

UNIVERSITY OF MICHIGAN HEALTH SYSTEM · DEPARTMENT OF EMERGENCY MEDICINE  
**PEDIATRIC EMERGENCY MEDICINE FELLOWSHIP PROGRAM**

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<b>Rotation:</b>	<b>Pediatric Emergency Medicine Fellowship Program Goals &amp; Objectives</b>
<b>Institution:</b>	<b>University of Michigan Health System</b>
<b>Fellow Training Year:</b>	<b>PD and EM trained fellows, (Year 1, 2 and 3)</b>
<b>Supervising Faculty:</b>	<b>Michele Carney, MD</b>

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**THE OVERALL GOAL OF THIS PROGRAM:**

The Pediatric Emergency Medicine (PEM) fellowship program at the University of Michigan Health System (UMHS) will offer fellows from both Pediatrics and Emergency Medicine (EM) backgrounds, a challenging and diverse training experience that will provide them with skills necessary to become outstanding academic leaders in the field of pediatric emergency medicine.  
*Competencies Assessed: MK, PC, SBP, PBLI, IC, P*

**THE OVERALL OBJECTIVES OF THIS PROGRAM:**

- Provide a clinical rotation infrastructure that allows ample exposure to a spectrum of pediatric age, complaint and procedures to develop skill in the assessment and management of pediatric medical and surgical emergencies; utilizing a curriculum that includes comprehensive goals, objectives, evaluation and feedback mechanisms.
- Utilize UMHS PEM and EM faculty role models to mentor fellows through progressive clinical development while participating in all aspects of the care of acutely ill and injured children.
- Provide fellows ample exposure to a didactic educational curriculum relevant to the practice of pediatric emergency medicine, including topics specific to clinical disease as well as undifferentiated presentations, research, PEM administration, and teaching.
- Develop fellows' academic skill in critical assessment of PEM medical literature, completion of an individual scholarly project supervised by a qualified mentor, and participation in a comprehensive research curriculum.
- Provide ongoing, timely evaluation processes that allow measurement of and improvements to fellow progress in each of the six core competencies.
- Maintain a program of training that emphasizes patient safety and house officer well being.
- Provide process(es) for ongoing programmatic assessment and improvement through regular evaluation and input by faculty and fellows.

**The UMHS PEM Fellowship Program has further defined goals and specific educational objectives for Clinical, Teaching, Research and Administrative aspects of this fellowship program.**

**CLINICAL GOALS & ROTATION SPECIFIC EDUCATIONAL OBJECTIVES:**

- Refine ability to perform and teach thorough yet appropriately focused history and physical exams in pediatric patients with a wide range of emergency conditions. *Competencies Assessed: MK, PC, IC, P, SBP, PBLI*
- Develop and refine skill in the evaluation and treatment of common and uncommon pediatric emergencies. *Competencies Assessed: MK, PC, P, PBLI, SBP*
- Develop proficiency in performing and teaching emergency medicine procedures in children. *Competencies Assessed: MK, PC, P*
- Refine ability to interact in a culturally sensitive manner with ill children and their families. *Competencies Assessed: PC, IC, P*
- Develop ability to appropriately deliver the news of a critical or fatal injury or illness to family

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members of a child. *Competencies Assessed: P, IC*

- Learn the nature EMS system of care and role of the PEM provider within the EMS system. *Competencies Assessed: SBP, PC, IC, P*
- Develop supervisory skills necessary to manage a busy pediatric emergency department including responsibility to simultaneously supervise house officers of varying levels of training, students, ancillary providers, direct resuscitations, procedural sedation and communications involved in the care of acutely ill and injured children in a calm effective manner. *Competencies Assessed: PC, IC, P, SBP*
- Understand and participate in disaster planning and community provider disaster educational training. *Competencies Assessed: PC, IC, P, SBP*
- Develop skill in managing pediatric emergencies involving common subspecialty problems. *Competencies Assessed: MK, PC, PBLI*
- Develop proficiency in the six core competencies including medical knowledge, professionalism, patient care, systems based practice, interpersonal and communications skills and practice based learning and improvement as they pertain to the practice of pediatric emergency medicine.

