

4th Year Medical Student Emergency Medicine Rotation

WELCOME TO LOUISVILLE!



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Welcome

Welcome to the University of Louisville Department of Emergency Medicine! Founded in 1971, we are one of the oldest programs in the country. Here you will find an atmosphere that promotes clinical excellence and education through collegiality among the residents, attending physicians and staff. Our stability is rooted in dedicated faculty, institutional support, and the recruitment of fun, energetic, and hardworking residents that thrive in the setting of autonomous yet supervised practice. It is the approach that hones our residents' clinical and decision making skills well prior to their graduation.

Again, welcome. Prepare to work hard, study, and learn skills that you can use throughout your career.

Introduction to EM

Emergency Medicine is a fun, fast-paced, fluid, and exciting specialty. We treat whatever may show up at the door. You will have the opportunity to provide critical, surgical, medical, gynecological, obstetrical, psychiatric, and even palliative care to a wide range of patients.

Procedures abound in the emergency department and you are invited to participate. Frequently, we perform trauma and medical resuscitations, FAST scan ultrasounds, central venous line placements, tube thoracostomy, fracture & dislocation reduction and splinting, intubation, incision & drainage, and laceration repair.

We have a lot for you to do and learn. Come to the shift excited and be prepared to get your hands dirty.

Introduction to EM

Student Goals and Objectives

- Develop good clinical judgement and learn to apply it to patient care
- Deliver appropriate and compassionate emergency care
- Broaden and apply your medical knowledge to patient care
- Work to communicate effectively with both patients and colleagues
- Always remain ethical, responsible, and reliable
- Learn what resources are available to the ED and how to utilize them
- Learn to recognize and treat a patient in distress

Introduction to EM

Student Core Competencies

- Patient Care
- Medical Knowledge
- Problem-based Learning
- Interpersonal Communication Skills
- Professionalism
- Systems-based Practice

Introduction to EM

What we expect of you:

- Strong work ethic with a desire to learn and then teach what you learn.
- Punctuality
- Follow-through with what you are asked/volunteer to do
- If a patient appears to be in distress, you need to **IMMEDIATELY** get help from an upper level resident or attending. **DO NOT** try to handle it yourself!
- Professionalism is a must! All staff – from environmental services to patients and consultants – are to be addressed in a professional and respectful manner.
Remember, this is a team sport

Orientation

- **On your first day, arrive in the ED academic office at 9:00 AM. It is located adjacent to the emergency department. Just ask anyone at the ED secretary's desk and they will show you back.**
- Dress code is business casual
- You will be making your own schedule this day, so bring your phone, planner, lunch napkin, or whatever else you use for organization.
- You will tour the department, be given your badge, and all other formalities this day.
- This will also be your opportunity to meet with the student coordinator, review the syllabus, ask questions, and get to know the other students on the rotation
- Plan for this orientation to last ~3 hours

Scheduling and Attendance

- Scheduling coverage is part of the EM career. Therefore, we leave it to YOU to create your own schedules. Here are the rules:
 - Students are required to work 15 shifts in the ED, 4 of which must be on a weekend.
 - Your 15 shifts must be **evenly** divided between the three shift times each day
 - 08:00 AM – 04:00 PM
 - 04:00 PM – 11:00 PM
 - 11:00 PM – 08:00 AM
 - You will need to be available the entire four weeks of your rotation. You cannot frontload or backload your schedule to complete it in a shorter time.
 - You may not work more than 5 consecutive days, and must have at least 8 hours between shifts.
 - No more than 2 students may work the same shift
 - Switching is allowed, but you are responsible for finding a student to switch. **All switches need to be approved by Alescia Bjelland 24 hours before the scheduled shift.**

Scheduling and Attendance

Other Responsibilities:

- Student Didactic Lectures: These are **mandatory** lectures/hands-on teaching sessions presented by the residents. The schedule will be provided to you by Alescia Bjelland. Every student *must* attend each of these unless you worked the 11PM – 8AM shift just prior.
- Resident Lectures: The department has lectures scheduled for the residents each Wednesday morning, typically 9AM -12PM. They are held in the ED conference room and cover a wide array of useful topics. It is *highly recommended* that you attend these conferences during your rotation. Topics and exact times can be found on the conference schedule posted on the conference room door.
- 16th Shift: In addition to the 15 shifts you must complete in the ED, you must also do one extra shift during your rotation with **one** of the following:
 - Procedural shift in the ED
 - Poison Control shadow
 - Air Methods helicopter ride-along

Late/Missed Shift

In the event that you are unable to attend a shift or will be late due to an emergency or illness, you are responsible for:

- Calling the main department at (502) 562-3015 and alerting the third year resident currently working.
- Calling your student coordinator (Alescia Bjelland) at (502) 852-1035 to alert her and reschedule your shift. **You will be responsible for making up any missed shifts.**

If you find out that you will not be able to work a shift 24+ hours in advance, you **must contact Alescia ASAP to reschedule the shift**. Again, you are able to switch shifts with other students, but it is your responsibility to arrange this.

