1901 Pediatric Acute Emergency Medicine

Course: Pediatric Acute Emergency Medicine Course Number: PED 1901

Department: Pediatrics

Faculty Coordinator: David Rodriguez, MD

Assistant Faculty Coordinators: N/A

UTSW Education Coordinator Contact: Anthony Lee (Anthony.Lee@UTSouthwestern.edu)

Hospital: (Location of rotation) Children’s Medical Center-Dallas

Periods Offered: Periods 1-12

Length: 4 weeks

Max # of Students: 2 (Post Clerkship Students)

First Day Contact: David Rodriguez, MD

First Contact Time: 1:00pm or Course Director Email

First Day Location: Emergency Department – 1st Floor Children’s Main Hospital

Prerequisites: PED 1801 Pediatric Core Clerkship

I. Course Description

Students will be integrated daily into the emergency department teams and will serve as the primary provider (under the direct supervision of attending physicians) for patients seeking care in the Children’s Emergency Department. The department is staffed by board-certified pediatric emergency medicine specialists. The Children’s Dallas Emergency Department is the pediatric trauma center for Dallas County. (Course not eligible for Special Topics)

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<tr>
<th>Goals</th>
<th>Objectives</th>
<th>Assessment Methods</th>
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| Patient Care:       | Medical students must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. | • Quality of Medical Records entries  
<p>|                     |                                                                            | • Skills evaluation from direct observation.                                      |
| Medical Knowledge:  | Medical students should demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care. | • Each student is required to create a case presentation and to present it to the faculty and fellows on the last Wednesday of the rotation. It is recommended that students present an interesting case they encountered during their rotation. However, they are also permitted to present on a topic of interest that relates to pediatric emergency medicine. |</p>
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<tr>
<th><strong>Interpersonal and Communication Skills:</strong> Medical students must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.</th>
<th><strong>Practice-Based Learning and Improvement:</strong> Medical students must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Medical students are expected to develop skills and habits to be able to meet the following goals</th>
<th><strong>Professionalism:</strong> Medical students must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.</th>
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<td>• Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds</td>
<td>• Identify strengths, deficiencies, and limits in one’s knowledge and expertise</td>
<td>• Compassion, integrity, and respect for others</td>
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<tr>
<td>• Communicate effectively with physicians, other health professionals, and health related agencies</td>
<td>• Set learning and improvement goals</td>
<td>• Responsiveness to patient needs that supersedes self-interest</td>
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<td>• Work effectively as a member or leader of a health care team or other professional group</td>
<td>• Identify and perform appropriate learning activities</td>
<td>• Respect for patient privacy and autonomy</td>
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<td>• Act in a consultative role to other physicians and health professionals</td>
<td>• Systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement</td>
<td>• Accountability to patients, society and the profession</td>
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<td>• Maintain comprehensive, timely, and legible medical records</td>
<td>• Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems</td>
<td>• Sensitivity and responsiveness to a diverse patient population including, but not limited to, diversity in age, gender, culture,</td>
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<td>• Observations of faculty and staff.</td>
<td>• Use information technology to optimize learning</td>
<td>• Observations of faculty and staff.</td>
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The presentation will be given in the Pediatric Emergency Medicine department conference room. Each student is required to create a case presentation and to present it to the faculty and fellows on the last Wednesday of the rotation. It is recommended that students present an interesting case they encountered during their rotation. However, they are also permitted to present on a topic of interest that relates to pediatric emergency medicine. The presentation will be given in the Pediatric Emergency Medicine department conference room.

Critical review of a relevant article.
II. Methods of Instruction

Didactic:

- Pediatric Emergency Medicine Fellow’s Conference
  - Fellow’s Conference occurs every Wednesday from 0900-1300 in the pediatric emergency medicine department conference located on the 2nd floor of the Bright Building. These weekly conferences provide educational opportunities to faculty, fellows, residents, and medical students. Didactics on topics in pediatric emergency medicine and lectures on research methodology and study designs are given by faculty and fellows.

