

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 this approach that hones our resident's clinical and decision making skills well prior to their graduation.

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

Introduction to EM

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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 and dislocation reduction and splinting, intubation, incision and 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

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■ Student Goals and Objectives

- Develop good clinical judgment and learn to apply it 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

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■ Student Core Competencies

- Patient care
- Medical knowledge
- Problem based learning
- Interpersonal communication skills
- Professionalism
- Systems based Practice

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■ What we expect from you

- Strong work ethic with a desire to learn and then teach what you learn
- Punctuality
- Follow through with what you are asked or 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 and handle it by 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

- **1-2 weeks prior to the scheduled start of your rotation please call to confirm at 502-852-1273**
- On your first day, arrive in the ED academic office at 10am. It is located in the emergency department. Just ask anyone and they will show you back
- Dress is business casual
- You will be making your own schedule this day, so bring your IPhone, planner, lunch napkin, or whatever you use for organization
- You will tour the department, be given your ID and pass cards, and all the other formalities this day.
- This will also be your opportunity to meet with course director, review the syllabus, ask question, and get know the other students on the rotation

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, of which 4 must be on a weekend, the rest evenly between D/E/N
 - All shifts (arrive 15min early)
 - 8a-4p
 - 4p-12a
 - 11p-8a

Scheduling and Attendance

- You must do one extra shift during the month at one of the following
 - Procedure shift in ED
 - Poison Control
 - Air Methods Lifeflight
- There is an attendance sheet that needs to be signed and returned to Robin at the end of the rotation

Scheduling and Attendance

- No more than 2 students may work any one shift.
- Work hour rules apply to students
 - No student may exceed 60 work hours in one week
 - Students may not work double shifts
 - Must not work more than 5 days in a row
 - Must have as many hours off between shifts as they worked the previous shift (i.e. work 8 off 8 hours)
- Switching is allowed, but you are responsible for finding a student to switch. All need to be addressed with the course director or Robin Thixton 24 hours before the scheduled shift
- Students are **required** to attend residents' lecture days during the rotation. Lectures are on Tuesday and Wednesday from 9a-11a.
 - Exceptions are working the night before or the day of

Scheduling and Attendance

- Students are required to attend the student didactics lectures and hands-on teaching sessions presented by the residents or attendings. Schedules for these lectures will be distributed at orientation. All students are required to come prepared and actively participate. These should be fun.
- Students scheduled to work on Tuesday and Wednesday day shifts will work directly with the attendings while residents are at conference. Each student should try to schedule at least one to two of these shifts a rotation. You are excused from conference during this time.
- In the event that a student is unable to attend a shift due to an emergency or illness, the student is responsible for calling (502) 562-3015 and speaking to the third year resident on that shift.

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 suppose to work, it is **your** responsibility to switch shifts and make it up

Student Roles and Responsibility

- All students are responsible for the following:
 - Completing history 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 room 9

Typical Student Shift

- Arrive for your shift 15 minutes early
- At the beginning of each shift, we round with an attending on all patients in the department. At this time, the residents turn over patients under their care to the oncoming residents.
- For new patients, when you go in the room make sure that the patient appears stable. If the patient appears to be unstable or have a true emergency, get a resident immediately.

Typical Student Shift

- AGAIN...If you are at all concerned about the well being of the patient do not hesitate to get the upper level resident **IMMEDIATELY**.
Caution will never be viewed as weakness. If a resident is not readily visible, go to the secretary's desk and ask them to page them to that room STAT.
- Take the patient's history, PMHx, etc. Perform a physical exam. **We ask that you only document past medical, surgical and social history with a review of systems.** The resident is responsible for documentation of the HPI and physical exam.
- You will be documenting on an electronic T-System. An on-line orientation must be completed prior to your first shift. You should receive more information from Robin Thixton and Rita Bole
- Formulate a differential diagnosis
- Formulate a plan of action
- Present a concise history, physical, diagnosis, and plan to an upper level resident. Include labs and x-rays you would like, along with the likely disposition

Typical Student Shift

- You and the resident will then see the patient, and they will assist you in ordering relevant studies.
- Once the orders are placed, be sure you follow up and get the results of the labs and x-rays. However, you must be quick if you want to beat the resident to them.
- Once disposition is determined, the resident will guide you in obtaining consultation, admission, or discharge
- Any procedures that need to be performed, you will be expected to participate
- Learn something from every patient you see
- Keep enough patients to stay active but not overwhelmed

Typical Student Shift

- At the end of the shift, we will round again.
- You will be responsible for presenting those patients you have to an oncoming resident in front of the attending. Be prepared to be asked questions related your medical knowledge of the diagnosis or injury. Usually, the residents have already taught this to you.
- You are not expected to know everything. But you are expected to at least know the basics regarding your patient's condition.
- Remember, this is an ED, so your presentations will vary in length. They should be concise with pertinent positives and negatives throughout and conclude with a disposition. See the example on the next slide

Typical Student Shift

- Sample presentation
 - GM 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. Physical exam unremarkable. Labs all negative including enzymes. EKG unchanged from previous with evidence of an old inferior infarct. Last Cath 3 years ago. Pt has had ASA, O2, IV, Lovenox. Dx is unstable angina. Cardiology consulted. Last check 30 min ago patient was pain free. Patient to be admitted to cardiology 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 you things and to also make sure that the residents are teaching you as well.

Didactics

- Didactic lectures, geared directly towards students will be given throughout your rotation. You are expected to attend all (unless on previous night shift). Several will be hands on experiences. The lecture topics and time/location will be emailed to you at least one day prior so be sure to check your email nightly.
- You are encouraged to attend any or all resident lectures held on Tuesdays and Wednesdays from 9:00a-11:00a (if not scheduled to work in the department).

