resident Responsibilities

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Each resident participates in an orthopaedic clinic or orthopaedic office approximately one day per week. During this experience the resident must demonstrate understanding of and be able to perform techniques of history taking, visual inspection, physical examination, initial x- ray interpretation, and pre-operative planning

Patient Care and Interpersonal and Communication Skills	In addition, the resident observes the technique of informed consent and be able to obtain appropriate informed consent from patients.
Patient Care and Interpersonal and Communication Skills	The resident also observes post-operative period of convalescence following adult reconstructive surgery for arthritis of the upper and lower extremity ranging from one week to fifteen years post-op, including evaluation of the patient using nationally recognized scoring systems as well as radiographic interpretation and physical examination.

Assistance in Surgery

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Senior residents (PGY-5) assist in supervising junior residents in all joint reconstructive procedures, assist faculty, and progressively assume increased responsibility as operating surgeon, under direct supervision of the faculty commensurate with his/her level of skill. The volume of operative treatment of joint reconstruction is approximately 20+ per week.
Medical Knowledge and Patient Care	The operative experience includes positioning the patient on the table, surgical exposures, surgically placing implants (both cemented and non-cemented), and wound closure. All operative experiences occur under direct supervision. The cases vary from shoulder joint reconstructive procedures to hip and knee reconstructive procedures including primary, revision, fractures and infections.
Medical Knowledge and Practice-Based Learning and Improvement	The resident reviews current medical literature prior to each procedure in order to obtain maximum educational experience from the operation. Required reading and review of evidence-based medicine includes, but is not limited to the following textbooks:

Medical Knowledge and Practice-Based Learning and Improvement	• *Hip and Knee Reconstruction Orthopaedic Knowledge Update #6*
	• *Reconstructive Surgery of the Joints* edited by Bernard. Morrey, 2nd edition: Chapters 66, 67, 68, 70, 71, 72, & 73
	• *Revision Total Knee Arthroplasty* by Gerald Engh and Cecil Rorabeck: Chapter 3, 6, 7, 10, 11, 17, 19, & 20
	• *The Art of Total Hip Arthroplasty* by William Thomas Stillwell:
	  ○ Part I – *The Fundamentals*
	  ○ *Part II – Primary Total hip Arthroplasty*
	• *Shoulder* by Rockwood and Green

Assistance in Clinic

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Senior level residents assist attending faculty in evaluation of patients in the orthopaedic private office.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	As the resident examines patients in the clinic, faculty provide supervision through review of orthopaedic fundamentals in conjunction with patient examination.
Medical Knowledge and Patient Care	The resident develops a patient care plan with the assistance of the attending physician after the resident has made pertinent physical exam findings and diagnoses.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	The resident reviews and discusses non-surgical and surgical treatment options in detail with more senior residents and the attending surgeon to clearly demonstrate that the resident understands the disease process and all treatment alternatives.

Morning Rounds

COMPETENCY	DESCRIPTION

Patient Care and Interpersonal and Communication Skills	The resident participates in rounds for all patients on the Arthroplasty Service, under the supervision of the attending physician.
Medical Knowledge, patient Care, and Interpersonal and Communication Skills	Residents participate in post-operative management of joint arthroplasty of adult reconstructive procedures, under the supervision of the attending surgeon of record.
Patient Care and Interpersonal and Communication Skills	Residents who have assisted in performing an arthroplasty procedure are responsible for entering and maintaining daily notes in the patient's chart.
Patient Care, Interpersonal and Communication Skills, Professionalism, and Systems-Based Practice	Residents engage in appropriate consultation with other medical doctors and health care professionals regarding common liabilities and discuss them with the attending in detail.
Medical Knowledge, Patient Care, Interpersonal and Communication Skills, and Practice-Based Learning and Improvement	Residents aggressively treat post-operative complications and review these at monthly Morbidity and Mortality Conferences.

Routines and Protocols

COMPETENCY	DESCRIPTION
Patient Care and Professionalism	In order to maintain a level of quality care consistent with current national standards, residents assigned to the Arthroplasty Rotation implement, whenever possible, the current protocols for hip and knee arthroplasty procedures as directed by Elective Surgical Steering Committee.

Current Medical Literature/Evidence-Based Medicine

By the end of the PGY-5 level rotation, the Orthopaedic Surgery resident must review and understand concepts and patient care techniques included in the following:

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Practice-Based Learning and Improvement	*Orthopaedic Knowledge Update #5* Chapter 36, *Hip and Pelvic Reconstruction*
	Orthopaedic Knowledge Update #5 Chapter 41, *Knee Reconstruction*
	Orthopaedic Knowledge Update #6: Chapter 38, *Hip and Pelvic Reconstruction*
	Orthopaedic Knowledge Update #6: Chapter 43, *Knee Reconstruction*
	Hip and Knee Reconstruction Orthopaedic Knowledge Update #6
	Reconstructive Surgery of the Joints edited by Bernard Morrey, Second Edition: Chapters 66, 67, 68, 70, 71, 72, & 73
	Revision Total Knee Arthroplasty by Gerald Engh and Cecil Rorabeck: Chapters 3, 6, 7, 10, 11, 17, 19, & 20
	The Art of Total Hip Arthroplasty by William Thomas Stillwell Part I - *The Fundamentals*
	The Art of Total Hip Arthroplasty by William Thomas Stillwell Part II - *Primary Total Hip Arthroplasty*
	Hoppenfeld's *Surgical Exposures In Orthopaedics: The Anatomic Approach*
	Rockwood's *Shoulder* textbook

Skills List for the PGY-5 Rotation

The resident demonstrates competence in the knowledge and skills acquired during the PGY-5 rotation:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Perform a thorough musculoskeletal exam of patients being evaluated for degenerative disease of shoulder, hip, and knee.
Medical Knowledge and Patient Care	Evaluate radiographs of patients with degenerative disease of these previously stated joints.
Medical Knowledge and Patient Care	Interpret the radiographs of the shoulder, hip, and knee for decision-making process including treatment algorithms.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Understand and describe surgical exposures, surgical exposures to the shoulder, to the hip, and to the knee
Medical Knowledge and Patient Care	Perform an direct anterior, anterior-lateral, posterior approach to the hip, an anterior approach to the knee, an anterior approach to the shoulder and other rarer approaches as needed

In addition, by the end of the PGY-5 level rotation, the resident demonstrates competence in the following skills:

COMPETENCY	DESCRIPTION
Patient Care, Practice Based Learning and Improvement, Interpersonal and Communication Skills, and Professionalism	Organize and administrate control of the Arthroplasty service at Erlanger Health System
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Describe and perform primary total hip arthroplasty, primary knee arthroplasty, and primary shoulder arthroplasty
Medical Knowledge and Patient Care	Understand and assist in revision hip and acetabular surgery, hip and knee replacement surgery, to assist in the performance of a total shoulder arthroplasty
Medical Knowledge and Patient Care	Understand and assist in revision and fracture surgery and infection surgical protocols
Interpersonal and Communication Skills, Practice-Based Learning and Improvement, and Professionalism	Prepare M & M monthly reports for the Arthroplasty service

PGY-5 Skills (Continued)

COMPETENCY	DESCRIPTION
Interpersonal and Communication Skills, Practice-Based Learning and Improvement, and Professionalism	Assist with bi-weekly Arthroplasty conference
Medical Knowledge and Patient Care	Recognize, diagnose, and treat postoperative complications of patients undergoing adult reconstructive procedures

General Educational Objectives:

During the rotation, the Resident continues to demonstrate competence as follows:

COMPETENCY	DESCRIPTION
Patient Care, Interpersonal & Communication Skills	Perform history and physical examinations on clinic and inpatients under faculty supervision.
Patient Care, Interpersonal & Communication Skills, and Systems-Based Practice	Communicate effectively with patients, faculty, other residents, and multi-disciplinary ancillary staff in order to deliver quality patient care.
Medical Knowledge and Patient Care	Organize a treatment plan to include appropriate therapies, medications and studies for both operative and non-operative patients.
Patient Care	Demonstrate increased surgical skills over the course of the rotation.
Patient Care and Professionalism	Maintain accurate and timely patient care records
Practice-Based Learning & Improvement	Demonstrate investigative skills and analytical thinking in problem solving. Develop skills in the use of information technology (literature searches, etc.)
Medical Knowledge and Practice-Based Learning & Improvement	Present clear, organized didactic cases in one-on-one faculty encounters, as well as conferences.
Medical Knowledge, Patient Care, and Practice-Based Learning & Improvement	Demonstrate current knowledge about surgical procedures and conditions, based upon review of medical textbooks, journals, and critical evaluation of evidence-based articles prior to seeing patients in the office or the Operating Room setting.

General Educational Objectives (Continued)

COMPETENCY	DESCRIPTION
Patient Care, Professionalism, and Systems-Based Practice	Demonstrate an awareness of cost-effective care and external patient care resources in day-to-day management and treatment of patients.
Patient Care and Professionalism	Treat patients and staff with high ethical standards and sensitivity regardless of culture, age, gender, or disabilities.
Patient Care and Professionalism	Demonstrate a commitment to excellence and professional development by being on time for clinics, patient rounds, and surgical procedures.

Foot and Ankle Curriculum

PGY-2

Director: Jesse F. Doty, M.D.

Faculty: Jesse F. Doty, M.D., Associate Professor

Rotations: PGY-2 (2 months)

GOALS, OBJECTIVES, AND READING ASSIGNMENTS

Reading Materials:

1. Coughlin MJ. *Mann's Surgery of the Foot and Ankle*. 9th edition. Elsevier, 2013.

2. Alexander IJ. *The Foot: Examination and Diagnosis*. 2nd edition. New York: Churchill Livingstone Inc., 1999.

3. *OKU: Foot and Ankle*. Current edition. Rosemont, Ill: AAOS.

Required Reading:

Week 1: *The Foot: Examination and Diagnosis* by Ian Alexander
Ch. 1 History and Terminology
Ch. 4 Basic Foot Kinematics
Ch. 5 Evaluation of Frontal Plane Mechanics

*Mann's Surgery of the Foot and Ankle*Coughlin, Saltzman, Andersoned.9
Ch. 1 Biomechanics of the Foot and Ankle

Week 2: Ch. 6 Hallux Valgus
Week 3: Ch. 7 Lesser Toe Deformities
Week 4: Ch. 25 PesPlanus
Week 5: Ch. 26 PesCavus, Ch. 13 Plantar Heel Pain
Week 6: Ch. 19 Arthritis of the Foot and Ankle, Ch. 21 Ankle Arthritis
Week 7: Ch. 30 Athletic Injuries to the Soft Tissues of the Foot and Ankle
Week 8: Ch. 27 Diabetes,Ch. 28 Amputations

Implementation

Medical Knowledge, Interpersonal & Communication Skills	1. Assess the foot and ankle patient and present the historical, clinical and radiographic findings in a clear concise manner. Read and present chapters from Coughlin, Alexander, and OKU. Assist in inpatient and outpatient orthopedic foot and ankle care, including rounding on all post-op patients. Duties will include outpatient assessment, history and physical examinations, pre and post operative care, supervised

	performance of surgical and non-surgical procedures, and participation in clinics.
Medical Knowledge, Patient Care	2. Properly evaluate and treat common conditions of the foot and ankle in an outpatient setting.
Patient Care, Interpersonal & Communication Skills, Professionalism	3. Appropriate counseling of patients will be stressed and appropriate conduct of professional interaction will also be emphasized.
Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	4. Evaluate and initiate non-operative treatment of various ankle, hindfoot, midfoot, and forefoot problems. Establish when non-operative management has been exhausted and surgical intervention should be appropriately instituted.
Practice-Based Learning & Improvement, Systems-Based Practice	5. Learn and use diagnostic codes and procedure codes as they pertain to billing E&M and surgical coding.

Skills Test and Evaluation

Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	1. One-on-one teaching sessions- History and Physical evaluation in the clinical setting of private practice and resident clinics
Interpersonal & Communication Skills, Professionalism, Systems-Based Practice	2. Direct observation of social skills.Evaluate PGY-2 resident interactions with patients and allied personnel in the private office and resident clinics.
Patient Care, Medical Knowledge, Practice-Based Learning & Improvement	3. Demonstrate ability to organize foot and ankle basic science and physical exam findings for differential diagnoses.
Medical Knowledge, Patient Care	4. Delineate appropriate treatment and prescriptions after seeing the patient.
Medical Knowledge, Practice-Based Learning & Improvement	5. Didactic presentations from reading list will include resident generated handout of the assigned material.
Medical Knowledge, Patient Care	6. Direct observation of surgical skills in the surgical suite.

Education Goals and Objectives

1. Provide a fundamental knowledge of foot and ankle anatomy
2. Provide a fundamental knowledge of foot and ankle biomechanics
3. Provide a broad exposure to foot and ankle disease processes
4. Review the foot and ankle literature in an organized fashion
5. Develop appropriate conservative treatment algorithms including specific physicaltherapy, activity modification, bracing, and medications.
6. Develop appropriate procedure selection for surgical intervention when conservative treatment fails to provide satisfaction.

PGY-4

Director: Jesse F. Doty, M.D.

Faculty: Jesse F. Doty, M.D., Associate Professor

Rotations: PGY-4 (2 months)

GOALS, OBJECTIVES, AND READING ASSIGNMENTS

Reading Materials:

1. Coughlin MJ. *Mann's Surgery of the Foot and Ankle*. 9th edition. Elsevier, 2013.

2. *OKU: Foot and Ankle.*Current edition. Rosemont, Ill: AAOS.

3. *Foot and Ankle International*

Required Reading:

Week 1:
Week 2:
Week 3:
Week 4:
Week 5:
Week 6:
Week 7:
Week 8:

Implementation

Medical Knowledge	1. The PGY-4 will have completed the reading requirements of the PGY-2 rotation.
Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	2. PGY-4 will function as an orthopedic foot and ankle surgeon with more responsibility in the private office and operating room by sharing diagnostic work-up, patient education duties, surgical decision-making, and participation in surgery.The PGY-4 resident will initiate inpatient and outpatient orthopedic foot and ankle care.
Professionalism, Systems-Based Practice	3. Active role incoding E&M and procedures.Fulfill an active role in ordering diagnostic tests, formulating treatment plans, writing prescriptions, educating patients, and delivering appropriate post-operative care.
Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	4. Counseling of patients and interpersonal as well as social skills in interactions with other healthcare providers. The PGY-4 resident will see all the Erlanger foot and ankle in-patient consults, order appropriate tests, initiate a treatment plan, and present to the foot and ankle on-call attending.

Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	5. Instruction of both orthopedic and non-orthopedic residents and medical students rotating on the foot and ankle service. PGY-4 resident will take an active role in helping prepare Foot and Ankle Ground Rounds and may be asked to participate.
Medical Knowledge, Practice-Based Learning & Improvement	6. Read and present assigned chapters.The PGY-4 resident will dissect and prepare the foot and ankle specimen for anatomy sessions.
	7. Review OITE questions

Skills Test and Evaluation

Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	1. History and Physical evaluation in the clinical setting with one-on-one teaching sessions.
Interpersonal & Communication Skills, Professionalism, Systems-Based Practice	2. Direct observation of people skills on how the PGY-4 resident handles not only patients but also allied hospital personnel.
Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	3. Demonstrate ability to organize clinic and basic science to arrive at differential diagnoses
Medical Knowledge, Patient Care	4. Write appropriate prescriptions
Medical Knowledge, Practice-Based Learning & Improvement	5. Didactic presentations from the mandatory reading list will include a handout of the assigned material as if it were a formal presentation.
Medical Knowledge, Patient Care	6. Direct observation of surgical skills in the surgical suite

Educational Goals and Objectives

1. Provide a detailed knowledge of the foot and ankle anatomy
2. Provide a detailed knowledge of foot and ankle biomechanics
3. Provide comprehensive exposure to complex foot and ankle diseases
4. Provide a detailed exposure to the foot and ankle literature in an organized fashion
5. Provide ability to writing appropriate prescriptions for conservative modalities
6. Provide a “private practice experience”
7. Provide the opportunity for the resident to function as an orthopedic surgeon in practice

Hand and Upper Extremity Surgery 2025-2026

Length: Two months
Location: Erlanger Medical Center
Level: PGY-2 – Junior Resident
Primary Director: Brandon Boyd, M.D., Clinical Instructor
Academic Staff: Mark A. Brzezienski, M.D., Professor of Orthopaedic & Plastic Surgery
D. Marshall Jemison, M.D., Professor, Departments of Orthopaedic & Plastic Surgery
Peter Lund, M.D., Assistant Professor of Orthopaedic Surgery
Jason Rehm, M.D., Associate Professor of Orthopaedic and Plastic Surgery

General Description – Hand and Upper Extremity Service

The Hand Surgery Rotation is a combined effort of the Departments of Plastic Surgery and Orthopedic Surgery at the University of Tennessee College of Medicine Chattanooga. Presently, four attending surgeons (3 Plastic and 3 Orthopaedic) staff the service, utilizing all private patients from their practices in the teaching program, significantly augmenting the patient load. All of the Senior Attendings hold the Certificate of Added Qualifications in Surgery of the Hand. The full range of hand problems is encountered in the clinical setting with a high volume of new patients, both in the private offices and the clinic. Certified Hand Therapists are available at the Hayes Hand Center for consultation for therapy and splinting as well as during resident clinic.

Goals and Objectives

At the end of this rotation, the resident will be able to:

Medical Knowledge, Patient Care, Practice-Based Learning	Appropriately work-up and treat hand and upper extremity trauma including simple and complex wound management, fractures involving the hand, wrist and upper extremity, soft tissue injuries including skin and nail bed, electrical and thermal burns, and penetrating injuries involving vascular peripheral nerve and flexor and extensor tendon injuries.
Medical Knowledge, Patient Care, Practice-Based Learning	Appropriately evaluate radiographs of the hand and upper extremity and be able to diagnose and formulate a treatment plan for fractures or dislocations involving the hand, wrist, forearm and elbow articular injuries.
Medical Knowledge	Begin to develop an in-depth knowledge of applied clinical anatomy of hand, wrist, forearm and elbow.
Medical Knowledge, Patient Care	Be familiar with evaluation and treatment principles of soft tissue and deep infections in the hand, including tendon sheath and deep palmar space infections as well as superficial infections (felon, paronychia, herpetic whitlow).
Medical Knowledge, Patient Care	Be familiar with treatment principles for osteomyelitis, human bites, animal injuries as well as unusual infections (mycobacterial and fungal).
Medical Knowledge, Patient Care	Formulate a treatment plan for bone and articular reconstruction related to post fracture deformities or deformities that arise as a result of contracture, inflammatory arthritis, osteoarthritis, and wrist instability patterns.
Medical Knowledge, Patient Care	Be familiar with and formulate a treatment plan for soft tissue reconstructive problems including simple and complex soft tissue loss, vascular injury, nerve reconstruction, and nerve entrapment syndromes.
Medical Knowledge	Understand flexor and extensor tendon repairs and reconstructions.

Medical Knowledge, Patient Care	Understand and carry out treatment principles related to traumatic amputations in the hand and upper extremity and be familiar with indications for replantation and revascularization procedures.
Medical Knowledge, Patient Care	Understand and formulate a treatment plan for post-traumatic elbow abnormalities, including contracture and heterotopic ossification release and to understand and be able to treat elbow instability problems.

Implementation:

Medical Knowledge, Practice-Based Learning & Improvement, Interpersonal & Communication Skills	Monthly one hour combined hand and upper extremity conference, including one hour of active discussion based on the American Society of Surgery of the Hand review syllabus topics.
Medical Knowledge, Interpersonal & Communication Skills	Intermittent scheduled participation on Monday Grand Rounds schedule with hand and upper extremity topics.
Medical Knowledge, Interpersonal & Communication Skills	Intermittent scheduled participation with the Wednesday morning Orthopaedic conference with hand and upper extremity case presentations.
Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	Weekly hand clinic, mandatory for the orthopaedic and plastic residents on the service. The staff attending is present in the clinic with the residents.
Medical Knowledge, Practice-Based Learning & Improvement	Quarterly Journal Club with assigned hand and upper extremity articles for the orthopaedic and plastic surgery residents.
Patient Care, Practice-Based Learning & Improvement, Professionalism, Systems-Based Practice	One half day a week should be spent with one of the hand attendings in their private office.
Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	Participate in the busy operative schedule planned rotations with different attendings with management of the clinic population operative cases. The assigned cases are determined by the senior resident on the service.

Skills List:

At the end of this rotation, the resident will be able to:

Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	History and physical evaluation in the clinical setting of the private office and Erlanger resident hand clinic will be directly observed on a one on one basis.
Interpersonal & Communication Skills	Interpersonal and communication skills will be directly observed on resident – patient resident – faculty resident – resident to resident – ancillary staff interactions.
Medical Knowledge, Patient Care	Organize a treatment plan to include appropriate therapies, medications and studies for both operative and no-operative patients.
Medical Knowledge, Patient Care	Knowledge of accurate prescription writing for hand therapy, splinting, and medications.
Medical Knowledge, Practice-Based Learning & Improvement	Demonstrate investigative and analytical thinking in problem solving. Develop skills in the use of information technology (literature searches, etc.)
Medical Knowledge, Interpersonal & Communication Skills	Assessment of quality of didactic case presentation and grand rounds, especially organization and knowledge base.
Medical Knowledge, Patient Care	Direct observation of operative skills and improvement over the course of the rotation.

Medical Knowledge, Practice-Based Learning & Improvement	Evaluation of preparation and reading, being informed in questioning in both the office and OR setting.

Hand and Upper Extremity Surgery

Length: Two months
Location: Erlanger Medical Center
Level: PGY-4 – Senior Resident on the Service
Primary Director: Brandon Boyd, M.D., Clinical Instructor
Academic Staff: Mark A. Brzezienski, M.D., Professor of Orthopaedic & Plastic Surgery
D. Marshall Jemison, M.D., Professor, Departments of Orthopaedic & Plastic Surgery
Peter Lund, M.D., Assistant Professor of Orthopaedic Surgery
Jason Rehm, M.D., Associate Professor of Orthopaedic and Plastic Surgery

Goals and Objectives:

At the end of this rotation, the resident will be able to:

Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	Assist in surgical skills and instruction to the Junior resident.
Practice-Based Learning & Improvement, Systems-Based Practice	Learn the dynamics of running the service, including management of operative and clinic schedule and rounds.
Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	The goals and objectives of PGY 2 year again apply, but the senior resident should have increasing sophistication and knowledge base in all of the listed areas for the PGY 2 year.
Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	Surgical responsibility is significantly increased, including more independence in decision-making and increased numbers of cases in which the senior resident is the operating surgeon.

Implementation:

1. The implementation will be as noted in the PGY 2 rotation.

2. Increased participation in the conference schedule for both the hand conference and the assigned orthopaedic conferences.

Skills List:

At the end of this rotation, the resident will be able to:

Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	History and physical evaluation in the clinical setting of the private office and Erlanger resident hand clinic will be directly observed on a one on one basis.
Interpersonal & Communication Skills	Interpersonal and communication skills will be directly observed on resident – patient/ resident – faculty/ resident – resident/ resident – ancillary staff interactions.
Medical Knowledge, Patient Care	Organize a treatment plan to include appropriate therapies, medications and studies for both operative and non-operative patients.
Medical Knowledge, Patient Care	Knowledge of accurate prescription writing for hand therapy, splinting, and medications.

Medical Knowledge, Practice-Based Learning & Improvement	Demonstrate investigative and analytical thinking in problem solving. Develop skills in the use of information technology (literature searches, etc.)
Medical Knowledge, Interpersonal & Communication Skills	Assessment of quality of didactic case presentation and grand rounds, especially organization and knowledge base.
Medical Knowledge, Patient Care	Direct observation of operative skills and improvement over the course of the rotation.
Medical Knowledge, Practice-Based Learning & Improvement	Evaluation of preparation and reading, being informed in questioning in both the office and OR setting.
Patient Care, Practice-Based Learning & Improvement, Systems-based Practice	Expectation for increased sophistication of knowledge base and patient management in general, both the dynamics of scheduling and coding and case preparation and overall service management that would be expected with a senior level resident.

Texts and Suggested Readings:

Medical Knowledge, Practice-Based Learning & Improvement	*Selected Readings in Hand Surgery* – Edited by Matthew M. Tomaino.
	Essentials of Hand Surgery – American Society for Surgery of the Hand Publications – John Gray Seiler III, Editor.
	Operative Hand Surgery Vol. 1-3 – David P. Green, Editor.
	The Hand: Diagnosis and Indications – Graham Lister.
	Master Techniques in Orthopaedic Surgery: The Elbow – Bernard Morrey, Editor.
	Master Techniques in Orthopaedic Surgery: The Wrist – Richard Gelberman, Editor.
	Master Techniques in Orthopaedic Surgery: The Hand – James Strickland, Editor.
	Surgery of the Hand and Upper Extremity – Clayton Peimer, Editor.
	Grabb & Smith's Plastic Surgery, 5th Edition
	Operative Nerve Repair and Reconstruction – Richard Gelberman, Editor.

Hand Topics Covered During the Two-Year Rotation
Based on the American Society of Surgery of the Hand Review Course & Syllabus

Hand Conference 2-year cycle

1. Fingertip injuries and ED management Hand Infections
2. Wrist Biomechanics and ligamentous instability/injuries
3. Compartment syndrome and pressure injection injuries
4. Amputations and Replantation's
5. Phalangeal fractures/dislocations
6. Carpal and Metacarpal fractures/dislocations
7. Compressive Neuropathies of the UE
8. Vascular disorders of the Hand
9. Flexor tendon injuries, repair, and reconstruction
10. Extensor tendon injuries, repair, and reconstruction
11. Dupuytren's disease
12. Congenital Hand
13. Peripheral nerve injuries, repair/reconstruction, and transfers
14. Tendon Transfers
15. Ulnar sided wrist pain/DRUJ
16. Osteoarthritis
17. Rheumatoid Arthritis
18. Hand and UE tumors
19. Kienbock's Disease and Carpal AVN

-Hand anatomy session will cover anatomy and pathophysiology of the Intrinsics and Digital Extensor Mechanism

Conference Schedule for 2025-2026

1. Fingertip injuries and ED management and Hand infections
2. Carpal and metacarpal fractures/dislocations
3. Vascular disorders of the hand
4. Compressive neuropathies
5. Peripheral nerve injuries and repair
6. Tendon Transfers
7. Kienbocks disease
8. OA/RA of the hand
9. Ulnar sided wrist pain/DRUJ
10. Anatomy session

Oncology Rotation Educational Goals and Objectives Department of Orthopaedic Surgery Curriculum

Director: Ryan T. Voskuil, M.D., Assistant Professor

Levels in which the rotation occurs for each Orthopaedic Surgery Resident: PGY-4 (2 months)

Overall Goal and Objective for the Oncology Rotation at the PGY-4 level:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	The goal of the oncology rotation is to prepare the orthopedic resident in the evaluation, appropriate workup, diagnosis, treatment and appropriate referrals where needed for patients with orthopaedic oncology diagnoses.

.

PGY-4 Oncology Rotation

By the end of the PGY-4 Oncology Rotation, the resident is able to demonstrate the following:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Obtain a history, physically examine, and interpret initial x-rays and images of the patient.
Medical Knowledge and Patient Care	Be skilled in the appropriate workup and development of oncologically safe treatment plans for patients
Medical Knowledge and Patient Care	Be knowledgeable in the common pathology seen in a general orthopaedic practice that may need treatment or referral to an orthopaedic oncologist.

Implementation

The educational objectives are met through a combination of resources:

COMPETENCY	DESCRIPTION
Medical Knowledge, Practice-Based Learning and Improvement, and Patient Care	Residents must participate in a weekly Oncology Conference. The conference is designed to review a chapter in OKU orthopaedic oncology to engage in reading. • Discuss pathology • How to work up and diagnose • How to develop safe treatment or referral plans
Medical Knowledge, Practice-Based Learning and Improvement, and Patient Care	Oncology lecture monthly. Questions and powerpoint to review the 12 most common topics in orthopaedic oncology that will be seen in general practice and on the boards.
Medical Knowledge, Practice-Based Learning and Improvement, Patient Care, and Interpersonal and Communication Skills	A Grand Rounds on Oncology is presented twice each year, one presented by an attending surgeon, and the other presented by a visiting lecturer. The purpose of each Oncology Grand Rounds is to provide a presentation to review one specific area of oncology.

Implementation (Continued)

Weekly Schedule

- Monday AM Surgery with Dr. Voskuil PM
- Monday Surgery with Dr. Voskuil AM
- Tuesday Surgery with Dr. D. Doty PM
- Tuesday Surgery with Dr. D. Doty
- Wednesday AM and PM Surgery with Dr. Voskuil
- Thursday AM Clinic or Office with Dr. Voskuil alternating weekly between Office with Dr. Voskuil and OR with Dr. D. Doty
- Friday AM & PM Surgery with Doty or Voskuil depending on cases

Resident Responsibilities

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Each resident participates in an orthopaedic office approximately two half days per week. During this experience the resident must demonstrate understanding of and be able to perform techniques of history taking, visual inspection, physical examination, initial x- ray interpretation, and development of further workup or treatment plans.
Patient Care and Interpersonal and Communication Skills	In addition, the resident observes the technique of informed consent and be able to obtain appropriate informed consent from patients.
Patient Care and Interpersonal and Communication Skills	The resident also observes post-operative period of convalescence following Oncology surgery including adult and pediatric patients, including evaluation of the patient using nationally recognized scoring systems as well as radiographic interpretation and physical examination.