- Simulation Center
  - Students will work with high fidelity simulation mannequins to practice case scenarios and procedures related to adult and pediatric emergency medicine. The simulation center is located on the 3rd floor of the “L” building in room 213.
  - Students will cover the following objectives:
    - Basic cardiopulmonary resuscitation (CPR) for the pediatric population
      - One person CPR
      - Two person CPR
    - Management of common pediatric dysrhythmias
      - Supraventricular tachycardia
      - Pulseless Electrical Activity
    - Pediatric airway management
      - Bag Mask Ventilation
      - Non-invasive airway management
      - Invasive airway management
    - Respiratory Emergencies
      - Bronchiolitis
      - Asthma
      - Pneumonia
    - Shock Management
      - Fluid resuscitation
    - Trauma evaluations and management
      - Primary and secondary assessments

- Case Presentation
  - Each student is required to create a case presentation and to present it to the faculty and fellows on the last Wednesday of the rotation. It is recommended that students present an interesting case they encountered during their rotation. However, they are also permitted to present on a topic of interest that relates to pediatric emergency medicine. The presentation will be given in the Pediatric Emergency Medicine department conference room.

Clinical:

- 14 clinical shifts in the Pediatric Emergency Department
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- Clinical Shifts:
  - AM shift is 0700 – 1500
  - PM shift is 1500 – 2300
    - ⅔ AM shifts/ ⅓ PM shifts
    - at least 4 weekend shifts (Fri, Sat, or Sun)
- 2 x 4 hour procedure shifts where the student’s sole responsibility is to perform procedures
- MS4 will work under the supervision of an attending physician in the pediatric emergency medicine department as a sub-intern. He or she will assume the responsibility of patient care and present directly to the attending on duty.
- MS4 will perform basic procedures as it relates to patient care in the pediatric emergency department. He or she will work under the supervision of the attending on duty.
- MS4 will be required to submit a procedure log of all patient encounters during the elective.

III. Overview of Student Responsibilities
- Demonstrate knowledge of disease pathophysiology in the acutely ill or injured pediatric patients.
- Expand clinical knowledge for the assessment of the acutely ill or injured.
- Explain the resuscitative and stabilization process for acutely ill or injured patients.
- Demonstrate knowledge in medical management of the acutely ill or injured patient.
- Sharpen skills necessary for establish patient rapport and trust.
- Enhance their assessment skills involving invasive and non-invasive therapeutic and diagnostic procedures pertinent to the medical care of critically ill and injured patients that present to the emergency department.

IV. Method of Evaluation of Students and Requirements
- Evaluation forms will be submitted to the attending physician on duty upon the completion of each shift in the emergency department. The evaluation forms should be placed in the metal box in the main emergency department labeled “MS4 Evaluations.” There should be a total of 14 evaluations: approximately one for each shift in the department. This evaluation assesses the student’s ability to do the following:
  - Recognize ill-appearing children
  - Demonstrate medical knowledge regarding common pediatric problems
  - Enthusiastically seek out additional knowledge to enhance his or her medical knowledge and procedural skills
  - Accurately and succinctly present patient histories and physical exams to medical professionals
  - Demonstrate professionalism
    - Each student is required to create a case presentation and to present it to the emergency department faculty and fellows in the pediatric emergency medicine department conference room (Bright Building, 2nd Floor). He or she will be evaluated by the faculty and fellows. These presentations will be given on the last Wednesday of the rotation.
    - Students will be evaluated on their performance during high fidelity simulation scenarios.
    - A composite evaluation will be completed for each student. This evaluation is based on the following:
      - 1) Evaluations by the faculty during emergency department shifts
      - 2) Evaluations by the faculty and fellows for case presentations
3) Simulation center evaluations.

Grades of “PASS” or “FAIL” will be submitted on behalf of the student to the University of Texas Southwestern Medical School.