EMERGENCY MEDICINE

Emergency Medicine is a time-dependent specialty that demands the immediate decision-making and timely actions necessary to prevent death or further disability for patients in health crises. It is practiced as patient-demanded and continuously available care for a patient population that is unrestricted and presents with a full spectrum of episodic, undifferentiated physical and behavioral conditions.

The student's responsibility in the ER is to serve as the primary caregiver to the patient in conjunction with other ED staff members and the supervision of the attending physician on duty. The physician assistants and certified nurse practitioners **will not** supervise or evaluate medical students performing a clerkship rotation in the ED. Students are discouraged from serving only in an information- gathering role. Students will be expected to perform a directed history and physical examination, formulate appropriate differential diagnoses, and institute a clinically indicated evaluation and treatment plan after discussion with the attending physician. This responsibility will also include abstracting information from the patient's medical record, serially monitoring the patient for changes in clinical status and keeping the patient informed during the course of their ED evaluation.

Procedures that need to be performed on a medical student's patient will be completed by the student under the supervision of the attending physician, unless the attending physician determines that a higher level of expertise is required in order to safely complete the procedure.

As the primary physician practicing under the direction of our ED staff, your educational goals and objectives are as follows:

Course Goals

Overall Goal: The development of the student's clinical skills, including the diagnosis and management of life-threatening conditions in the undifferentiated patient with a secondary emphasis on basic procedural skills.

Goals:

- 1. The student will be able to perform a directed, problem-focused history and physical examination.
- 2. The student will formulate a differential diagnosis addressing urgent and emergent conditions consistent with history and physical examination findings.
- 3. The student will demonstrate proficiency in basic patient care and monitoring procedures.
- 4. The student will become proficient in basic wound management.
- 5. The student will become proficient in basic splinting/immobilization techniques.
- 6. The student will become proficient in basic EKG interpretation.
- 7. The student will develop interpersonal skills and professional attributes necessary to provide care in the Emergency Department.
- 8. The student will under the role the Emergency Department plays in the greater health care system and how the Emergency Physician may facilitate patient care, including pre-hospital care.

Contact the Emergency Medicine CST Coordinator (https:// catalog.unmc.edu/medicine/curriculum/phase3/career-specialitytracks/) with scheduling questions unless a course administrator is specified for a course in the course description.

EMED 733 TRAUMA CENTER/EMERGENCY DEPARTMENT - UNIVERSITY HOSPITAL 4 Credit Hours

SUB-INTERN

This is an experience at the Nebraska Medical Center University Hospital, which will show the operation of an emergency department in a large community by full-time faculty of the College of Medicine and allows students direct patient contact under supervision of an attending physician. In addition, the rotation includes wound care and procedure lab, extremity injury and immobilization lab, simulation lab and a post-test (NBME EM Shelf Exam). Paramedic squad observation will be offered but is not mandatory. Rotations Offered: Each 4 weeks. Instructor. Dr. Lisa Meinke

Typically Offered: FALL/SPR Capacity: 4

EMED 734 HYPERBARIC AND UNDERSEA MEDICINE 4 Credit Hours SUB-INTERN

Undersea and hyperbaric medicine specialists work with other physicians to treat infectious, traumatic, radiation, surgical and iatrogenic emergencies. This is highly specialized work founded on a large and rapidly progressing literature base. Hyperbaric treatments are advocated by specialists in oral maxillofacial surgery, trauma surgery, infectious disease, internal medicine, pediatrics, toxicology, orthopaedics, critical care, and other fields as highly efficacious, scientifically sound, and fiscally responsible. Medical students in those schools associated with hyperbaric facilities learn state of the art treatment of medical and surgical emergencies, including air gas embolism, necrotizing fasciitis, gas gangrene, osteomyelitis, radiation injuries, sudden hearing loss, sudden vision loss, avascular necrosis, gas toxicities, decompression illness, thermal burns and comprised flaps or grafts. This course is designed to introduce the student to the principles of hyperbaric, diving and undersea medicine. The student will have the opportunity to observe monoplace hyperbaric medicine treatments and will review theory of the use of hyperbaric in the 14 UHMS approved therapies. Complication and controversies of HBO use will be discussed in lecture format. The student will review common wound problems, diabetes infection, nutrition, venous statis and arterial insufficiency. Students will be exposed to patients with radiation injury, diabetic wounds, vascular issues, and infectious issues such as osteomyelitis and necrotizing fasciitis. Didactics will include undersea and diving related topics such as gas embolism, decompression illness, inert gas narcosis, barotrauma, and marine envenomations and environmental illness. The Hyperbaric Medicine Center at UNMC is the only 24-hour per day hyperbaric medicine referral center with critical care capability from Des Moines to Denver and Kansas City to Minneapolis. Rotations Offered: Each 4 weeks. Prerequisite: Not open to visiting students.