Assistance in Surgery

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	residents (PGY-4) assist the more senior residents and faculty in all Oncology procedures. The volume of operative treatment of oncologic diagnoses is approximately five per week. The junior resident functions as a first assistant or operating surgeon commensurate with his/her level of skill and training.
Medical Knowledge and Patient Care	The operative experience includes positioning the patient on the table, surgical exposures, surgically placing implants (both cemented and non-cemented), tumor removal, prophylactic fixation, pathologic fracture fixation,biopsy, and wound closure. All operative experiences occur under direct supervision. The cases vary across all ages and extremities.
Medical Knowledge and Practice-Based Learning and Improvement	The residents must review current medical literature prior to each procedure in order to obtain maximum educational experience from the operation. Required reading and review of evidence-based medicine includes, but is not limited to the following textbooks:
Medical Knowledge and Practice-Based Learning and Improvement	• *Oncology Orthopaedic Knowledge Update #4 and 5* • *Reconstructive Surgery of the Joints* edited by Bernard. Morrey, 2nd edition: Chapters 66, 67, 68, 70, 71, 72, & 73

	• *Revision Total Knee Arthroplasty* by Gerald Engh and Cecil Rorabeck: Chapter 3,6,7,10,11, 17,19,&20
	• *The Art of Total Hip Arthroplasty* by William Thomas Stillwell:
	  ○ *Part I – The Fundamentals*
	  ○ *Part II – Primary Total hip Arthroplasty*
	• The google drive of foundational and new research oncology papers all residents have access to. Focus on foundational papers.

Assistance in Clinic

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Junior level residents assist the attending in evaluation of patients in the orthopaedic private office.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	As the resident examines patients in the clinic, the faculty provide supervision through review of orthopaedic fundamentals in conjunction with patient examination.
Medical Knowledge and Patient Care	The resident develops a patient care plan with the assistance of the attending physician after the resident has made pertinent physical exam findings and diagnoses.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	The resident reviews and discusses non- surgical and surgical treatment options in detail with more senior residents and the attending surgeon to clearly demonstrate that the resident understands the disease process and all treatment alternatives.

Morning Rounds

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	The resident participates in rounds for all patients on the Oncology Service, under the supervision of the attending physician.
Medical Knowledge, patient Care, and Interpersonal and Communication Skills	Residents participate in post-operative management of Oncology patients under the supervision of the attending surgeon of record.
Patient Care and Interpersonal and Communication Skills	Residents who have assisted in performing an Oncology procedure are responsible for entering and maintaining daily notes in the patient's chart.
Patient Care, Interpersonal and Communication Skills, Professionalism, and Systems-Based Practice	Residents engage in appropriate consultation with other medical doctors and health care professionals regarding common liabilities and discuss them with the attending in detail.
Medical Knowledge, Patient Care, Interpersonal and Communication Skills, and Practice-Based Learning and Improvement	Residents aggressively treat post-operative complications and review these at monthly Morbidity and Mortality Conferences.

Routines and Protocols

COMPETENCY	DESCRIPTION
Patient Care and Professionalism	In order to maintain a level of quality care consistent with current national standards, residents assigned to the Oncology Rotation implement, whenever possible, the current protocols for Oncology care.

Current Medical Literature/Evidence-Based Medicine
By the end of the PGY-3 level rotation, the Orthopaedic Surgery resident must review and understand concepts and patient care techniques included in the following:

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Practice-Based Learning and Improvement	*Orthopaedic Knowledge Update #5* Oncology
	All 20 foundational papers on the google drive

Skills List for PGY-4 Residents assigned to the Arthroplasty Rotation At the end of this rotation, the resident(s) must be able to:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Perform a thorough musculoskeletal exam of patients being evaluated for degenerative and oncology disease pelvis, lower extremity, upper extremity.
Medical Knowledge and Patient Care	Evaluate radiographs of patients with Oncology disease of these previously stated areas.
Medical Knowledge and Patient Care	Interpret the radiographs and images of those areas with special attention to the pelvis, shoulder, elbow, hip, and knee for decision-making process including treatment algorithms.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Understand and describe oncology surgical exposures, surgical exposures to the pelvis, thigh, shoulder, to the elbow, to the hip and to the knee. Anatomy of all areas.
Medical Knowledge and Patient Care	Perform a safe biopsy, handling of tumor specimen, prophylactic nail, use of frozen pathology intraop, removal of benign tumor, curettage of benign bone tumor, safe metastatic workup, when to refer.

General Educational Objectives:
During the rotation, the Resident continues to demonstrate competence as follows:

COMPETENCY	DESCRIPTION
Patient Care, Interpersonal & Communication Skills	Perform history and physical examinations on clinic and inpatients under faculty supervision.
Patient Care, Interpersonal & Communication Skills, and Systems-Based Practice	Communicate effectively with patients, faculty, other residents, and multi-disciplinary ancillary staff in order to deliver quality patient care.
Medical Knowledge and Patient Care	Organize a treatment plan to include appropriate therapies, medications and studies for both operative and non-operative patients.
Patient Care	Demonstrate increased surgical skills over the course of the rotation.
Patient Care and Professionalism	Maintain accurate and timely patient care records
Practice-Based Learning & Improvement	Demonstrate investigative skills and analytical thinking in problem solving. Develop skills in the use of information technology (literature searches, etc.)
Medical Knowledge and Practice-Based Learning & Improvement	Present clear, organized didactic cases in one-on-one faculty encounters as well as conferences.
Medical Knowledge, Patient Care, and Practice-Based Learning & Improvement	Demonstrate current knowledge about surgical procedures and conditions, based upon review of medical

	textbooks, journals, and critical evaluation of evidence-based articles prior to seeing patients in the office or the Operating Room setting.

General Educational Objectives (Continued)

COMPETENCY	DESCRIPTION
Patient Care, Professionalism, and Systems-Based Practice	Demonstrate an awareness of cost-effective care and external patient care resources in day-to-day management and treatment of patients.
Patient Care and Professionalism	Treat patients and staff with high ethical standards and sensitivity regardless of culture, age, gender, or disabilities.
Patient Care and Professionalism	Demonstrate a commitment to excellence and professional development by being on time for clinics, patient rounds, and surgical procedures.

Department of Orthopaedic Surgery Research Curriculum

Director: Orthopaedic Surgery Director of Research
When: Throughout the 5-year residency program
PGY-2 one month; PGY-4 one month

Educational Objectives

By the completion of the Orthopaedic Surgery Residency Program, residents will demonstrate competence in scholarly activity and research as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge, Interpersonal and Communication Skills, and Professionalism	1. Demonstrate knowledge and explain basic research concepts including basic science in the biomechanical realm as well as clinical research
Medical Knowledge, Interpersonal and Communication Skills, and Professionalism	2. Formulate a research idea including ascertaining a clinical question and then constructing and testing an hypothesis
Medical Knowledge, Practice-Based Learning and Improvement	3. Perform a literature search about the formed hypothesis
Medical Knowledge, Practice-Based Learning and Improvement	4. Design a research model to answer the known hypothesis
Medical Knowledge, Practice-Based Learning and Improvement, and Interpersonal and Communication Skills	5. Write a research protocol, with all necessary components for submission to the Scientific Review Committee (SRC) and the Institutional Review Board (IRB)
Medical Knowledge, Practice-Based Learning and Improvement, Interpersonal and Communication Skills, and Systems-Based Practice	6. Obtain support and approval of the research project from the SRC/IRB
Medical Knowledge, Practice-Based Learning and Improvement, and Interpersonal and Communication Skills	7. Implement designed study through the Department of Orthopaedic Surgery
Medical Knowledge and Practice-Based Learning and Improvement	8. Acquire accurate, meaningful data

Educational Objectives (Continued)

COMPETENCY	DESCRIPTION
Medical Knowledge, Practice-Based Learning and Improvement, and Interpersonal and Communication Skills	9. Analyze data including any appropriate statistical methodology that may be necessary with help from statistician
Medical Knowledge and Practice-Based Learning and Improvement	10. Draw appropriate conclusions based upon the data
Medical Knowledge and Interpersonal and Communication Skills	11. Write a concise abstract
Medical Knowledge and Interpersonal and Communication Skills	12. Submit the abstract to specialty meetings
Medical Knowledge and Interpersonal and Communication Skills	13. Write a publishable manuscript and submit for publication in a peer-review journal

Resident Research Skills

Over the course of the five-year program, the resident will demonstrate competence in the following research skills:

COMPETENCY	DESCRIPTION
Medical Knowledge, Practice-Based Learning and Improvement, and Professionalism	Demonstrate an understanding and appreciation for research design, implementation and completion via his/her research project
Medical Knowledge, Practice-Based Learning and Improvement, interpersonal and Communication Skills, and Professionalism	Discuss and explain the need for orthopaedic research and the benefit that can be gained for quality practice and patient care
Medical Knowledge and Practice-Based Learning and Improvement	Perform a background literature search regarding a hypothesis
Medical Knowledge and Practice-Based Learning and Improvement	Identify which data points are pertinent to the hypothesis and how to acquire this data accurately
Medical Knowledge and Practice-Based Learning and Improvement	Demonstrate ability to use sound statistical methodology

Medical Knowledge, Practice-Based Learning and Improvement, and Professionalism	Prepare an abstract for submission to meetings
Medical Knowledge, Practice-Based Learning and Improvement, and Professionalism	Prepare manuscript for publication

Implementation

Various methods are utilized in conducting research and scholarly activity throughout the training program. Residents participate as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge, Interpersonal and Communication Skills, and Professionalism	1. Design research project to be presented to the SRC/IRB
Interpersonal and Communication Skills and Practice-Based Learning and Improvement	2. Present the research project to appropriate authorization and funding committees
Practice-Based Learning and Improvement and Professionalism	3. Utilize research rotation to execute needed steps in the completion of the project

Resident Responsibilities

Residents demonstrate competence as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge, Practice-Based Learning and Improvement, and Professionalism	1. Organize, prepare, and write at least one research project in a publishable format
Interpersonal and Communication Skills	2. Present the research project at Grand Rounds or a Conference to peers and faculty

General Educational Objectives

While participating in research in the Orthopaedic Surgery Program, the resident continues to demonstrate competence as follows:

COMPETENCY	DESCRIPTION
Practice-Based Learning & Improvement	1. Demonstrate investigative skills and analytical thinking in problem solving. Develop skills in the use of information technology (literature searches, manuscript submission, etc.)

Medical Knowledge and Practice-Based Learning & Improvement	2. Present clear, organized didactic cases in conferences.
Medical Knowledge, Patient Care, and Practice-Based Learning & Improvement	3. Demonstrate current knowledge about surgical procedures and conditions, based upon review of medical textbooks, journals, and critical evaluation of evidence-based articles.
Patient Care, Professionalism, and Systems-Based Practice Patient Care and Professionalism	4. Demonstrate an awareness of cost-effective care and external patient care resources 5. Treat patients and staff with high ethical standards and sensitivity regardless of culture, age, gender, or disabilities.
Patient Care and Professionalism	6. Demonstrate a commitment to excellence and professional development by being on time for clinics, patient rounds, and surgical procedures.

CURRICULUM TIMELINE

PGY-1

1. Become acquainted with departmental research projects and faculty research interests.
2. Complete the CITI Human Subjects Research training (www.citiprogram.org) and present a copy of the certificate of completion to the orthopaedic department research coordinator (certification must be updated every 3 years through completion of refresher modules).
3. Begin involvement with a current departmental research study as a co-investigator or begin to develop a proposal for a new study in consultation with a faculty mentor/principal investigator. Meet with research coordinator before beginning work with any project.

PGY-2

1. Research rotation. Assist with departmental research-oriented tasks, as needed.
2. Begin work on Quality Improvement and Patient Safety (QIPS) research project. Perform podium or poster presentation at Annual Quality Improvement and Patient Safety Day, if applicable.
3. Continue work as a co-investigator on a current study and/or submit a proposal for a new study. If planning a new study, work closely with faculty mentor/principal investigator and research coordinator on developing a proposal for submission to the UTCOMC SRC and IRB.

PGY-3

1. Continue work as a co-investigator on a current study and/or submit a proposal for a new study. If planning a new study, work closely with faculty

mentor/principal investigator and research coordinator on developing a proposal for submission to the UTCOMC SRC and IRB.
2. Continue to work on Quality Improvement and Patient Safety (QIPS) research project. Perform podium or poster presentation at Annual Quality Improvement and Patient Safety Day, if applicable.
3. As a co-investigator, actively participate in all aspects of the research study as needed: administrative work, patient enrollment/consent process, data collection, chart review, analysis, preparation of abstract submission to a conference, preparation of poster/presentation, manuscript writing, manuscript submission. Communicate regularly with research coordinator and principal investigator.

PGY-4

1. Research rotation. Assist with departmental research-oriented tasks, as needed.
2. Continue work as a co-investigator on a current study and/or submit a proposal for a new study. If planning a new study, work closely with faculty mentor/principal investigator and research coordinator on developing a proposal for submission to the UTCOMC SRC and IRB.
3. Continue to work on Quality Improvement and Patient Safety (QIPS) research project. Perform podium or poster presentation at Annual Quality Improvement and Patient Safety Day, if applicable.
4. As a co-investigator, actively participate in all aspects of the research study as needed: administrative work, patient enrollment/consent process, data collection, chart review, analysis, preparation of abstract submission to a conference, preparation of poster/presentation, manuscript writing, manuscript submission. Communicate regularly with research coordinator and principal investigator.

PGY-5

1. As a co-investigator, actively participate in all aspects of the research study as needed: administrative work, patient enrollment/consent process, data collection, chart review, analysis, preparation of abstract submission to a conference, preparation of poster/presentation, manuscript writing, manuscript submission. Communicate regularly with research coordinator and principal investigator.
2. If study is ongoing, identify another resident who will become a co-investigator on the study.

By the end of the five-year program, resident should have 1) presented at least one research study or case report at UTCOMC Annual Quality Improvement and Patient Safety Day, 2) presented at least one research study or case report at a regional meeting and/or national meeting as a lead author or co-author, 3) submitted at least one manuscript (case report or research study) to a peer-reviewed journal as a lead author or co-author.

ACGME Orthopaedic Surgery research requirements:

Residents' Scholarly Activities

The curriculum must advance residents' knowledge of the basic principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care.

- Resident education must include instruction in experimental design, hypothesis testing, and other current research methods, as well as participation in clinical or basic research.