#### **TEACHING GOALS AND OBJECTIVES:**

##### **Goals:**

- Fellows will become facile educators of adult health professional learners regarding topics in pediatric emergency medicine through didactic content preparation, small group/workshops and bedside clinical opportunities. *Competencies Assessed: IC, P*
- Fellows will become leaders in pediatric advanced life support education & training. *Competencies Assessed: MK, PC, IC, P, PBLI*

##### **Objectives:**

- All fellows will be expected to develop a teaching portfolio, similar to what is expected of University of Michigan faculty with the ultimate goal of producing 12-15 excellent lectures on core topics in pediatric emergency medicine of varying format including didactic topic reviews, case presentations, morbidity & mortality conferences, Ludwig and Fleisher Chapter review and evidence based medicine presentations. *Competencies Assessed: P, IC, MK, PBLI*
- Fellows will prepare one case for submission to the annual American Academy of Pediatrics/Section on EM (due spring annually): Fellow Case Conference Competition. This competition requires preparation of an interesting case with background information on the topic with differential diagnostic discussion. Nationally fellows compete for the chance to present at the annual fall meeting of the AAP/Section on EM. If chosen, the fellow will attend the AAP/Section on EM annual meeting to participate in the competition. An award is presented to the best case presentation by a fellow. *Competencies Assessed: P, IC, PBLI*
- The fellows will refine their bedside teaching skills through opportunities to directly supervise pediatric and emergency medicine residents with attending supervision, teaching medical students, teaching procedural workshops to these trainees and participating in nursing CME.

Accreditation Council for Graduate Medical Education (ACGME) Core Competency Key:

PC = Patient Care; MK = Medical Knowledge; PBLI = Practice-Based Learning and Improvement; IC = Interpersonal and Communication Skills; P = Professionalism; SBP = Systems-Based Practice

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***Competencies Assessed: P, IC, PBLI***

- Fellows will be made aware of the University’s extensive resources for teaching “how to teach” adult learners, especially health care professionals. Fellows with interest in career development in teaching/educational research may choose to participate in UMHS GME Clinical Scholars Program; a two year program designed to develop fellows/junior faculty in advanced educational theory and preparation for scholarly activity in educational careers. All fellows will participate in one Department of Emergency Medicine “Teach the Teacher” session. ***Competencies Assessed: IC, P, PBLI***
- Fellows will be certified providers and encouraged to be instructors in Pediatric Advanced Life Support (PALS). ***Competencies Assessed: MK, PC, P, PC, PBLI***
- Fellows will be certified providers in Advanced Trauma Life Support (ATLS) and Neonatal Advanced Life Support and will be encouraged to become instructors for these courses. ***Competencies Assessed: MK, PC, P, PC, PBLI***

**RESEARCH GOALS AND OBJECTIVES:**

**Goals:**

The overall **goals** for the Pediatric Emergency Medicine Fellowship Research curriculum are to prepare fellows for academic careers in Pediatric Emergency Medicine. By incorporating the 2004 PEM RRC guidelines for fellowship research training into this curriculum, PEM fellows will produce excellent quality scholarly projects and prepare for leadership in research activities that benefit the care of children in emergency settings. ***Competencies measured: MK, IC, P, PBL***

**Objectives:**

- Learn how to critically evaluate biomedical research and the scientific literature. ***Competencies Assessed: PBL***
- Understanding the mentorship process. ***Competencies Assessed: PBL, P, IC***
- Understand methods of study hypothesis development and testing. ***Competencies Assessed: PBL***
- Develop an understanding of the various study designs and methodologies. ***Competencies Assessed: PBL***
- Develop an understanding of basic statistics; learn how to apply these basic techniques and interpret the results. ***Competencies Assessed: PBL, MK***
- Develop an understanding of computer applications and data management relevant to research. ***Competencies Assessed: PBL***
- Develop the skills necessary to produce a manuscript acceptable for publication in a peer review journal, and an understanding of the peer review process. ***Competencies Assessed: PBL, P, IC***
- Develop a general understanding of grants including the writing process, methods of procuring research funds, grants management and research employees. ***Competencies Assessed: PBL***
- Learn the definition and requirements of informed consent, including the difficulties with this concept in pediatric acute care research. ***Competencies Assessed: IC, P, PBL***
- Develop an understanding of IRB regulations and processes. ***Competencies Assessed: PBL***

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- Develop skills in research presentation. *Competencies Assessed: PBL, IC, P*
- Understand the ethical considerations of clinical research and their ramifications. *Competencies Assessed: P, PBL*

To accomplish Research goals and objectives, we have developed a comprehensive Research Curriculum (see Attachment B), which includes formal course work, didactic lectures, several workshops, and participation in a monthly journal club series.