Resources and Reading

- Books
 - Rosen's and Tintinalli are the staples for emergency medicine
 - Read about the topics outlined in the study guide
- Organizations
 - www.acep.org
 - www.emra.org
 - www.saem.org
 - www.aaem.org
 - www.abem.org

Evaluation

- Student Grades will be compiled from three components with the following weights
 - 70%
 - evaluation by residents and faculty
 - Each student should have a minimum of 15 evals
 - One of your evaluations can be discarded
 - 5%
 - On line SAEM quizzes
 - 25% final exam
 - There is an optional section at the end of the test which must be completed in order to **honor** the course

Evaluation

- Written Evaluations
 - Based on Core Competencies
 - Patient care
 - Medical knowledge
 - Problem based learning
 - Interpersonal communication skills
 - Professionalism
 - Systems based Practice

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

	Excellent	Above avg	Average	Below avg	Poor
1. PATIENT CARE 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: _____

Evaluation

- Written Exam

- This is a 100 question exam, meant for a knowledge level of at least PGY-1
- Use the study guide for list of topics covered
- The optional section consists of multiple choice questions that MUST BE COMPLETED in order to **honor** the course

Evaluation

- Quizzes

- You are required to complete **three** quizzes during the rotation
- The quizzes can be found at
 - <http://www.saemtests.com>
 - You need to complete 3 by the end of the rotation
 - You can do as many as you want
 - Only the first 3 submitted will be counted toward your grade

Evaluation

- You will be asked to evaluate the residents just as they are asked to evaluate you.
- Please fill these out honestly as they value your feedback greatly, especially on the effectiveness of their teaching skills
- Resident evaluations are located in Blackboard.

Blackboard

- Blackboard is the exam system used by UofL
- Contains the final written exam, honors portion, resident evaluation, and course evaluation
- Access to the final exam and evaluations is one week prior to and one week after your last rotation day.

T-Systems

- Electronic patient medical record
- Students are to document past medical, surgical and social history with a review of systems, and procedure notes.
- Remember to lock your charts after documenting.
- Contact Rita Bole, RN in the ED office for questions regarding charting or locking charts.

IMPORTANT TO KNOW

- Your final grade will not be released until you have:
 - a) Completed the resident and course evaluation in Blackboard
 - b) Locked ALL of your patient charts in T-System
 - c) Return copy of Current DX and Treatment in Emergency Medicine Textbook

Study Guide

- The following information is meant as a broad based guide for the questions one may encounter on the test at the end of the rotation. Any and everything about each topic is considered 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
- P.E.
- Pneumonia
- Asthma/COPD

■ Wounds

- Suture
- 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

- Ortho
 - 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 extinguish

Hospital Policies

- **Blood Exposure** - If you experience a needle stick or other occupational blood exposure, please do the following:
 - Obtain consent from the patient involved for HIV testing and contact the nursing supervisor
 - Complete an incident report
 - If you have a needle stick from a high risk patient call 852-6446 immediately and ask to speak to the MD on call. Start PEP within one hour
 - Follow all exposure protocol and if you have any questions, call 852-6446 which is answered 24 hours a day

The Department

The following is a quick tour 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 an idea of how the ED flows.



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, to
assess for stability to
transfer to Kosair
Children's Hospital



Room 9

Room nine is our medical and trauma resuscitation room. This is one of the four bays pictured on your right.



When you are in the main department and hear a buzzer sound followed by “Room 9,” please drop what you are doing and proceed to this room to participate.



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 allowed to participate with increasing frequency in room 9. So get yourself prepared by paying close attention at first.



Room 9

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

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



Room 9

Sometimes room 9s are not that serious and you may be dismissed to see patients in the department. When dismissed, please return to the main department and help the resident not in room 9.

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



Main Department

This is a partial view of the main department.

The design is an arena style with patients room peripherally and staff located centrally.



This is a view of where the residents and attending sit and work. The third year resident sits at the far computer, and the second year at the one closest to you. There are x-ray reading computers located behind each resident. This is where you will come to present your patients to the residents.



Main Department

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



The phones and radios in this picture are located right behind the resident's seat. These are used to take transfer calls from other facilities and to provide medical control for EMS. **Please do not use these phones at anytime.**



Main Department

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



An important thing to learn from this point on in your training is that being nice to nurses will save you a lot of time and work. Plus, they deserve it, they work as hard or harder than we do.



Main Department

We also see a good number of homeless patients. Often they will ask for a sandwich. This is the refrigerator where you can get food for them if it is approved by your resident. Sometimes, this is a good way to break the ice and make them feel more welcome and forthcoming about their complaints.



X-ray

We have our own dedicated radiology suites and CT scanner. They are located in the hall just behind the department. There is also 24 hr radiologist coverage. They can be found for direct consultation at anytime.



EPS stands for Emergency Psychiatric Services. Patients that present to the ED with only a psych complaint will be seen here by a psychiatrist 24 hours a day. Patients with both psych and medical complaints will be seen in the main department. If their medical condition permits, the patient will be transferred to EPS after appropriate care.



First Care

First care is a fast track area. It is staffed by mid-level providers, usually in the afternoons and evening. Patients presenting to the ED with minor complaints are sent here during their normal hours of operation. All other times, they are seen in the main department.



Important names and Numbers

- Course Director
Melissa Platt, MD
- Course Coordinator
Robin Thixton
- Residency Director
Mary Nan Mallory, MD
- Chairman
Dan Danzl, MD

- All can be reached by calling the office at 502-852-5689 or by email