Residents should participate in scholarly activity.

- Each resident must demonstrate scholarship through at least one of the following activities:
  1) participation in sponsored research;
  2) preparation of an article for a peer-reviewed publication;
  3) presentation of research at a regional or national meeting; or,
  4) participation in a structured literature review of an important topic.

Shoulder/Elbow Rotation Educational Goals and Objectives Department of Orthopaedic Surgery Curriculum

Director: Daniel Doty, M.D., Assistant Professor

Levels in which the rotation occurs for each Orthopaedic Surgery Resident: PGY-4 (2 months)

Overall Goal and Objective for the Shoulder and Elbow Rotation at the PGY-4 level:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	The goal of the shoulder and elbow rotation is to prepare the orthopedic resident in the evaluation and treatment of patients with shoulder and elbow pathology.

PGY-4 Arthroplasty Rotation

By the end of the PGY-4 Arthroplasty Rotation, the resident is able to demonstrate the following:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Obtain a history, physically examine, and interpret imaging of shoulder and elbow patients
Medical Knowledge and Patient Care	Develop a nonoperative treatment plan when appropriate for patients.
Medical Knowledge and Patient Care	Develop preoperative surgical plan and postoperative care plan/ rehabilitation of surgical patients. Manage postsurgical inpatient care.

Implementation

The educational objectives are met through a combination of resources:

COMPETENCY	DESCRIPTION
Medical Knowledge, Practice-Based Learning and Improvement, and Patient Care	Residents must participate in Shoulder/Elbow morning conference as scheduled. They must participate in office evaluation of patients. Each week they should have one case to present Hx, PE, Imaging, Surgical plan and Post surgical care in detail with PT protocol. They will scrub as many surgical cases as possible and will be an engaged participant. They will round on inpatients and help manage their care.
Medical Knowledge, Practice-Based Learning and Improvement, and Patient Care	A Basic Science lecture pertaining to joint implants, the biomechanics of the shoulder and elbow joint in regards to arthroplasty.
Medical Knowledge, Practice-Based Learning and Improvement, Patient Care, and Interpersonal and Communication Skills	Residents may present a grand rounds on Shoulder and Elbow topic. Outside Speakers will be sought for grand rounds as well. Residents are expected to answer questions in conference. They are expected to communicate professionally with office staff, patients, and hospital workers.

Weekly Schedule

- Monday — Surgery with Voskuil
- Tuesday — Surgery with Doty or Office with Voskuil
- Wednesday — Surgery with Voskuil or Office with Doty
- Thursday — Surgery with Doty
- Friday — Surgery with Voskuil/Doty

Resident Responsibilities

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Each resident participates in an orthopaedic office approximately two half days per week. During this experience the resident must demonstrate understanding of and be able to perform techniques of history taking, visual inspection, physical examination, initial x- ray interpretation, and pre-operative planning
Patient Care and Interpersonal and Communication Skills	In addition, the resident observes the technique of informed consent and be able to obtain appropriate informed consent from patients.
Patient Care and Interpersonal and Communication Skills	The resident also observes post-operative period of convalescence following surgery of the upper extremity ranging from one week to fifteen years post-op, including evaluation of the patient using nationally recognized scoring systems as well as radiographic interpretation and physical examination.

Assistance in Surgery

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Junior residents assist the more senior residents and faculty in procedures. The volume of operative treatment of shoulder and elbow surgery is approximately 8 cases/week. The junior resident functions as a first assistant or operating surgeon commensurate with his/her level of skill and training.
Medical Knowledge and Patient Care	The operative experience includes positioning the patient on the table, surgical exposures, surgically placing implants (both cemented and non-cemented), and wound closure. The cases vary from shoulder and elbow joint arthroscopy, fracture repair and arthroplasty reconstruction.
Medical Knowledge and Practice-Based Learning and Improvement	The residents must review current medical literature prior to each procedure in order to obtain maximum educational experience from the operation. Required reading and review of evidence-based medicine includes, but is not limited to excerpts from the following textbooks:
Medical Knowledge and Practice-Based Learning and Improvement	• *A Cowboy's Guide to Advanced Shoulder Arthroscopy.* Burkart • *Shoulder* by Rockwood and Green • *Operative Techniques in Should and Elbow Surgery.* Williams, Ramsey • *The Elbow and Its Disorders,* Bernard Morrey • *Reconstructive Procedures about the Elbow* edited by Bernard Morrey

Assistance in Clinic

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Junior level residents assist the attending in evaluation of patients in the orthopaedic private office.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	As the resident examines patients in the clinic, the faculty provide supervision through review of orthopaedic fundamentals in conjunction with patient examination.
Medical Knowledge and Patient Care	The resident develops a patient care plan with the assistance of the attending physician after the resident has made pertinent physical exam findings and diagnoses.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	The resident reviews and discusses non- surgical and surgical treatment options in detail with more senior residents and the attending surgeon to clearly demonstrate that the resident understands the disease process and all treatment alternatives.

Morning Rounds

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	The resident participates in rounds for all patients on the service, under the supervision of the attending physician.
Medical Knowledge, patient Care, and Interpersonal and Communication Skills	Residents participate in post-operative management of procedures, under the supervision of the attending surgeon of record.
Patient Care and Interpersonal and Communication Skills	Residents are responsible for entering and maintaining daily notes in the patient's chart.
Patient Care, Interpersonal and Communication Skills, Professionalism, and Systems-Based Practice	Residents engage in appropriate consultation with other medical doctors and health care professionals regarding common liabilities and discuss them with the attending in detail.
Medical Knowledge, Patient Care, Interpersonal and Communication Skills, and Practice-Based Learning and Improvement	Residents treat post-operative complications and review these at monthly Morbidity and Mortality Conferences.

Routines and Protocols

COMPETENCY	DESCRIPTION
Patient Care and Professionalism	In order to maintain a level of quality care consistent with current national standards, residents review current literature in regards to shoulder and elbow care. They follow postoperative protocols based upon the best current evidence.

Current Medical Literature/Evidence-Based Medicine

The Orthopaedic Surgery resident must review and understand concepts and patient care techniques included in the following:

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Practice-Based Learning and Improvement	
	Hoppenfeld's *Surgical Exposures In Orthopaedics: The Anatomic Approach*
	Reconstructive Surgery of the Elbow by Bernard Morrey

	Rockwood's *Shoulder* textbook
	A Cowboy's Guide to Advanced Shoulder Arthroscopy
	The Elbow and It's Disorders
	Operative Techniques in Shoulder and Elbow Surgery

Skills List for PGY-4/5 Residents on Shoulder/Elbow Rotation At the end of this rotation, the resident(s) must be able to:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Perform a thorough musculoskeletal exam of patients being evaluated for degenerative disease of shoulder and elbow
Medical Knowledge and Patient Care	Evaluate radiographs of patients with disease, injuries, or pain of these previously stated joints.
Medical Knowledge and Patient Care	Interpret the radiographs of the shoulder and elbow for decision-making process including treatment algorithms.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Understand and describe surgical exposures, surgical exposures to the shoulder and elbow.
Medical Knowledge and Patient Care	Perform deltopectoral and lateral approach to the shoulder. Perform multiple approaches to the elbow. Perform safe Arthroscopy to shoulder and elbow joints

General Educational Objectives:
During the rotation, the Resident continues to demonstrate competence as follows:

COMPETENCY	DESCRIPTION
Patient Care, Interpersonal & Communication Skills	Perform history and physical examinations on clinic and inpatients under faculty supervision.
Patient Care, Interpersonal & Communication Skills, and Systems-Based Practice	Communicate effectively with patients, faculty, other residents, and multi-disciplinary ancillary staff in order to deliver quality patient care.
Medical Knowledge and Patient Care	Organize a treatment plan to include appropriate therapies, medications and studies for both operative and non-operative patients.
Patient Care	Demonstrate increased surgical skills over the course of the rotation.
Patient Care and Professionalism	Maintain accurate and timely patient care records
Practice-Based Learning & Improvement	Demonstrate investigative skills and analytical thinking in problem solving. Develop skills in the use of information technology (literature searches, etc.)
Medical Knowledge and Practice-Based Learning & Improvement	Present clear, organized didactic cases in one-on-one faculty encounters as well as conferences.
Medical Knowledge, Patient Care, and Practice-Based Learning & Improvement	Demonstrate current knowledge about surgical procedures and conditions, based upon review of medical textbooks, journals, and critical evaluation of evidence-based articles prior to seeing patients in the office or the Operating Room setting.

General Educational Objectives (Continued)

COMPETENCY	DESCRIPTION
Patient Care, Professionalism, and Systems-Based Practice	Demonstrate an awareness of cost-effective care and external patient care resources in day-to-day management and treatment of patients.
Patient Care and Professionalism	Treat patients and staff with high ethical standards and sensitivity regardless of culture, age, gender, or disabilities.
Patient Care and Professionalism	Demonstrate a commitment to excellence and professional development by being on time for clinics, patient rounds, and surgical procedures.

Sports Medicine, Shoulder, General Orthopaedics

Director: Jeremy Bruce, M.D., Associate Professor **Faculty:**
Brandon Cincere, M.D., Assistant Professor
Jad Dorizas, M.D., Assistant Professor
Chad Smith, M.D., Assistant Professor
David Bruce, M.D., Clinical Instructor

First month

	Mon	Tues	Wed	Thurs	Fri
Jr	Cincere OR	Dorizas OR or JBruce OR	AM: Dorizas office PM: Research	JBruce OR	JBruce (office then OR)
Sr	Office/ Research	Smith OR	D Bruce or Cincere OR	Smith/Dorizas OR	D Bruce OR or Research

Second month

	Mon	Tues	Wed	Thurs	Fri
Jr	Office/ Research	Smith OR	D Bruce or Cincere OR	Smith/Dorizas OR	Float or Cincere office
Sr	Cincere OR	Dorizas OR or JBruce OR	AM: Dorizas office PM: Research	JBruce OR	JBruce (office then OR)

PGY-2 (2 months) & PGY-3 (2 months)

Goals and Objectives

There is a strong emphasis on excellence in history taking and physical examination skills. We must all learn to be better clinicians in order to be better diagnosticians. Methods of extracting information from patients and appropriately interpreting this information will be stressed. There will be a concentration on knee, hip and shoulder physical examination skills during this rotation, although the entire musculoskeletal system examination will be covered. This will be done in the clinical setting in private offices or the orthopedic knee and shoulder clinic.

At the end of this rotation, the resident will be able to:

Medical Knowledge, Patient Care	Develop proficiency in patient evaluation and differential diagnosis making.
Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	Develop knowledge of treatment plans and begin to make their own recommendations.
Medical Knowledge, Patient Care	Be able to perform routine shoulder and knee arthroscopy and related surgery. Attending surgeon will determine resident's ability to complete cases.
Medical Knowledge, Patient Care	Learn reconstructive techniques in sports medicine surgery of the knee, shoulder, hip and elbow.

A general list of arthroscopically assisted surgeries includes but is not limited to:

- Arthroscopic subacromial decompression
- Excision of subacromial bursa
- Arthroscopic evaluation and repair of rotator cuff tears
- Arthroscopic excision of the distal clavicle
- Slap lesion repair and debridement
- Arthroscopic Bankart repair
- General arthroscopic surgery of the shoulder
- Meniscus repair
- Arthroscopic lateral release
- Articular surface debridement of the knee
- OATS procedures
- Arthroscopic fixation of tibial plateau or tibial spine fractures.
- Suprascapular nerve decompression.

Reconstructive procedures commonly done would include, but not be limited to:

- Open Bankart repairs
- Mini-open rotator cuff repairs
- AC joint reconstruction
- Other shoulder instability surgery

The resident will learn procedures including

- VMO placation
- MPFL reconstruction
- Tibial tubercle osteotomes such as Trillator Fulkerson
- ACL reconstruction
- PCL reconstruction
- Knee dislocation surgery
- Osteochondral allograft
- Arthrofibrosis surgery
- Achilles tendon surgery
- Elbow tendinopathy surgery, UCL reconstruction
- Hip arthroscopy

Implementation

Patient Care, Professionalism, System-Based Practice	Attend private office at least 1-2 half days per week.
Medical Knowledge, Patient Care, Practice-Based Learning & Improvement, Interpersonal & Communication Skills	In office setting the residents will be asked to see new patients and present these for discussion regarding the history and physical examination findings, assessment of the diagnostic tests, and development of a treatment plan.
Medical Knowledge, Patient Care, Practice-Based Learning & Improvement, Interpersonal & Communication Skills	Attend all arthroscopic surgery as described by SSG rotation table below. Attend all arthroscopic labs on specific lab sessions
Medical Knowledge, Professionalism	Attend monthly sports medicine/radiology conference.

Medical Knowledge, Practice-Based Learning & Improvement	Participate in research as time permits. Present Sports M&Ms when necessary

Resident Responsibilities

Patient Care, Professionalism	Residents are to dictate all office notes prior to leaving the office on that day. They are also required to dictate all patient operative notes immediately after the case.
Patient Care, Professionalism	Complete the H&P form in Plaza or Erlanger East surgery to include the preoperative diagnosis and planned surgery along with a signature and date.
Patient Care, Professionalism	Do daily ward rounds on all inpatients including documentation of a signed progress note prior to 8:00 a.m. This will establish a plan of action for the day and assist the nurses and patients in discharge planning.
Patient Care	PGY-2 residents are responsible for inpatient care and plan implementation. They will work with the PGY-3 and -5 resident to complete all in-patient duties.

Skills Test and Evaluation

Medical Knowledge, Patient Care	Direct observation by attending of clinical skills in office or clinic.
Medical Knowledge, Patient Care	Direct observation of quality of care of in-patients.
Medical Knowledge, Patient Care	Assessment of quality of prescriptions for physical therapy, braces, orthotics.
Medical Knowledge, Patient Care	Direct observation of operative skills and improvement over the course of the rotation.
Medical Knowledge, Practice-Based Learning, Interpersonal & Communication Skills	Assessment of quality of didactic presentations, case presentations and sports/radiology conference.
Medical Knowledge, Interpersonal & Communication Skills	Evaluation of scope and comprehension of required reading via informal conversation and questioning.