#### **ADMINISTRATIVE GOALS AND OBJECTIVES:**

##### **Goals**

- Fellows will be capable of performing basic administrative tasks involving the operational management of a busy Children's Emergency Department staffed by health house officers, students and allied health personnel; mentored by on site PEM faculty. *Competencies Assessed: P, IC, SBP*
- Fellows will learn basic elements of Quality Improvement activities from administrative leadership within Children's Emergency Services at UMHS. All fellows will participate in one UMHS Department of Emergency Medicine CQI training program. *Competencies Assessed: P, IC, SBP, PBLI*
- Fellows will understand the administrative responsibilities involved in attending status including administrative leadership responsibilities in PEM, documentation, patient safety, error reduction and reporting, billing, patient complaints, effort reporting, competencies, and recruitment & retention of staff, multidisciplinary ED team function. *Competencies Assessed: P, IC, PC, SBP, PBLI*

##### **Objectives**

- Each fellow is assigned a prospective ongoing quality improvement initiative during the fellowship to be completed by the end of the training. An example of such a project is an effort to track contaminated blood cultures drawn on children to ascertain whether this problem is equipment or staff related. Another example is tracking the appropriate use of procedural sedation in children. This will serve to educate fellows about accessing this type of information in the ED and the measures necessary to correct problems. *Competencies Assessed: PC, P, IC, PBLI*
- Fellows will demonstrate an awareness of and participate in patient safety efforts including identification/reporting of system errors, through presentation of cases during M&M conference and Department of EM error reduction activities. *Competencies: SBP, PC, PBLI, P*
- Fellows will assume administrative responsibility for the Children's Emergency Service area when they become senior fellows, under the guidance of the CES faculty assigned during the shift. Fellows will learn the basics of managing triage/acuity assessment, referrals, UMHS Survival Flight oversight, patient through put, documentation and discharge processes. *Competencies Assessed: IC, P, SBP, PC*
- Fellows will attend didactic administrative educational lectures including QI issues, handling patient complaints, billing systems, recruiting and retaining faculty, patient satisfaction surveys

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and their use etc. *Competencies Assessed: P, IC, PBLI,*

- The fellow will attend and participate in monthly Pediatric Emergency faculty meetings during which current ED administrative issues are discussed. *Competencies Assessed: P, IC, SBP, PBLI*
- The fellow will attend scheduled PEM Fellowship GME Committee meetings participating in administrative and programmatic issues affecting the program. *Competencies Assessed: P, IC, PBLI*
- One or more fellows will be assigned to attend UMHS EM Residency Committee meetings to act as a liaison to the EM residency on matters of fellowship (under the guidance of the PD). *Competencies Assessed: P, IC*
- All fellows are encouraged to attend special EM Administration Lecture Series offered by the department on Thursdays (special two year curriculum) if available (although not designated in the admin track). *Competencies Assessed: P, IC*

**DESCRIPTION OF CLINICAL EXPERIENCE(s):**

- See Rotation-specific Clinical Experiences (Fellowship Manual: Goals & Objective Documents)

**DESCRIPTION OF DIDACTIC EXPERIENCE(s):**

- See Master Calendar Didactic Schedule (Online, Program Shared Access)
- See PEM Core Topic Reference Guide (Fellowship Manual, Curriculum)
- See Policy: Conference Attendance (Fellowship Manual, Policies)

**EVALUATION PROCESS:**

- All elements of the UMHS PEM Fellowship Program are evaluated in the six core competencies: MK, PC, IC, SBP, PBLI, P.
- PEM Fellows are required to learn to use MEDHUB, the UMHS medical education portal for ongoing evaluations to/from faculty, peers, ancillary staff, students and logging procedures.
- Formative Feedback: Fellows should expect timely return (immediate – one month post rotation) of faculty, peer, ancillary staff evaluations and fellows are encouraged to monitor MedHub for evaluation updates at least monthly.
- Formative & Summative Feedback: Fellows will meet with the Program Director quarterly (and at least semi and annually for summative feedback) to review all elements of their training program (and sooner at fellow or PD request).

Reviewed	06/2008		06/30/2009		7/2011		
Revised	06/2008	11/2008	06/30/2009	05/2011	7/2011 MN		

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Initial(s)	MN	MN	MN/SLB	MN/sb			
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