

Division Introduction

The Division of Pediatric Emergency Medicine (PEM) provides clinical and administrative service at Children's Health Emergency Departments at Children's Medical Center Dallas and Children's Medical Center Plano. The annual patient volume in 2016 for both campuses was 172,350 (Dallas, 125,797 and Plano, 46,350). Our ED admission rate remains at 17% for Dallas and 8% for Plano, with nearly 40% of hospital admissions coming through the ED.

The Dallas Campus is a major pediatric referral center for Dallas County and the surrounding region, and is the only ACS Verified Level I pediatric trauma center in North Texas. One of the major responsibilities of the Pediatric Emergency Medicine faculty at a Level I pediatric trauma center is providing trauma stabilization and resuscitation for serious and critical injuries. Division faculty also provide medical oversight and physician coordination for the Children's Health transport team and Dallas County EMS system (BioTel).

The Plano campus is a community hospital staffed with pediatric emergency medicine faculty, general pediatricians experienced in pediatric emergency medicine, and acute care advanced practice providers. In 2016, the Plano campus was licensed as a separate hospital and Dr. Pam Okada was appointed Chief of Service for Pediatric Emergency Medicine. The Plano campus leadership is currently in the process of obtaining Level IV pediatric trauma verification to better service the pediatric population in the region.

Under the direction of Halim Hennes, M.D., M.S., Division Chief, the PEM Division plays a vital role in providing attending physician support, supervising pediatric emergency medicine fellows, pediatric residents, emergency medicine residents, family medicine residents, and the advanced practice providers in the emergency departments at Children's Medical Center Dallas and Plano campuses.

On August 3, 2015, the Division launched a telemedicine program that connects community ED physicians with a pediatric emergency medicine specialist for consultation. The program has since expanded, and currently provides telemedicine service to 12 hospital emergency departments throughout Texas, 24 hours a day.

The division has an excellent research infrastructure with a full time research coordinator, three research assistants, and two volunteer students. The research staff assist our faculty and fellows with IRB applications, patient enrollment, and maintain research materials. Our faculty are involved in several clinical research studies, designed to advance patient care and knowledge regarding asthma and other respiratory diseases, brain injury, pain management, sedation, injury epidemiology and prevention, and noninvasive monitoring.

The division has a well-established fellowship program that provides strong clinical and research training in pediatric emergency medicine and plays a crucial role in clinical teaching of pediatric residents. The program accepts three fellows every year and participates in the national match program. The Division also provides the primary teaching faculty for medical students and other allied health professionals on the acute recognition, evaluation, and management of critically ill and traumatized children.



Halim Hennes, M.D., M.S.
Division Chief

In August 2015, the Pediatric Emergency Medicine Division launched a telemedicine program that connects community Emergency Department physicians with a pediatric emergency medicine specialist for consultation. The program has since expanded from two sites in 2015 to 10 sites at the end of 2016.

Pediatric Emergency Medicine Division Leadership



Halim Hennes, M.D.
Professor
Division Chief



Mohamed Badawy, M.D.
Associate Professor
Medical Director



Pamela Okada, M.D.
Associate Professor
Medical Director



Ken Yen, M.D.
Associate Professor
Fellowship Director



Jo-Ann Nesiama, M.D.
Associate Professor
Associate Fellowship Director



Craig Huang, M.D.
Associate Professor
Director, EMS and Trauma
Plano



Michael Baldovsky, D.O.
Assistant Professor
Director, Referral Nurse
Coordinator Program



David Rodriguez, M.D.
Assistant Professor
Director, ED Clerkship



Julie Ann Lively
Division Administrator

Faculty

The Division has twenty-five full-time and three part-time faculty members and nine fellows, all with diverse research and administrative interests. Five new faculty joined the Division in 2016.

Bharati Beatrix Bansal, M.D.

Assistant Professor



B.C.S.

Santa Clara University, Santa Clara, CA, 1989

M.D.

University of Hawaii, Manoa, HI, 1994

Postdoctoral Training

Residency, Pediatrics

UT Southwestern Medical Center, Dallas, TX, 1994-1997

Fellowship, Pediatric Emergency Medicine

UT Southwestern Medical Center/Children's Health, Dallas, TX, 1997-2000

Interests

Medical education

Jennifer Deramo, M.D.