Required Reading:

	A. Must Read:
Medical Knowledge, Practice-Based Learning & Improvement	1. *OKU Sports Medicine*
	2. Core Sports articles
	3. Yellow journal Sports articles
	4. JBJS Sports articles
	B. Optional Read:
	1. The *American Journal of Sports Medicine*
	2. The *Journal of Arthroscopy*
	3. OKU Shoulder & Elbow
	4. Burkhart's Cowboy Techniques in Shoulder Surgery
	5. *Journal of Shoulder and Elbow Surgery*

Sports Medicine, Shoulder, General Orthopaedics

Director: Jeremy Bruce, M.D., Associate Professor **Faculty:**
Brandon Cincere, M.D., Assistant Professor
Jad Dorizas, M.D., Assistant Professor
Chad Smith, M.D., Assistant Professor

PGY-5 (4 months) Goals and Objectives

There is a strong emphasis on excellence in history taking and physical examination skills. We must all learn to be better clinicians in order to be better diagnosticians. Methods of extracting information from patients and appropriately interpreting this information will be stressed. There will be a concentration on knee, hip and shoulder physical examination skills during this rotation, although the entire musculoskeletal system examination will be covered. This will be done in the clinical setting in private offices.

In addition to the knowledge and skills previously acquired during the PGY-2 and PGY-3 rotations, the resident(s) will be able to:

Medical Knowledge, Patient Care, Practice-Based Learning & Improvement	Be able to identify differential diagnosis of patient's complaint and know how to further evaluate to distinguish between them.
Medical Knowledge, Interpersonal & Communication Skills	Be able to identify accepted treatment options for conditions and then defend their choice of treatment for each case.
Medical Knowledge, Patient Care	Be able to complete routine arthroscopic surgery of knee (debridement, plica, meniscectomy, lateral release) and shoulder (loose body, capsular release, debridement, and acromioplasty).
Medical Knowledge, Patient Care	Complete as much of the complex cases as ability permits (meniscal repair, osteochondral grafts, ACL, PCL, rotator cuff repair, labral repair, Bankart).

A general list of arthroscopically assisted surgeries includes but is not limited to:

- Arthroscopic subacromial decompression
- Excision of subacromial bursa
- Arthroscopic evaluation and repair of rotator cuff tears
- Arthroscopic excision of the distal clavicle
- Slap lesion repair and debridement
- Arthroscopic Bankart repair
- General arthroscopic surgery of the shoulder
- Meniscus repair
- Arthroscopic lateral release
- Articular surface debridement of the knee
- OATS procedures
- Arthroscopic fixation of tibial plateau or tibial spine fractures.
- Suprascapular nerve decompression

Reconstructive procedures commonly done would include, but not be limited to:

- Open Bankart repairs
- Mini-open rotator cuff repairs
- AC joint reconstruction
- Other shoulder instability surgery

The resident will learn procedures including

- VMO placation
- MPFL reconstruction
- Tibial tubercle osteotomies such as Trillat or Fulkerson
- ACL reconstruction
- PCL reconstruction's
- Knee dislocation surgery
- Osteochondral allograft
- Arthrofibrosis surgery
- Achilles tendon surgery
- Elbow tendinopathy surgery, UCL reconstruction
- Hip arthroscopy.

Implementation

Patient Care, Professionalism, System-Based Practice	Attend private office at least 1-2 half days per week.
Medical Knowledge, Patient Care, Practice-Based Learning & Improvement, Interpersonal & Communication Skills	In office setting the residents will be asked to see new patients and present these for discussion regarding the history and physical examination findings, assessment of the diagnostic tests, and development of a treatment plan.
Medical Knowledge, Patient Care, Practice-Based Learning & Improvement, Interpersonal & Communication Skills	Attend all arthroscopic surgery as described by SSG rotation table below. Attend all arthroscopic labs on specific lab sessions
Medical Knowledge, Professionalism	Attend monthly sports medicine/radiology conference.
Medical Knowledge, Practice-Based Learning & Improvement	Participate in research as time permits. Present Sports M&Ms when necessary.

Resident Responsibilities

Patient Care, Professionalism	Residents are to dictate all office notes prior to leaving the office on that day. They are also required to dictate all patient operative notes immediately after the case.
Patient Care, Professionalism	Complete the H&P form in Plaza or Erlanger East surgery to include the preoperative diagnosis and planned surgery along with a signature and date.
Patient Care, Professionalism	Do daily ward rounds on all inpatients including documentation of a signed progress note prior to 8:00 a.m. This will establish a plan of action for the day and assist the nurses and patients in discharge planning.

Patient Care	PGY-2 residents are responsible for inpatient care and plan implementation. They will work with the PGY-3 and -5 resident to complete all in-patient duties.

Skills Test and Evaluation

Medical Knowledge, Patient Care	Direct observation by attending of clinical skills in office or clinic.
Medical Knowledge, Patient Care	Direct observation of quality of care of in-patients.
Medical Knowledge, Patient Care	Assessment of quality of prescriptions for physical therapy, braces, orthotics.
Medical Knowledge, Patient Care	Direct observation of operative skills and improvement over the course of the rotation.
Medical Knowledge, Practice-Based Learning, Interpersonal & Communication Skills	Assessment of quality of didactic presentations, case presentations and sports/radiology conference.
Medical Knowledge, Interpersonal & Communication Skills	Evaluation of scope and comprehension of required reading via informal conversation and questioning.

Required Reading:

Medical Knowledge, Practice-Based Learning & Improvement	A. Must Read:
	1. *OKU Sports Medicine*
	2. Operative Techniques in Orthopaedics
	3. Yellow journal Sports articles
	4. JBJS Sports articles
	B. Optional Read:
	1. The *American Journal of Sports Medicine*
	2. The *Journal of Arthroscopy*
	3. OKU Shoulder & Elbow
	4. Burkhart's Cowboy Techniques in Shoulder Surgery
	5. *Journal of Shoulder and Elbow Surgery*

Orthopaedic Trauma Rotation Goals and Objectives

Rotation Director: Dirk Kiner

PGY1: 4 (2 summer/fall, 2 winter/spring) months

PGY2: 4(2 summer/fall, 2 winter/spring) months

PGY3: 4 (2 summer/fall, 2 winter/spring) months

PGY4: 2 months in winter/spring

PGY5: 2 months in summer/fall

Goals and Objectives

This rotation is the foundation of your orthopaedic training. It is mandated to be 12 of the 48 months of your dedicated orthopaedic residency. It is designed as a process of graduated responsibility and autonomy where each layer builds upon, and requires, the layer below it. Successful completion of this rotation, and your residency at large, requires tireless compassion, investment and dedication. These are patients and families experiencing some of the most traumatic occasions of their lives. You are there to help start to get them through it. Your knowledge and skills are expected to advance continually. You are expected to read and prepare for cases, conferences and rounds. You are expected to round on all patients, every day. The division of that responsibility lies with the Orthopaedic Trauma Chief Resident.

PGY1: Summer/fall: The focus of this rotation is to develop the early skill set required for the rest of your training and career. You will be learning under the **DIRECT** and **OBSERVED** supervision of your more senior residents. You are to learn a proper ER trauma H&P, for both emergent and less urgent consults. You are to learn the daily rounding and floor work responsibilities of these often complex patients. You are expected to work with the inpatient Orthopaedic Trauma PA, the PA may help with the work, but it is ultimately your responsibility. You are expected to liaise with the other members of the care team (general surgery trauma, neurosurgery, plastic surgery, hand surgery, nursing, therapy, case management, etc.) to coordinate the best care for the patients. You are to maintain the accuracy and completeness of the daily trauma as well as the "81" lists. You are expected to spend 1 day a week in the outpatient office at the direction of the Trauma Chief resident. You are expected to scrub into the OR whenever possible.

Winter/Spring: Building on the above. You are now expected to carry the consult pager during the day. You are expected to present all consults to your more senior residents as soon as is feasible to ensure proper and timely care of the patient. No longer are you under observed supervision, but still under direct supervision. You are expected to master proper H&P as well as presentation skills for morning checkout as well as conferences. You are expected to begin to gain an understanding of the injuries you see and begin to develop thoughtful plans for treatment. By the end of this rotation, you should be conversationally familiar with all AO/OTA and fracture specific classifications, so that you can articulate these in your attending checkouts and document these appropriately in your consult notes.

PGY2: Building on the above. You expected to be the workhorse of the service. The PGY1 is your responsibility to prepare for the real responsibilities of training. You are expected to manage the floor work with the help of the inpatient PA, when available. You are expected to maintain the Trauma list. You are responsible for the daily patient maintenance including dressing changes, splint changes, etc… You are expected to master the art of the Trauma H&P, both obtaining and presenting, identifying pertinent positives/negatives, developing appropriate basic to moderate plans, and executing early surgical judgment in the posting of cases. You are expected to accurately complete discharge summaries over the weekend. You are expected to quickly master all common, and most uncommon, closed reductions. You are expected to master all splints and casts, traction of all types and all ER Orthopaedic management. In the Summer/fall these should be discussed with senior residents, in the Winter/Spring, not necessarily. You are expected to spend 1 day a week in the outpatient

Trauma office at the direction of the Trauma chief resident. You are expected to scrub into cases as much as possible, with the understanding that emergent consults are that, and take precedent. You are expected to leave the OR and attend to trauma leveled consults and all truly emergent consults. You are expected to triage the acuity of **ALL** consults and ask the PA to begin the consult process on the less acute consults where you will attend to them after the OR case you are currently in. You are expected to be able to do simple cases with help by the end of this year (Simple ankles, IMN tibia and femur, IMN hip, simple distal radius). By the end of this year, you should strive to master all the basics of fracture classifications and triage as outlined in the Handbook of Fractures.

PGY3: Building on the above. You are now responsible for the PGY2 and PGY1 performing their responsibilities correctly. You are expected to supervise the ER work with increasing distance. You are expected to scrub into the OR as much as possible. You are expected to develop thoughtful plans and be able to begin to execute them in the OR. By the end of this rotation, your preoperative plans should be exhaustive enough to convince any attending to provide you an appropriate level of autonomy commensurate with your skill set. This year is when your operative skill set is expected to skyrocket. You are expected to be able to do moderate cases with minimal help by the end of the year (lateral plateau, IMN femur, tibia, IT. Ankle, Distal radius, humeral shaft, etc…) At the end of this rotation you should recognize that you will soon be operating with non-trauma staff on trauma patients, some of which may call on you to nearly autonomously execute safe trauma surgery.

PGY4 and PGY 5: Building on the above. You are now the Trauma Chief. The entire service, all of the patients, all of the surgeries, all of the residents, everything is now your responsibility to manage. You are expected to do so. You are expected to assure the accuracy of all notes, postings, H&Ps and consults. You are expected to review the charts of all patients the evening prior to their expected surgery to assure appropriate preoperative clearance, consent, imaging, medication/blood requisites for surgery, etc. You are expected to communicate with the orthopaedic trauma fellow and assign operative cases with as much advanced notice as possible to allow for the residents and fellow to read and prepare. You are expected to review the postoperative films on all patients on the service to assure they are done and to identify any unexpected findings. You are expected to examine the postoperative wounds of any patient you operated and create a plan for appropriate wound care. You are expected to assign clinic duties. You are expected to become proficient at all but the most complicated of Orthopaedic Trauma cases. Upon completion of this rotation, you should strive to be safe and effective in fundamental orthopaedic trauma surgery should your career require you to provide emergency room call coverage.

Physician's Assistant Roles:

You have critical responsibilities to the service. You are one of the very few who are a permanent part of the service. You are expected to manage the patients on the subacute trauma patient list, the "81 list". You are expected to see them all weekly. You are expected to change dressings, splints, remove sutures, update therapy orders, disposition and clinic follow up on each patient on the list. You are expected to "run the list" with the attendings weekly and complete the added management from that discussion. You are expected to place an updated note no less than every 7 days to be certain that all interested parties know the updated plan. You are expected to expedite the convoluted discharge process with the multiple departments and people involved in it, taking whatever steps may be required to safely and efficiently minimize our patient's lengths of stay. You are expected to Round daily with general surgery trauma team and/or physical therapy to expedite patient care and throughput. You are expected to Complete Epic discharge summary for all consults or surgical patients for the orthopaedic trauma services, with details for appropriate weight bearing status, wound management, brace/splint/cast care, ROM limitations when needed, follow up plan. are expected to assist the junior resident(s) with the daily dressing and splint changes, particularly those tasks that require multiple people (i.e.: splints and wound vac changes). You are expected to get the less acute consults started, as indicated by the trauma pager holding resident. This would include beginning the H&P, obtaining correct imaging and ordering the needed labs and tests in order to best expedite patient care. High acuity trauma consults are not your responsibility, but you are expected to help with them.

Recommended Readings:

Handbook of Fractures

Skeletal Trauma

Fracture in Adults

Surgical Treatment of Orthopedic Trauma

Masters Techniques in Orthopedics: Trauma 2

Orthopaedic Knowledge Update: Trauma 3

OTA Evidenced Based topic specific literature (https://ota.org/education/evidence-based-medicine-resource-list#/+/0/score,date_na_dt/desc/)

Orthopaedic Trauma Surgery Rotation Educational Goals and Objectives Department of Orthopaedic Surgery Curriculum

Director: Dirk Kiner, MD, Professor
Academic Staff: Bryce Cunningham, MD, Assistant Professor
Warren E. Gardner, MD, Associate Professor Michael Yee., Assistant Professor

Levels in which the rotation occurs: PGY-1 (4 months), PGY-2 (4 months), PGY-3 (4 months), PGY-4 (2 months) and PGY-5 (2 months)

Overall Rotation Goals and Objectives

PGY-2

Continue to demonstrate competence as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Evaluate injured patients both isolated and polytraumatized
Medical Knowledge and Patient Care	Perform a thorough musculoskeletal physical exam of the injured patient

PGY-2 Residents also demonstrate competence as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Order appropriate studies of injured patients
Medical Knowledge and Patient Care	Determine diagnosis of patient's orthopaedic injuries
Patient Care	Develop surgical skills in orthopaedic surgery
Medical Knowledge and Practice-Based Learning and Improvement	Review articles for appropriate treatment of each case as they are presented

Implementation

The educational objectives are met through a combination of resources. During this rotation the PGY-2 resident:

COMPETENCY	DESCRIPTION
Medical Knowledge and Practice-Based Learning & Improvement	Gains knowledge and participates in a bi-weekly trauma conferences and monthly fracture conference. The resident reviews and gains knowledge and classification, review of studies, case presentations, and treatment alternatives.
Medical Knowledge, Practice-Based Learning & Improvement, and Interpersonal & Communication Skills	Gains knowledge and participates in a weekly clinical correlations conference. The resident learns via case presentations from the faculty regarding specific orthopaedic trauma topics. The resident discusses outcome studies, treatments of specific fractures, and classifications with the faculty. Daily morning report case presentations allow residents the opportunity to improve communication skills and learning.
Medical Knowledge and Practice-Based Learning and Improvement	Gains knowledge and participates in basic science didactic sessions which address the basic science of fracture, healing, nonunion, osteomyelitis, and biomechanics.