Interview Season

- Interviews are important!
- Your schedule should accommodate most of your interviews as your schedule is self-made and flexible.
- You are required to complete 15 shifts, regardless if you have 0 interviews or 12.
- If you have an interview scheduled on a day you are supposed to work, it is **your** responsibility to switch shifts and make it up.
- If you are applying to UofL for a residency, there is a chance that you will interview during the month of your rotation.
 - The interview day will be announced in time for you to change your schedule (if necessary)

Student Roles and Responsibility

All students are responsible for the following:

- Completing histories and physicals
- Formulating clinical decisions
- Ordering treatment and additional tests with supervision
- Learning and performing procedures
- Determining patient disposition
- Learning how to obtain and completing consultation as directed by your resident
- Assisting in treatment of critically ill patients in the trauma room (Room 9)
- EMR documentation of ROS and PMHx/SHx/FHx
- Check your email daily for updates

Typical Student Shift

- Arrive 15 minutes early to your shift
- At the beginning of each shift, all residents and attending(s) will round on all patients in the department. At this time, the leaving residents will turn over their remaining patients to the oncoming team.
- Make sure that each patient you go to see appears stable. If the patient appears to be unstable or have a true emergency, get a resident **immediately**. Caution will never be viewed as a weakness. If a resident is not immediately available, ask a secretary or nurse to page the resident to the room STAT.
- Take the patient's history, PMHx, etc. Perform a physical exam. Remember, you are only able to *document* ROS, PMHx, SHx, and FHx. But you must still perform a full H&P.
- Formulate a DDx and plan of action
- Present a concise history, physical, diagnosis, and plan to an upper-level resident. Include interpretation of completed labs/imaging/EKG as well as what else you would like to order and likely disposition (See slide 17)

Typical Student Shift

- Your resident will then see the patient, and they will assist you in ordering relevant studies.
- Once the orders are placed, be sure to follow up and get the results of the labs and x-rays. However, you must be quick or the residents will beat you to it!
- Once disposition is determined, the resident will guide you in obtaining consultation, admission, or discharge
- If procedures are necessary, you will be expected to participate
- Learn something from every patient you see. Try to pick up a wide range of chief complaints and patients.
- Keep enough patients to stay active but not overwhelmed.
- At the end of the shift, we will round again. **DO NOT LEAVE UNTIL ROUNDS HAVE FINISHED!**
 - You may be called to present on any of your patients that are being turned over. This will be like your initial presentation (slide 17 for example). Be prepared to be asked questions. You are not expected to know everything, but you will be responsible for the basics. Know why you ordered/performed what you did.

Example Presentation

Pt is a 67 y/o AA male. Presented to the ED today with worsening angina with exertion. Pain free on presentation. Came because his wife made him. Hx of CAD, CABG. Pt is a smoker for 40 years. PEx is unremarkable. Labs so far all negative, including cardiac enzymes. EKG unchanged from 6 months ago, with evidence of an old inferior infarct. Last cath 3 years ago. Pt has had ASA, O2, IV and lovenox. Suspect unstable angina. Will consult Cardiology. Plan for Cardiology admission for likely repeat cath.

- If you use a term, know the definition. A likely question here is “What are the different types of angina and how do you treat them?”
- Know why you did things. “Why did you give this patient lovenox?”
- Questions are meant to teach, not punish

Example Presentation

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Resources and Reading

Books

- Rosen's and Tintinalli's are the staples for Emergency Medicine
- Read about the topics outlined in the study guide
- All students are provided with a loaned copy of Step-Up to Emergency Medicine

Organizations

- www.acep.org
- www.emra.org
- www.saem.org
- www.aaem.org
- www.abem.org

Evaluation

Student grades will be compiled from two components:

- Shift evaluations will count for **70%** of your final grade
 - An evaluation will be completed from your upper-level resident at the end of each shift
 - Each student should have a *minimum of 10 evaluations*
- End-of-clerkship exam will account for **30%** of your final grade
 - Online, NBME exam. The date and time will be provided during orientation
 - See study guide for list of topics covered
- **Final grade breakdown**
 - 87 or higher : Honors
 - 81 – 86.4 : High Pass
 - 60 – 80.4 : Pass

Evaluation

Shift Evaluations are based on core competencies

- Patient Care
- Medical Knowledge
- Problem-based Learning
- Interpersonal Communication Skills
- Professionalism
- Systems Based Practice

Evaluation

MEDICAL STUDENT PERFORMANCE EVALUATION
DEPARTMENT OF EMERGENCY MEDICINE
UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE
March 14 – April 8, 2011

Name: _____

PLEASE EVALUATE ALL SIX COMPETENCIES

1. PATIENT CARE	Excellent	Above avg	Average	Below avg	Poor
Demonstrates appropriate clinical judgment Provides essential clinical information Prioritizes plan of care for ED patients Keeps medical record current **Develops differential diagnosis					
2. MEDICAL KNOWLEDGE					
Demonstrates appropriate level of medical knowledge Makes use of available resources Asks pertinent clinical questions Reaches decisions with confidence ** Develops cohesive treatment plan					
3. PRACTICE-BASED LEARNING AND IMPROVEMENT					
Reviews and learns from errors Accepts constructive criticism well Takes initiative for learning					
4. INTERPERSONAL AND COMMUNICATION SKILLS					
**Communicates appropriately & professionally with patients Counsels/educates patient & family Documentation of patient care is complete & legible Communicates effectively with other members of the health care team					
5. PROFESSIONALISM					
Exhibits ethical behavior in the ED Arrives for assigned shifts prepared and in a timely manner Exhibits leadership abilities Demonstrates reliability & accountability **Assumes responsibility willingly; exhibits strong work ethic **Given the necessary guidance, what is your prediction of future success					
6. SYSTEMS-BASED PRACTICE					
Exhibits awareness of cost effectiveness Utilizes hospital resources to optimize care Gives appropriate/attainable follow-up instructions Effectively manages patient flow/turnover					

COMMENTS: (Required)

DATE: _____

EVALUATOR: _____

Blackboard Evaluation

After your final shift and written exam, you will be asked to evaluate the residents

- Please fill these out honestly. They value your feedback greatly, especially on the effectiveness of their teaching skills.
- These evaluations are located on Blackboard under “Course Documents”
 - If you are a visiting student, Alescia will email you with access the last week of your rotation
 - **These must be completed to receive your final grade**

Important to Know

Your final grade will not be released until you have:

- a) Completed the resident and course evaluation
- b) Signed ALL of your patient charts
- c) Returned your completed 16th Shift form to Alescia

Study Guide

The following information is meant as a *broad* guide for the questions you may encounter on the final exam. Any and everything about each topic is fair game!

Study Guide

HEENT

- Otitis media
- Bell's Palsy
- "The red eye"
- Pharyngitis
- Vertigo
- Ocular foreign body
- Glaucoma
- Epistaxis
- Globe rupture

Environmental

- Lightning
- Hypothermia
- Hyperthermia
- Diving
- High altitude sickness
- Drowning

Study Guide

Toxicology

- Beta-blockers
- Snake bite
- Cyanide
- Tylenol
- ASA
- TCA
- EtOH
- CO
- Spider bite

Trauma

- Resuscitation
- Management of multiple trauma
- Burns
- Cervical X-rays
- EMS Management
- Shock

Study Guide

Respiratory

- Dyspnea
- Airway Management
- ABG's
- PE
- PNA
- Asthma/COPD

Wounds

- Suturing
- Wound Care

Abdomen

- Gallbladder
- Pyelonephritis
- Abdominal pain
- Acute abdomen
- SBO
- Mesenteric ischemia