Instructor: Dr. Jeffrey Cooper Typically Offered: FALL/SPR Capacity: 1

EMED 735 E.D. BELLEVUE - COMMUNITY EMERGENCY MEDICINE 4 Credit Hours

ELECTIVE

This is an experience at the Nebraska Medicine Bellevue Medicine Center Emergency Department (30,000 visits/yr.). This rotation is designed to expose students to the operations and patient care provided at a community based mid-sized ED by full-time faculty of the College of Medicine. Student will provide direct patient care under supervision of an attending physician. The rotation also includes dedicated didactic and simulation 4 hours including wound care and procedure lab, extremity injury and immobilization lab. There is no end of rotation standardized test. Rotations Offered: Each 4 weeks.

Prerequisite: Not open to visiting students. Instructor: Dr. Amy Cutright and Dr. Lisa Meinke

Typically Offered: FALL/SPR Capacity: 6

EMED 736 E.M. ADVANCED EMERGENCY MEDICINE 4 Credit Hours SUB-INTERN

Student will complete 16 shifts during the rotation at either UNMC University or UNMC Bellevue emergency departments. Students will act as interns and evaluate patients under the direct supervision of faculty. They will participate in all aspects of patient care including HP, clinical documentation, pending orders for faculty review and disposition management. Student will complete 4 weeks of the "Bridge to EM" curriculum, a nationally developed curriculum designed to prepare students for the transition to residency. Students will also complete a 4 hours intensive POCUS session to learn common EM bedside ultrasound exams. Rotations Offered: January, February, March.

Prerequisite: EMED 733. Not open to visiting students. Instructor: Dr. Amy Cutright and Dr. Lisa Meinke Typically Offered: SPRING Capacity: 8

EMED 737 EMERGENCY POINT OF CARE ULTRASOUND 4 Credit Hours ELECTIVE

Students will gain an immersive and invaluable experience in bedside ultrasound. The focus will be emergency bedside ultrasound as scanning shifts and clinical shifts will occur in the Emergency Department. The students will be expected to gain foundational knowledge through selfstudy by utilizing free online textbooks and resources and completion of assigned online modules. Students will be expected to complete all assignments to also include a journal article presentation, a case presentation, and a short whiteboard talk on an ultrasound topic of their choosing. The students will also attend weekly QA sessions with ultrasound faculty members as well as attend weekly Emergency Medicine Residency conferences. The students will perform ultrasound examinations on peers, through simulation, and on real-life patients in the Emergency Department. The students will be performing training studies on voluntary patients in the Emergency Department. The students will perform two clinical shifts working directly with ultrasound faculty towards the end of the rotation to serve as a summative assessment. Students will be supervised directly by Dr. Bonk, or other ultrasound faculty members during all clinical shifts, but students will be allowed and expected to perform independent scanning during their scanning sessions. Rotations Offered: Each 4 weeks.

Prerequisite: Completion of one prior EMED rotation required. ACLS certification highly recommended. Not open to visiting students. Instructor. Dr. Cody Bonk Typically Offered: FALL/SPR Capacity: 2

EMED 761 AWAY EMERGENCY ROOM 4 Credit Hours ELECTIVE

Special away electives in Emergency Medicine at other medical centers can be arranged for an extraordinary learning experience not regularly available within the department. Any student interested in this elective may choose their experience or ask for suggestions from the EM Clerkship Director. An away elective application form must be signed by the student's advisor then submitted to the Emergency Medicine Department clerkship director for approval. The primary concern is to identify a responsible and acceptable faculty-in-absentia who will assure an active clerkship and offer an evaluation of performance. Rotations Offered: Each 4 weeks.

Prerequisite: Pre-arrangement with the Emergency Medicine CST Director and an approved application for an away elective. Not open to visiting students.

Typically Offered: FALL/SPR Capacity: Variable