Medical Knowledge, Patient Care, Interpersonal & Communication Skills, and Systems-Based Practice	Interacts with physicians in other specialties by participating in multi-disciplinary trauma rounds held once a month. Cases involving multi-injured patients are presented and discussed among all surgical services; *i.e.*, general surgery, orthopaedics, vascular, and neurosurgery.

Weekly Schedule

Monday	Surgery with Drs. Cunningham, Kiner and Gardner Office
Monday	with Dr. Yee *
Tuesday	Surgery with Drs. Cunningham, Gardner and Yee Office with
Tuesday	Dr. Kiner *
Wednesday	Surgery with Drs. Kiner, Cunningham and Yee
Wednesday	Office with Dr. Gardner *
Thursday	Surgery with Drs. Kiner, Gardner and Yee Office
Thursday	wit Dr. Cunningham *
Friday	Surgery with all Attendings

** Specific office coverage to be determined by the Chief Resident in conjunction with the Rotation Director

Resident Responsibilities

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	The resident is involved in all aspects of the care of orthopaedic trauma patients, pre-operatively, during surgery, and post-operatively, under the direct supervision of the Orthopaedic Traumatology faculty members This is critical due to the complexity and potential morbidity of many of the procedures performed on the Trauma Service
Patient Care and Interpersonal and Communication Skills	As a junior resident, the PGY-2 resident provides patient care and assistance to the Chief Resident of the Orthopaedic Trauma Service, under the supervision of the faculty.

Assistance in Surgery

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	The PGY-2 resident assists senior residents and faculty in orthopaedic trauma procedures as assigned by a senior level resident.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Residents assume patient care responsibility for managing individual patients based upon their individual level of knowledge and experience at the discretion of the attending faculty member supervising the service.
Medical Knowledge and Practice-Based Learning and Improvement	Adequately prepare for planned surgical procedures prior to assisting in the OR (through review of medical textbooks and current medical literature) to gain maximum educational and experience. The resident demonstrates knowledge of the steps involved in procedures.
Medical Knowledge and Interpersonal and Communication Skills	Discuss each surgical case with the attending pre-operatively, intra-operatively and post-operatively.

Assistance in Clinic

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	The PGY-2 resident is responsible for assisting the Chief Resident in evaluating the patient's injuries and formulating a treatment plan for all patients being seen in clinic.
Patient Care and Interpersonal and Communication Skills	Attending supervision is available and all patients must be evaluated with the attending
Patient Care and Interpersonal and Communication Skills	Examination of all patients should include an exam from either a chief resident or one of the attendings to help discern that the lower-level resident is capable of appropriately examining all patients with regard to injuries they may have sustained
Patient Care and Interpersonal and Communication Skills	Pertinent physical exam techniques and tips to securing diagnosis are reviewed by upper level residents and faculty

Morning Rounds

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	The PGY-2 resident and Chief Resident (or senior level resident) are responsible for attending 6:30 AM x-ray rounds in the Orthopaedic Library with Drs. Kiner, Gardner, Cunningham and Yee.
Patient Care and Interpersonal and Communication Skills	These rounds are rather brief but include discussion of all patients admitted to the hospital on the previous evening. Inpatient morning rounds and daily patient care plans are reviewed.
Patient Care and Interpersonal and Communication Skills	All appropriate x-rays from those patients and patients that had been seen on the previous day (that had follow-up x-rays) should be available at that time.
Patient Care and Interpersonal and Communication Skills	Rounds follow on Monday through Friday mornings. If any patient requires visitation on either of those mornings, the attending is notified and the evaluation is performed that morning.

Routines and Protocols

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	The Orthopaedic Trauma Service at Erlanger, directed by Drs. Nowotarski, Kiner and Gardner, provides experience for the chief resident and PGY-2 resident with a high volume of operative and non-operative fracture cases.
Medical Knowledge and Patient Care	This includes pelvic and acetabular reconstruction as well as periarticular fractures involving the upper and lower extremity.
Medical Knowledge and Patient Care	Additionally, collective surgery related to trauma, i.e., infections, non-unions and mal-unions) are typically seen on this rotation. The PGY-2 resident participates in the treatment and surgical management of these patients at the discretion of the Chief Resident.

Reading List

COMPETENCY	DESCRIPTION
Medical Knowledge and Practice-Based Learning and Improvement	Hoppenfeld's *Surgical Exposures In Orthopaedics: The Anatomic Approach*
	Skeletal Trauma- 6th edition
	AO Principles of Fracture Management- online

	Campbell's Operative Orthopaedics 14th edition
	Tile's textbook on *Pelvic and Acetabular Surgery*-4th edition
	Letournel's textbook on *Acetabular Surgery*-2nd edition
	Mast book on *Indirect Reduction Technique*
	Orthopaedic trauma Association Resource list of topic specific articles:https:// ota.org/education/ota-online-resources/evidence-based-medicine-resource-list#/+/0/score,date_na_dt/desc/
	The Master's Series on *Fracture Management*-4th edition
	Surgical Treatment of Orthopaedic Trauma, 2nd edition, Stannard, Schmidt, Kregor

PGY-2 Skills List

The PGY-2 resident continues to demonstrate competence and increasing skills from the PGY-1 rotations:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Perform a thorough musculoskeletal exam of injured patients both isolated and polytraumatized
Medical Knowledge and Patient Care	Evaluate radiographs of fractured extremities
Medical Knowledge and Patient Care	Place percutaneous skeletal pins for traction of the distal femur and proximal tibia
Medical Knowledge and Patient Care	Apply splints and cast to simple injuries to both upper and lower extremities
Medical Knowledge and Patient Care	Perform simple reduction maneuvers of common fractures in the Emergency Room, i.e., distal radius fracture, ankle fracture dislocation

The PGY-2 resident also demonstrates competence in the following skills:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Order appropriate adjunctive tests and interpret, i.e., CT scan, MRI
Medical Knowledge and Patient Care	Perform minor surgical procedures including hardware removal and external fixator placement, and simple internal fixation and intramedullary nailing procedures
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Describe common surgical procedures to humerus, forearm, hip, knee, and ankle fractures
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Evaluate patients in clinic, diagnose and discuss treatment options
Medical Knowledge and Patient Care	Perform simple and more complex reductions of extremity fractures in the Emergency Room

General Educational Objectives:

During the rotation, the PGY-2 Resident continues to demonstrate competence as follows:

COMPETENCY	DESCRIPTION
Patient Care, Interpersonal & Communication Skills	Perform history and physical examinations on clinic and inpatients under faculty supervision.
Patient Care, Interpersonal & Communication Skills, and Systems-Based Practice	Communicate effectively with patients, faculty, other residents, and multi-disciplinary ancillary staff in order to deliver quality patient care.

Medical Knowledge and Patient Care	Organize a treatment plan to include appropriate therapies, medications and studies for both operative and non-operative patients.
Patient Care	Demonstrate increased surgical skills over the course of the rotation.
Patient Care and Professionalism	Maintain accurate and timely patient care records
Practice-Based Learning & Improvement	Demonstrate investigative skills and analytical thinking in problem solving. Develop skills in the use of information technology (literature searches, etc.)
Medical Knowledge and Practice-Based Learning & Improvement	Present clear, organized didactic cases in one-on-one faculty encounters as well as conferences.
Medical Knowledge, Patient Care, and Practice-Based Learning & Improvement	Demonstrate current knowledge about surgical procedures and conditions, based upon review of medical textbooks, journals, and critical evaluation of evidence-based articles prior to seeing patients in the office or the Operating Room setting.
Patient Care, Professionalism, and Systems-Based Practice Patient Care and Professionalism	Demonstrate an awareness of cost-effective care and external patient care resources in day-to-day management and treatment of patients. Treat patients and staff with high ethical standards and sensitivity regardless of culture, age, gender, or disabilities.
Patient Care and Professionalism	Demonstrate a commitment to excellence and professional development by being on time for clinics, patient rounds, and surgical procedures.

Orthopaedic Trauma Surgery Rotation Educational Goals and Objectives Department of Orthopaedic Surgery Curriculum

Director: Dirk Kiner, MD, Professor
Academic Staff: Bryce Cunningham, MD, Assistant Professor
Warren E. Gardner, MD, Associate Professor Michael
Yee, M.D., Assistant Professor

Levels in which the rotation occurs: PGY-1 (4 months), PGY-2 (4 months), PGY-3 (4 months), PGY-4 (2 months) and PGY-5 (2 months)

Overall Rotation Goals and Objectives

PGY-3

The resident continues to demonstrate competence in the following as gained during rotations at the PGY-1 and PGY-2 level:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Evaluate injured patients both isolated and polytraumatized
Medical Knowledge and Patient Care	Perform a thorough musculoskeletal physical exam of the injured patient
Medical Knowledge and Patient Care	Order appropriate studies of injured patient
Medical Knowledge and Patient Care	Determine diagnosis of patient's orthopaedic injuries
Medical Knowledge and Patient Care	Develop surgical skills in orthopaedic surgery
Medical Knowledge and Practice-Based Learning and Improvement	Review articles for appropriate treatment of each case as they are presented

During the PGY-3 rotation residents demonstrate the following:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Create a treatment plan for patient
Medical Knowledge and Patient Care	Discern the principles of acute fracture management (both operative and non-operative) and apply these principles when appropriate

Implementation

The educational objectives are met through a combination of methods and resources. The PGY-3 resident participates as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge and Practice-Based Learning & Improvement	Gains knowledge and participates in a bi-weekly fracture conference. Each conference addresses a different skeletal fracture. The resident reviews and gains knowledge and classification, review of studies, case presentations, and treatment alternatives.
Medical Knowledge, Practice-Based Learning & Improvement, and Interpersonal & Communication Skills	Gains knowledge and participates in a weekly clinical correlations conference. The resident learns via case presentations from the faculty regarding specific orthopaedic trauma topics. The resident discusses outcome studies, treatments of specific fractures, and

	classifications with the faculty. Daily morning report case presentations allow residents the opportunity to improve communication skills and learning.
Medical Knowledge and Practice-Based Learning and Improvement	Gains knowledge and participates in basic science didactic sessions which address the basic science of fracture, healing, nonunion, osteomyelitis, and biomechanics.
Medical Knowledge, Patient Care, Interpersonal & Communication Skills, and Systems-Based Practice	Interacts with physicians in other specialties by participating in multi-disciplinary trauma rounds held once a month. Cases involving multi-injured patients are presented and discussed among all surgical services; *i.e.*, general surgery, orthopaedics, vascular, and neurosurgery.

Weekly Schedule

Monday	Surgery with Drs. Cunningham, Kiner and Gardner Office
Monday	with Dr. Yee *
Tuesday	Surgery with Drs. Cunningham, Gardner and Yee Office with
Tuesday	Dr. Kiner *
Wednesday	Surgery with Drs. Kiner, Cunningham and Yee
Wednesday	Office with Dr. Gardner *
Thursday	Surgery with Drs. Kiner, Gardner and Yee Office
Thursday	wit Dr. Cunningham *
Friday	Surgery with all Attendings

** Specific office coverage to be determined by the Chief Resident in conjunction with the Rotation Director

Resident Responsibilities

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	The resident is involved in all aspects of the care of orthopaedic trauma patients, pre-operatively, during surgery, and post-operatively, under the direct supervision of the Orthopaedic Traumatology faculty members This is critical due to the complexity and potential morbidity of many of the procedures performed on the Trauma Service
Patient Care and Interpersonal and Communication Skills	The PGY-3 resident assumes increased responsibilities for patient care assists the Chief Resident of the Orthopaedic Trauma Service, under the supervision of the faculty, in supervising more medical students, PGY-1, and PGY-2 residents.

Assistance in Surgery The PGY-3 resident:

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	Assists upper-level residents and faculty in orthopaedic trauma procedures as assigned by a senior level resident.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Assumes patient care responsibility for managing individual patients based upon their individual level of knowledge and experience at the discretion of the attending faculty member supervising the service.
Medical Knowledge and Practice-Based Learning and Improvement	Adequately prepares for planned surgical procedures prior to assisting in the OR (through review of medical textbooks and current medical literature) to gain maximum educational and experience. The resident demonstrates knowledge of the steps

	involved in procedures.
Medical Knowledge and Interpersonal and Communication Skills	Discusses each surgical case with the attending pre-operatively, intra-operatively and post-operatively.

Assistance in Clinic The PGY-3 resident:

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Assists the Chief Resident in evaluating the patient's injuries and formulating a treatment plan for all patients seen in clinic. Attending supervision is available and all patients must be evaluated with the attending
Patient Care and Interpersonal and Communication Skills	Examines all patients, including an exam from either a chief resident or one of the attendings for each patient to discern that the PGY-3 level resident is capable of appropriately examining all patients with regard to injuries they may have sustained
Patient Care and Interpersonal and Communication Skills	Increases skill in performing pertinent physical exam techniques and tips to securing diagnosis. These are reviewed by the upper-level residents and faculty.

Morning Rounds The PGY-3 resident:

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	Participates with the Chief Resident (or senior level resident) in attending 6:30 AM x-ray rounds in the orthopaedic library with Drs. Nowotarski, Kiner and Gardner. These rounds are rather brief but include discussion of all patients admitted to the hospital on the previous evening.
Patient Care and Interpersonal and Communication Skills	Reviews and analyzes all appropriate x-rays from those patients and patients that had been seen on the previous day (that had follow-up x-rays).
Patient Care and Interpersonal and Communication Skills	Participates in Trauma Teaching Rounds on Monday through Friday mornings following the x-ray rounds. If any patient requires visitation on either of those mornings, the attending is notified and the evaluation is performed that morning. Inpatient morning rounds and daily patient care plans are reviewed.

Routines and Protocols The PGY-3 Resident:

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	Gains increased experience with a high volume of operative and non-operative fracture cases, as part of the Orthopaedic Trauma Service at Erlanger, directed by Drs. Kiner, Gardner, Cunningham and Yee. This includes pelvic and acetabular reconstruction as well as periarticular fractures involving the upper and lower extremity.
Medical Knowledge and Patient Care	Participates in the treatment and surgical management of orthopaedic trauma patients at the discretion of the Chief Resident, including surgery related to trauma, i.e., infections, non-unions and mal-unions. Internal and external fixation and intramedullary nailing techniques are learned with increasing experience and autonomy during surgery.