Instructor



B.S., *summa cum laude*

University of California, Los Angeles, CA, 2009

M.D.

University of California Davis School of Medicine, Davis, CA, 2013

Postdoctoral Training

Residency, Pediatrics

UT Southwestern Medical Center/Children's Health, Dallas, TX, 2013-2016

Interests

Quality and process improvement

Shashidhar Marneni, M.D.

Assistant Professor



M.B.B.S.

Kakatiya Medical College, Telangana, India, 1996

Postdoctoral Training

Residency, Pediatrics

Bronx Lebanon Hospital Center, Bronx, NY, 2006-2009

Fellowship, Pediatric Emergency Medicine

SUNY Downstate Medical Center/Kings County Hospital Center, New York City, NY, 2009-2012

Interests

PALS, pediatric orthopedics, and sickle cell diseases

Vicki Moore, D.O.

Instructor



B.S., cum laude

University of North Texas, Denton, TX, 2003

D.O.

Texas College of Osteopathic Medicine, Fort Worth, TX, 2008

Postdoctoral Training

Residency, Pediatrics

UT Southwestern Medical Center/Children’s Health, Dallas, TX, 2008-2011

Interests

Finding medical homes for children, and newborn medicine

Rushi Parikh, D.O.

Faculty Associate



B.A.

University of Texas at Austin, Austin, TX

D.O.

A.T. Still University, Kirksville, MO, 2013

Postdoctoral Training

Residency, Pediatrics

Children’s Hospital of Michigan/Wayne State School of Medicine, Detroit, MI, 2013-2016

Interests

Asthma, thrombophilia, toxicology, and well-child care

Honors / Awards

Kevin Barnes

- Promotion to Assistant Professor

Jennifer Deramo

- Pediatric Resident Teaching Award
- Pediatric Resident Quality Improvement Award

Collin Goto

- Promotion to Professor

Jo-Ann Nesiama

- Promotion to Associate Professor

Susan Scott

- Inducted into Alpha Omega Alpha (AOA) Honor Medical Society

Invited Lectures

Craig Huang

- 21st Annual Forrest White Visiting Lectureship, 18th Annual Pediatric Emergency Medicine Update, Children's Hospital of the King's Daughters, Norfolk, VA, April 2016
 - *"Telemedicine: The Wave of the Future. Are You Ready?"*
 - *"The Acute Scrotum"*

Conference Presentations

Keith K, **Morse R.**

Poster, Pediatric Academic Society/Society of Pediatric Research, Baltimore, MD, April 2016
"Effect of Viral Testing on Length of Stay for Neonatal Fever Patients with Negative Sepsis Evaluations"

Morse R, Hall M, Rehm KP, Berry J.

Poster, Pediatric Academic Society/Society of Pediatric Research, Baltimore, MD, April 2016
"Use of Post-Acute Psychiatric Facility Care Following Acute-Care Hospitalization in Children"

Parikh K, Hall M, Thompson J, Mussman G, Wilson K, Montalbano A, **Morse R**, Berry J, Shah SS.

Poster, Pediatric Academic Society/Society of Pediatric Research, Baltimore, MD, April 2016
"Racial Disparities in Pediatric Readmissions for Common Inpatient Chronic Conditions"

Sills M, Hall M, Colvin JD, Macy ML, Cutler GJ, Bettenhausen JL, **Morse RB**, Auger KA, Raphael JL, Gottlieb LM, Fieldston ES, Shah SS.

Poster, Pediatric Academic Society/Society of Pediatric Research, Baltimore, MD, April 2016
"Impact of Social Determinants on Children's Hospitals' Preventable Readmissions Performance"

Badawy M, Liu A.

Poster, Pediatric Academic Society/Society of Pediatric Research, Baltimore, MD, May 2016
"Safety Parameters for Admission to Ward versus ICU for Infants with Bronchiolitis Treated with High-Flow Nasal Cannula"

Poster, Pediatric Academic Society/Society of Pediatric Research, Baltimore, MD, May 2016
"Does Hypoxia Predict the Need for Advanced Airway Management in Infants with Acute Bronchiolitis Treated with High-Flow Nasal Cannula?"