Pediatrics

- Trauma
- Infections

Study Guide

OB/GYN

- Pregnancy
- Eclampsia
- Abortions
- Vaginal bleeding
- Ectopic Pregnancy
- PID

Dermatology

- Stevens Johnson Syndrome
- RMSF
- Lyme Disease

Neurology

- Meningitis
- CVA/Stroke
- Mimicry of CVA
- Seizures
- Headaches

Psychiatric

- Safety Measures
- Suicidal/Homicidal Pt
- Psychosis

Study Guide

Orthopedics

- Sprains
- Splints
- Fractures
- Hand Injuries
- Arthritis

Cardiology

- MI
- Arrhythmias
- CXR
- ACLS

Endocrine

- Adrenal
- Thyroid
- Anaphylaxis
- Graves Disease
- DKA

Hospital Policies

Fire Safety: we follow the RACE method

- R – **Rescue** persons from fire, know exit locations and fire compartments, feel doors for heat, search while yelling “blue flash” or “fire”
- A – **Activate** alarm pull station while yelling “blue flash” or “fire”. Dial 20 (code phone) to report fire location
- C – **Control/Contain** the fire, **Close** all windows and doors
- E – **Extinguish** or **evacuate** using portable fire extinguishers

Hospital Policies

Blood Exposure – If you experience a needle stick or other occupational blood exposure, please do the following:

- Obtain consent for the patient involved for HIV testing and contact the nursing supervisor
- Complete and incident report
- If you have a needle stick from a high-risk patient, call (502) 852-6446 immediately and ask to speak with MD on call. Start PEP within one hour.
- Follow all exposure protocol and if you have any questions, call (502) 852-6446, which is answered 24/7

The Department

The following is a quick tour of our department of our department, with relevant information about each area.

This will give you an idea of the layout of the ED, where people can be found, and the ED flow



Triage

Patients sign in here and are sent to the proper location based on illness

Occasionally, residents are called to triage for evaluation of a pediatric patient, abnormal triage EKG, etc.



Room 9

Room 9 is our medical and trauma resuscitation room. There are four bays, one of which is seen here.

When you are in the ED and hear a buzzer sound followed by a “Room 9” page, please stop what you are doing and proceed to Room 9.



Room 9

Generally, only critically ill patients are seen in Room 9. Everything we need is right at hand and things move very quickly.

As your rotation progresses, you will be asked to participate with increasing frequency in Room 9, so pay close attention!



Room 9

As the residents become more comfortable with your skills, you may be asked to perform procedures in Room 9. So read up on nasal and oral intubation, chest tubes, central lines, and splints

If you do not know how to perform a procedure or are uncomfortable doing it, say so! Do not pretend to know how to do something you don't know how to do. Your resident will teach you, and you can do the next one.



Room 9

Sometimes Room 9 patients are not serious and you may be dismissed to the department. When dismissed, please return to the department and continue seeing patients.

Sometimes the patient is too ill to be a teaching case. In this instance, you may be asked to stand aside and watch. This is only ever done when a patient's life is on the line. Please do so quickly and do not take it personally.



Main Department

This is a partial view of the main department. The design is an arena style with patient rooms on the periphery and staff seating located centrally



This is a view of where the residents and attendings sit and work. Please sit at the single monitor computers – upper levels will sit at the double-monitors.



Main Department

This is a picture of the glass room in the center of the dept. We call it the “fish bowl”. This is where our consulting services will do their work. That is Dr. Danzl, our chairman, on the phone. Of note, his name also appears on the cover of Rosen’s.

The phones and radios in this picture are located behind the resident’s seat. These are used to take transfer calls from EMS and AirMethods. **Please do not use these phones at any time.**



Main Department

Remember, EM is a team sport and collegiality is a hallmark of our program. Can you imagine what it would be like if no one took pride in keeping the ED clean?

An important thing to learn is that being nice to nurses and other staff will save you a lot of time and work. Plus, they deserve it. They work even harder than we do.



Main Department

Often, a patient or family will ask for food or drink. Other times it may be clinically important for the patient to eat/drink (diabetics, PO before d/c, etc.). Pictured here is the fridge and coffee maker where you can get drinks or crackers. Additional food is located at the secretary's desk.



Radiology

We have our own dedicated radiology suites and CT scanner. They are located in the hall just behind the department. This is also where you can find our radiologists for direct consultation.



EPS

EPS (Emergency Psychiatric Services) is our department for EM patients that present with only psychiatric complaints. Psychiatrists staff this area 24/7. Patients with both psych and medical complaints will be seen in the main ED, and then transferred to EPS once medically cleared.



First Care

First Care is a fast track area. It is staffed by midlevel providers. Patients presenting to the ED with minor complaints are sent here.



Important Contacts

- Course Director
Raymond Orthober, MD
raymondorthober@hotmail.com
Cell/text 502-759-0515
- Student Coordinator
Alescia Bjelland
akbjel01@louisville.edu
502-852-1035
- Help Desk (IT)
502-562-3637 (3637 from ED phone)