Reading List

COMPETENCY	DESCRIPTION
Medical Knowledge and Practice-Based Learning and Improvement	Hoppenfeld's *Surgical Exposures In Orthopaedics: The Anatomic Approach*
	Skeletal Trauma- 6th edition
	AO Principles of Fracture Management- online
	Campbell's Operative Orthopaedics 14th edition
	Tile's textbook on *Pelvic and Acetabular Surgery*-4th edition
	Letournel's textbook on *Acetabular Surgery*-2nd edition
	Mast book on *Indirect Reduction Technique*
	Orthopaedic trauma Association Resource list of topic specific articles: https:// ota.org/education/ota-online-resources/evidence-based-medicine-resource-list#/+/0/score,date_na_dt/desc/
	The Master's Series on *Fracture Management*-4th edition
	Surgical Treatment of Orthopaedic Trauma, 2nd edition, Stannard, Schmidt, Kregor

PGY-3 Skills List

The PGY-3 resident continues to demonstrate competence in knowledge and skills acquired during the PGY-1 and PGY-2 rotations:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Perform a thorough musculoskeletal exam of injured patients both isolated and polytraumatized
Medical Knowledge and Patient Care	Evaluate radiographs of fractured extremities
Medical Knowledge and Patient Care	Place percutaneous skeletal pins for traction of the distal femur and proximal tibia
Medical Knowledge and Patient Care	Apply splints and cast to simple injuries to both upper and lower extremities
Medical Knowledge and Patient Care	Perform simple reduction maneuvers of common fractures in the Emergency Room, i.e., distal radius fracture, ankle fracture dislocation
Medical Knowledge and Patient Care	Order appropriate adjunctive tests and interpret, i.e., CT scan, MRI
Medical Knowledge and Patient Care	Perform minor surgical procedures including hardware removal and external fixator placement
Medical Knowledge, Patient Care,, Interpersonal and Communication Skills	Describe common surgical procedures to humerus, forearm, hip, knee, and ankle fractures
Medical Knowledge, Patient Care,, Interpersonal and Communication Skills	Evaluate patients in clinic, diagnose and discuss treatment options
Medical Knowledge and Patient Care	Perform simple and more complex reductions of extremity fractures in the Emergency Room

In addition, the PGY-3 resident demonstrates competence as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Evaluate, diagnose, and plan treatment of common fractures in clinic patients
Medical Knowledge and Patient	Perform surgical procedures on diaphyseal fracture of the

Care	humerus, forearm, femur, and tibia
Medical Knowledge and Patient Care	Perform surgical procedures on simple articular fractures at the wrist and ankle
Medical Knowledge and Patient Care	Describe and perform surgical approaches to previously described procedures and more complex procedures about the knee, hip and shoulder
Medical Knowledge and Patient Care	Interpret all radiographic studies on patients with fractures including plane radiography, CT, and MRI

General Educational Objectives:

During the rotation, the Resident continues to demonstrate competence as follows:

COMPETENCY	DESCRIPTION
Patient Care, Interpersonal & Communication Skills	Perform history and physical examinations on clinic and inpatients under faculty supervision.
Patient Care, Interpersonal & Communication Skills, and Systems-Based Practice	Communicate effectively with patients, faculty, other residents, and multi-disciplinary ancillary staff in order to deliver quality patient care.
Medical Knowledge and Patient Care	Organize a treatment plan to include appropriate therapies, medications and studies for both operative and non-operative patients.
Patient Care	Demonstrate increased surgical skills over the course of the rotation.
Patient Care and Professionalism	Maintain accurate and timely patient care records
Practice-Based Learning & Improvement	Demonstrate investigative skills and analytical thinking in problem solving. Develop skills in the use of information technology (literature searches, etc.)
Medical Knowledge and Practice-Based Learning & Improvement	Present clear, organized didactic cases in one-on-one faculty encounters as well as conferences.
Medical Knowledge, Patient Care, and Practice-Based Learning & Improvement	Demonstrate current knowledge about surgical procedures and conditions, based upon review of medical textbooks, journals, and critical evaluation of evidence-based articles prior to seeing patients in the office or the Operating Room setting.
Patient Care, Professionalism, and Systems-Based Practice Patient Care and Professionalism	Demonstrate an awareness of cost-effective care and external patient care resources in day-to-day management and treatment of patients. Treat patients and staff with high ethical standards and sensitivity regardless of culture, age, gender, or disabilities.
Patient Care and Professionalism	Demonstrate a commitment to excellence and professional development by being on time for clinics, patient rounds, and surgical procedures.

Orthopaedic Trauma Surgery Rotation Educational Goals and Objectives Department of Orthopaedic Surgery Curriculum

Director: Dirk Kiner, MD, Professor
Academic Staff: Bryce Cunningham, MD, Assistant Professor
Warren E. Gardner, MD, Associate Professor Michael Yee, MD, Assistant Professor

Levels in which the rotation occurs: PGY-1 (4 months), PGY-2 (4 months), PGY-3 4 months), PGY-4 (2 months) and PGY-5 (2 months)

Overall Rotation Goals and Objectives

PGY-4

The resident continues to demonstrate competence in the following as gained during rotations at the PGY-1, PGY-2 and PGY-3 levels:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Evaluate injured patients both isolated and polytraumatized
Medical Knowledge and Patient Care	Perform a thorough musculoskeletal physical exam of the injured patient
Medical Knowledge and Patient Care	Order appropriate studies of injured patients
Medical Knowledge and Patient Care	Determine diagnosis of patient's orthopaedic injuries
Medical Knowledge and Patient Care	Develop surgical skills in orthopaedic surgery
Medical Knowledge and Practice-Based Learning and Improvement	Review articles for appropriate treatment of each case as they are presented
Medical Knowledge and Patient Care	Create a treatment plan for patient
Medical Knowledge and Patient Care	Discern the principles of acute fracture management (both operative and non-operative) and apply these principles when appropriate

In addition, the PGY-4 Resident increases skills and demonstrates competence as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Professionalism	Carry out treatment plan in a confident manner
Patient Care and Interpersonal and Communication Skills	Communicate to other services involving patient's care so the patient receives the best treatment and outcome
Medical Knowledge and Patient Care	Learn to appropriately manage complications involved in the care of multi-trauma patients, including the initial evaluation discerning a treatment plan in cases requiring surgical intervention, pre-operative planning, and post-operative follow-up
Medical Knowledge and Patient Care	Learn to appropriately manage the multi-trauma patient and the more severe periarticular fractures.

Implementation

The educational objectives are met through a combination of methods and resources. The PGY-4 resident participates as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge and Practice-Based Learning & Improvement	Gains knowledge and participates in a bi-weekly fracture conference. Each conference addresses a different skeletal fracture. The resident reviews and gains knowledge and classification, review of studies, case presentations, and treatment alternatives.
Medical Knowledge, Practice-Based Learning & Improvement, and Interpersonal & Communication Skills	Gains knowledge and participates in a weekly clinical correlations conference. The resident learns via case presentations from the faculty regarding specific orthopaedic trauma topics. The resident discusses outcome studies, treatments of specific fractures, and classifications with the faculty.
Medical Knowledge and Practice-Based Learning and Improvement	Gains knowledge and participates in basic science didactic sessions which address the basic science of fracture, healing, nonunion, osteomyelitis, and biomechanics.
Medical Knowledge, Patient Care, Interpersonal & Communication Skills, and Systems-Based Practice	Interacts with physicians in other specialties by participating in multi-disciplinary trauma rounds held once a month. Cases involving multi-injured patients are presented and discussed among all surgical services; *i.e.*, general surgery, orthopaedics, vascular, and neurosurgery.

Weekly Schedule

Monday	Surgery with Drs. Cunningham, Kiner and Gardner Office
Monday	with Dr. Yee *
Tuesday	Surgery with Drs. Cunningham, Gardner and Yee Office with
Tuesday	Dr. Kiner *
Wednesday	Surgery with Drs. Kiner, Cunningham and Yee
Wednesday	Office with Dr. Gardner *
Thursday	Surgery with Drs. Kiner, Gardner and Yee Office
Thursday	with Dr. Cunningham *
Friday	Surgery with all Attendings

** Specific office coverage to be determined by the Chief Resident in conjunction with the Rotation Director

Resident Responsibilities

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	The resident is involved in all aspects of the care of orthopaedic trauma patients, pre-operatively, during surgery, and post-operatively, under the direct supervision of the Orthopaedic Traumatology faculty members This is critical due to the complexity and potential morbidity of many of the procedures performed on the Trauma Service
Patient Care and Interpersonal and Communication Skills	The PGY-4 resident will serve as Chief Resident of the Service and will be ultimately responsible for all Orthopaedic Trauma Service patients. He or she will have the responsibility to delegate appropriate level responsibilities to the more junior residents assisting on the service.

Assistance in Surgery The PGY-4 Resident:

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	Responsible for assigning resident coverage for all cases on the Orthopaedic Trauma Service.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Assumes patient care responsibility for managing individual patients based upon their individual level of knowledge and experience at the discretion of the attending faculty member supervising the service.
Medical Knowledge and Practice-Based Learning and Improvement	Adequately prepares for planned surgical procedures prior to assisting in the OR (through review of medical textbooks and current medical literature) to gain maximum educational and experience. The resident demonstrates knowledge of the steps involved in procedures.
Medical Knowledge and Interpersonal and Communication Skills	Discusses each surgical case with the attending pre-operatively, intra-operatively and post-operatively.

Assistance in Clinic The PGY-4 Resident:

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Evaluates the patient's injuries and formulates a treatment plan for all patients seen in clinic, assisted by the junior residents. Attending supervision is available and all patients must be evaluated with the attending
Patient Care and Interpersonal and Communication Skills	Examines all patients, including an exam by or presentation to an attending for each patient to discern that the PGY-4 level resident is capable of appropriately examining all patients with regard to injuries they may have sustained
Patient Care and Interpersonal and Communication Skills	Increases skill in performing pertinent physical exam techniques and tips to securing diagnosis. These are reviewed by the faculty.

Morning Rounds The PGY-4 Resident:

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	Participates with the junior resident in attending 6:30 AM x-ray rounds in the orthopaedic library with Drs. Kiner, Gardner, Cunningham and Yee. These rounds are rather brief but include discussion of all patients admitted to the hospital on the previous evening.
Patient Care and Interpersonal and Communication Skills	Reviews and analyzes all appropriate x-rays from those patients and patients that had been seen on the previous day (that had follow-up x-rays).
Patient Care and Interpersonal and Communication Skills	Participates in Trauma Teaching Rounds on Monday through Friday mornings. If any patient requires visitation on either of those mornings, the attending is notified, and the evaluation is performed that morning. Inpatient morning rounds and daily patient care plans are reviewed.

Routines and Protocols The PGY-4 Resident:

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	Gains increased experience with a high volume of operative and non-operative fracture cases, as part of the Orthopaedic Trauma Service at Erlanger, directed by Drs. Kiner, Gardner, Cunningham and Yee. This includes pelvic and acetabular reconstruction as well as periarticular fractures involving the upper and lower extremity. The PGY-4 resident and Orthopaedic Trauma Fellow decide and delegate case assignments
Medical Knowledge and Patient Care	Uses discretion in determining which cases In which to be involved and those to assign to other residents, including surgery related to trauma, i.e., infections, non-unions and mal-unions.

Reading List

COMPETENCY	DESCRIPTION
Medical Knowledge and Practice-Based Learning and Improvement	Hoppenfeld's *Surgical Exposures In Orthopaedics: The Anatomic Approach*
	Skeletal Trauma- 6th edition
	AO Principles of Fracture Management- online
	Campbell's Operative Orthopaedics 14th edition
	Tile's textbook on *Pelvic and Acetabular Surgery*-4th edition
	Letournel's textbook on *Acetabular Surgery*-2nd edition
	Mast book on *Indirect Reduction Technique*
	Orthopaedic trauma Association Resource list of topic specific articles:https://ota.org/education/ota-online-resources/evidence-based-medicine-resource-list#/+/0/score,date_na_dt/desc/
	The Master's Series on *Fracture Management*-4th edition
	Surgical Treatment of Orthopaedic Trauma, 2nd edition, Stannard, Schmidt, Kregor

PGY-4 Skills List

The PGY-4 resident continues to demonstrate competence in knowledge and skills acquired during the PGY-1, PGY-2, and PGY-3 rotations:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Perform a thorough musculoskeletal exam of injured patients both isolated and polytraumatized
Medical Knowledge and Patient Care	Evaluate radiographs of fractured extremities
Medical Knowledge and Patient Care	Place percutaneous skeletal pins for traction of the distal femur and proximal tibia
Medical Knowledge and Patient Care	Apply splints and cast to simple injuries to both upper and lower extremities
Medical Knowledge and Patient Care	Perform simple reduction maneuvers of common fractures in the Emergency Room, i.e., distal radius fracture, ankle fracture dislocation
Medical Knowledge and Patient Care	Order appropriate adjunctive tests and interpret, i.e., CT scan, MRI
Medical Knowledge and Patient Care	Perform minor surgical procedures including hardware removal

	and external fixator placement
Medical Knowledge, Patient Care, Interpersonal and Communication Skills	Describe common surgical procedures to humerus, forearm, hip, knee, and ankle fractures
Medical Knowledge, Patient Care, Interpersonal and Communication Skills	Evaluate patients in clinic, diagnose and discuss treatment options
Medical Knowledge and Patient Care	Perform simple and more complex reductions of extremity fractures in the Emergency Room
Medical Knowledge and Patient Care	Evaluate, diagnose, and plan treatment of common fractures in clinic patients
Medical Knowledge and Patient Care	Perform surgical procedures on diaphyseal fracture of the humerus, forearm, femur, and tibia
Medical Knowledge and Patient Care	Perform surgical procedures on simple articular fractures at the wrist and ankle
Medical Knowledge and Patient Care	Describe and perform surgical approaches to previously described procedures and more complex procedures about the knee, hip, shoulder and elbow
Medical Knowledge and Patient Care	Interpret all radiographic studies on patients with fractures including plane radiography, CT, and MRI

In addition to the knowledge and skills previously acquired during the junior rotations, the PGY-4 demonstrates competence as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Organize treatment plan of multiply injured patient including timing of surgical procedures.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Describe necessary surgical equipment for treatment of fractures of the extremities including backup options.
Patient Care	Perform surgery on periarticular fractures of proximal humerus, distal humerus, elbow, wrist, proximal femur, distal femur, proximal tibia, distal tibia, and foot.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Describe and perform surgical approaches to periarticular fractures of the extremities.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Describe likely complications and plan of treatment of fractures of these extremities.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Evaluate PGY-1, 2 & 3 for their ability to perform their previous level skills.
Patient Care and Professionalism	Organize / administrate control of the Orthopaedic Trauma Service at Erlanger Health System.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Describe and perform acetabular/pelvic surgery with assistance from staff.
Patient Care, Practice-Based Learning and Improvement, and Professionalism	Prepare Orthopaedic Trauma morbidity / mortality case list monthly.
Patient Care, Practice-Based Learning and Improvement and Professionalism	Assist with Orthopaedic Trauma conference every other week.
Medical Knowledge, Patient Care,	Discern appropriate timing of surgery on all patients on

Interpersonal and Communication Skills, and Professionalism	Orthopaedic Trauma Service and coordinate with staff.
Medical Knowledge and Patient Care	Perform any and all surgery necessary involving patients on the Orthopaedic Trauma Service

General Educational Objectives:

During the rotation, the Resident continues to demonstrate competence as follows:

COMPETENCY	DESCRIPTION
Patient Care, Interpersonal & Communication Skills	Perform history and physical examinations on clinic and inpatients under faculty supervision.
Patient Care, Interpersonal & Communication Skills, and Systems-Based Practice	Communicate effectively with patients, faculty, other residents, and multi-disciplinary ancillary staff in order to deliver quality patient care.
Medical Knowledge and Patient Care	Organize a treatment plan to include appropriate therapies, medications and studies for both operative and non-operative patients.
Patient Care	Demonstrate increased surgical skills over the course of the rotation.
Patient Care and Professionalism	Maintain accurate and timely patient care records
Practice-Based Learning & Improvement	Demonstrate investigative skills and analytical thinking in problem solving. Develop skills in the use of information technology (literature searches, etc.)
Medical Knowledge and Practice-Based Learning & Improvement	Present clear, organized didactic cases in one-on-one faculty encounters as well as conferences.
Medical Knowledge, Patient Care, and Practice-Based Learning & Improvement	Demonstrate current knowledge about surgical procedures and conditions, based upon review of medical textbooks, journals, and critical evaluation of evidence-based articles prior to seeing patients in the office or the Operating Room setting.
Patient Care, Professionalism, and Systems-Based Practice Patient Care and Professionalism	Demonstrate an awareness of cost-effective care and external patient care resources in day-to-day management and treatment of patients. Treat patients and staff with high ethical standards and sensitivity regardless of culture, age, gender, or disabilities.
Patient Care and Professionalism	Demonstrate a commitment to excellence and professional development by being on time for clinics, patient rounds, and surgical procedures.

Orthopaedic Trauma Surgery Rotation Educational Goals and Objectives Department of Orthopaedic Surgery Curriculum

Director: Dirk Kiner, MD, Professor
Academic Staff: Bryce Cunningham, MD, Assistant Professor
Warren E. Gardner, MD, Associate Professor Michael Yee, MD, Assistant Professor

Levels in which the rotation occurs: PGY-1 (4 months), PGY-2 (4 months), PGY-3 4 months), PGY-4 (2 months) and PGY-5 (2 months)

Overall Rotation Goals and Objectives

PGY-5

The resident continues to demonstrate competence in the following as gained during rotations at the PGY-1, PGY-2, PGY-3 and PGY-4 levels:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Evaluate injured patients both isolated and polytraumatized
Medical Knowledge and Patient Care	Perform a thorough musculoskeletal physical exam of the injured patient
Medical Knowledge and Patient Care	Order appropriate studies of injured patients
Medical Knowledge and Patient Care	Determine diagnosis of patient's orthopaedic injuries
Medical Knowledge and Patient Care	Develop surgical skills in orthopaedic surgery
Medical Knowledge and Practice-Based Learning and Improvement	Review articles for appropriate treatment of each case as they are presented
Medical Knowledge and Patient Care	Create a treatment plan for patient
Medical Knowledge and Patient Care	Discern the principles of acute fracture management (both operative and non-operative) and apply these principles when appropriate

In addition, the PGY-5 Chief Resident increases skills and demonstrates competence as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Professionalism	Carry out treatment plan in a confident manner
Patient Care and Interpersonal and Communication Skills	Communicate to other services involving patient's care so the patient receives the best treatment and outcome
Medical Knowledge and Patient Care	Learn to appropriately manage complications involved in the care of multi-trauma patients, including the initial evaluation discerning a treatment plan in cases requiring surgical intervention, pre-operative planning, and post-operative follow-up
Medical Knowledge and Patient Care	Learn to appropriately manage the multi-trauma patient and the more severe periarticular fractures.

Implementation

The educational objectives are met through a combination of methods and resources. The PGY-5 resident participates as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge and Practice-Based Learning & Improvement	Gains knowledge and participates in a bi-weekly fracture conference. Each conference addresses a different skeletal fracture. The resident reviews and gains knowledge and classification, review of studies, case presentations, and treatment alternatives.
Medical Knowledge, Practice-Based Learning & Improvement, and Interpersonal & Communication Skills	Gains knowledge and participates in a weekly clinical correlations conference. The resident learns via case presentations from the faculty regarding specific orthopaedic trauma topics. The resident discusses outcome studies, treatments of specific fractures, and classifications with the faculty.
Medical Knowledge and Practice-Based Learning and Improvement	Gains knowledge and participates in basic science didactic sessions which address the basic science of fracture, healing, nonunion, osteomyelitis, and biomechanics.
Medical Knowledge, Patient Care, Interpersonal & Communication Skills, and Systems-Based Practice	Interacts with physicians in other specialties by participating in multi-disciplinary trauma rounds held once a month. Cases involving multi-injured patients are presented and discussed among all surgical services; *i.e.*, general surgery, orthopaedics, vascular, and neurosurgery.

Weekly Schedule

Monday	Surgery with Drs. Cunningham, Kiner and Gardner Office
Monday	with Dr. Yee *
Tuesday	Surgery with Drs. Cunningham, Gardner and Yee Office with
Tuesday	Dr. Kiner *
Wednesday	Surgery with Drs. Kiner, Cunningham and Yee
Wednesday	Office with Dr. Gardner *
Thursday	Surgery with Drs. Kiner, Gardner and Yee Office
Thursday	with Dr. Cunningham *
Friday	Surgery with all Attendings

** Specific office coverage to be determined by the Chief Resident in conjunction with the Rotation Director

Resident Responsibilities

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	The resident is involved in all aspects of the care of orthopaedic trauma patients, pre-operatively, during surgery, and post-operatively, under the direct supervision of the Orthopaedic Traumatology faculty members This is critical due to the complexity and potential morbidity of many of the procedures performed on the Trauma Service
Patient Care and Interpersonal and Communication Skills	The Chief Resident of the Service will be ultimately responsible for all Orthopaedic Trauma Service patients. He or she will have the responsibility to delegate appropriate level responsibilities to the more junior residents assisting on the service.

Assistance in Surgery The PGY-5 Chief Resident:

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	Responsible for assigning resident coverage for all cases on the Orthopaedic Trauma Service.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Assumes patient care responsibility for managing individual patients based upon their individual level of knowledge and experience at the discretion of the attending faculty member supervising the service.
Medical Knowledge and Practice-Based Learning and Improvement	Adequately prepares for planned surgical procedures prior to assisting in the OR (through review of medical textbooks and current medical literature) to gain maximum educational and experience. The resident demonstrates knowledge of the steps involved in procedures.
Medical Knowledge and Interpersonal and Communication Skills	Discusses each surgical case with the attending pre-operatively, intra-operatively and post-operatively.

Assistance in Clinic The PGY-5 Chief Resident:

COMPETENCY	DESCRIPTION
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Evaluates the patient's injuries and formulates a treatment plan for all patients seen in clinic, assisted by the junior residents. Attending supervision is available and all patients must be evaluated with the attending
Patient Care and Interpersonal and Communication Skills	Examines all patients, including an exam by or presentation to an attending for each patient to discern that the PGY-5 level resident is capable of appropriately examining all patients with regard to injuries they may have sustained
Patient Care and Interpersonal and Communication Skills	Increases skill in performing pertinent physical exam techniques and tips to securing diagnosis. These are reviewed by the faculty.

Morning Rounds The PGY-5 Resident:

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	Participates with the junior resident in attending 6:30 AM x-ray rounds in the orthopaedic library with Drs. Kiner, Gardner, Cunningham and Yee. These rounds are rather brief but include discussion of all patients admitted to the hospital on the previous evening.
Patient Care and Interpersonal and Communication Skills	Reviews and analyzes all appropriate x-rays from those patients and patients that had been seen on the previous day (that had follow-up x-rays).
Patient Care and Interpersonal and Communication Skills	Participates in Trauma Teaching Rounds on Monday through Friday mornings. If any patient requires visitation on either of those mornings, the attending is notified, and the evaluation is performed that morning. Inpatient morning rounds and daily patient care plans are reviewed.

Routines and Protocols The PGY-5 Resident:

COMPETENCY	DESCRIPTION
Patient Care and Interpersonal and Communication Skills	Gains increased experience with a high volume of operative and non-operative fracture cases, as part of the Orthopaedic Trauma Service at Erlanger, directed by Drs. Kiner, Gardner, Cunningham and Yee. This includes pelvic and acetabular reconstruction as well as periarticular fractures involving the upper and lower extremity. The Chief Resident and Orthopaedic Trauma Fellow decide and delegate case assignments.
Medical Knowledge and Patient Care	Uses discretion in determining which cases in which to be involved and those to assign to other residents, including surgery related to trauma, i.e., infections, non-unions and mal-unions.

Reading List

COMPETENCY	DESCRIPTION
Medical Knowledge and Practice-Based Learning and Improvement	Hoppenfeld's *Surgical Exposures In Orthopaedics: The Anatomic Approach*
	Skeletal Trauma- 6th edition
	AO Principles of Fracture Management- online
	Campbell's Operative Orthopaedics 14th edition
	Tile's textbook on *Pelvic and Acetabular Surgery*-4th edition
	Letournel's textbook on *Acetabular Surgery*-2nd edition
	Mast book on *Indirect Reduction Technique*
	Orthopaedic trauma Association Resource list of topic specific articles: https://ota.org/education/ota-online-resources/evidence-based-medicine-resource-list#/+/0/score,date_na_dt/desc/
	The Master's Series on *Fracture Management*-4th edition
	Surgical Treatment of Orthopaedic Trauma, 2nd edition, Stannard, Schmidt, Kregor

PGY-5 Skills List

The PGY-5 resident continues to demonstrate competence in knowledge and skills acquired during the PGY-1, PGY-2, PGY-3 and PGY-4 rotations:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Perform a thorough musculoskeletal exam of injured patients both isolated and polytraumatized
Medical Knowledge and Patient Care	Evaluate radiographs of fractured extremities
Medical Knowledge and Patient Care	Place percutaneous skeletal pins for traction of the distal femur and proximal tibia
Medical Knowledge and Patient Care	Apply splints and cast to simple injuries to both upper and lower extremities
Medical Knowledge and Patient Care	Perform simple reduction maneuvers of common fractures in the Emergency Room, i.e., distal radius fracture, ankle fracture dislocation
Medical Knowledge and Patient Care	Order appropriate adjunctive tests and interpret, i.e., CT scan, MRI
Medical Knowledge and Patient Care	Perform minor surgical procedures including hardware removal and external fixator placement

Medical Knowledge, Patient Care, Interpersonal and Communication Skills	Describe common surgical procedures to humerus, forearm, hip, knee, and ankle fractures
Medical Knowledge, Patient Care, Interpersonal and Communication Skills	Evaluate patients in clinic, diagnose and discuss treatment options
Medical Knowledge and Patient Care	Perform simple and more complex reductions of extremity fractures in the Emergency Room
Medical Knowledge and Patient Care	Evaluate, diagnose, and plan treatment of common fractures in clinic patients
Medical Knowledge and Patient Care	Perform surgical procedures on diaphyseal fracture of the humerus, forearm, femur, and tibia
Medical Knowledge and Patient Care	Perform surgical procedures on simple articular fractures at the wrist and ankle
Medical Knowledge and Patient Care	Describe and perform surgical approaches to previously described procedures and more complex procedures about the knee and hip
Medical Knowledge and Patient Care	Interpret all radiographic studies on patients with fractures including plane radiography, CT, and MRI

In addition to the knowledge and skills previously acquired during the junior rotations, the PGY-5 demonstrates competence as follows:

COMPETENCY	DESCRIPTION
Medical Knowledge and Patient Care	Organize treatment plan of multiply injured patient including timing of surgical procedures.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Describe necessary surgical equipment for treatment of fractures of the extremities including backup options.
Patient Care	Perform surgery on periarticular fractures of proximal humerus, distal humerus, elbow, wrist, proximal femur, distal femur, proximal tibia, distal tibia, and foot.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Describe and perform surgical approaches to periarticular fractures of the extremities.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Describe likely complications and plan of treatment of fractures of these extremities.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Evaluate PGY-1, 2, 3 & 4 for their ability to perform their previous level skills.
Patient Care and Professionalism	Organize / administrate control of the Orthopaedic Trauma Service at Erlanger Health System.
Medical Knowledge, Patient Care, and Interpersonal and Communication Skills	Describe and perform acetabular/pelvic surgery with assistance from staff.
Patient Care, Practice-Based Learning and Improvement, and Professionalism	Prepare Orthopaedic Trauma morbidity / mortality case list monthly.
Patient Care, Practice-Based Learning and Improvement and Professionalism	Assist with Orthopaedic Trauma conference every other week.
Medical Knowledge, Patient Care, Interpersonal and	Discern appropriate timing of surgery on all patients on Orthopaedic Trauma Service and coordinate with staff.

Communication Skills, and Professionalism	
Medical Knowledge and Patient Care	Perform any and all surgery necessary involving patients on the Orthopaedic Trauma Service

General Educational Objectives:

During the rotation, the Resident continues to demonstrate competence as follows:

COMPETENCY	DESCRIPTION
Patient Care, Interpersonal & Communication Skills	Perform history and physical examinations on clinic and inpatients under faculty supervision.
Patient Care, Interpersonal & Communication Skills, and Systems-Based Practice	Communicate effectively with patients, faculty, other residents, and multi-disciplinary ancillary staff in order to deliver quality patient care.
Medical Knowledge and Patient Care	Organize a treatment plan to include appropriate therapies, medications and studies for both operative and non-operative patients.
Patient Care	Demonstrate increased surgical skills over the course of the rotation.
Patient Care and Professionalism	Maintain accurate and timely patient care records
Practice-Based Learning & Improvement	Demonstrate investigative skills and analytical thinking in problem solving. Develop skills in the use of information technology (literature searches, etc.)
Medical Knowledge and Practice-Based Learning & Improvement	Present clear, organized didactic cases in one-on-one faculty encounters as well as conferences.
Medical Knowledge, Patient Care, and Practice-Based Learning & Improvement	Demonstrate current knowledge about surgical procedures and conditions, based upon review of medical textbooks, journals, and critical evaluation of evidence-based articles prior to seeing patients in the office or the Operating Room setting.
Patient Care, Professionalism, and Systems-Based Practice Patient Care and Professionalism	Demonstrate an awareness of cost-effective care and external patient care resources in day-to-day management and treatment of patients. Treat patients and staff with high ethical standards and sensitivity regardless of culture, age, gender, or disabilities.
Patient Care and Professionalism	Demonstrate a commitment to excellence and professional development by being on time for clinics, patient rounds, and surgical procedures.