Stevens G, **Cooper M.**

Poster, Pediatric Academic Society/Society of Pediatric Research, Baltimore, MD, May 2016
"Intervention to Decrease Non-Urgent Fever Related Visits to a Large Pediatric Emergency Department"

Elkhunovich MA, Liu DR, Wang VJ, **Yen K**, et al.

Oral, Pediatric Academic Society/Society of Pediatric Research, Baltimore, MD, May 2016
"The Incidence of Urinary Tract Infections in Febrile Infants 2-12 Months of Age With Bronchiolitis: a Multicenter Study"

Mulroy M, **Feng SY**, **Goto C**, et al.

Poster, National Update on Behavioral Emergencies (NUBE) Conference, Las Vegas, NV, December 2016
"The Agitated Child: A Multi-Disciplinary Approach to the Development of an Agitation Guideline for Use in a Pediatric Emergency Department"

Education and Training

The Division of Pediatric Emergency Medicine provides educational opportunities for medical students and residents, in addition to its fully accredited fellowship program.

The faculty are also involved in teaching pediatric advanced life support (PALS) and advanced trauma life support (ATLS) and operating the simulation lab. In 2016, we expanded our educational activities to the Plano campus and started offering monthly educational activities to communities around the Plano campus including EMS providers.

Medical Students

The Emergency Medicine faculty and fellows are very active in providing didactic education to UT Southwestern medical students, as well as physicians locally and nationally.

The Division offers a fourth-year clerkship for medical students that provides in-depth exposure to Pediatric Emergency Medicine and Immunology through recognition, evaluation, and management of the acutely ill and injured child.

The division also offers a monthly simulation lab for ongoing skills training.

Residents

Major internal educational activities include didactic lectures to the Pediatric residents, as well as Family Medicine and Emergency Medicine residents. Training in the emergency department is often sought by residents from other pediatric training programs in Texas and Oklahoma.

The objectives of the course are to:

- Recognize, evaluate, and manage the acutely ill and injured pediatric patients
- Master technical skills, including: venous access, venipuncture, lumbar puncture, laceration repair, splinting, and bladder catheterization
- Evaluate and manage common pediatric complaints and disease processes
- Acquire and maintain efficiency and prioritization required to care for multiple patients simultaneously

Requirements for this course include:

- Core competencies: common complaints, disease processes, and technical skills
- Monthly patient lists: chief complaint and diagnosis
- Noon and monthly emergency room conferences and grand rounds

Education opportunities include:

- Group check-out rounds
- Monthly Pediatric Emergency Medicine Conferences
- "Emergigrams"

- "Article of the Month"
- Pediatric Emergency Medicine Fellows Meeting
- Core Journal CD
- "Case of the Month"

Fellows

The well-established Pediatric Emergency Medicine Fellowship Program accepts both pediatric- and emergency medicine-trained residents with interest in furthering their careers in pediatric emergency medicine. The program provides strong clinical training and includes a comprehensive research curriculum with didactic teaching that covers basic research concepts and statistics.

Division faculty have diverse research interests, offering the fellows a unique opportunity to select the appropriate mentor with interests that match theirs. An experienced research coordinator is available to assist faculty and fellows with their research projects.

Faculty and fellows play a major role in the education of pediatric residents, family medicine residents, adult emergency medicine residents, and medical students.

Recognizing the outstanding clinical training and opportunities to evaluate and manage a diverse population of acutely ill and injured children, fellows from other Pediatric Emergency Medicine Fellowship Programs often submit requests for elective rotations here.

Research Activities

PEM serves a diverse population with broad pediatric pathology and high acuity, providing an ideal environment for clinical research. Because of a rich clinical service and research interest, the Division has been routinely selected to participate in multicenter, national, and international level studies. The research team has a proven track record of success by becoming one of the top enrolling sites for multiple studies.

The mission of the Division is to conduct state of the art clinical research, with an emphasis on improving the clinical care and outcome of the acutely ill or injured child. The pillars of the research program in the Division include trauma, EMS/pre-hospital management, injury prevention, pain management, sedation, respiratory care, and neurologic emergencies.

The research infrastructure includes a full time dedicated research coordinator and three research assistants. The research assistants are present in the Emergency Department 15 hours per day. In addition, we have two medical students working as volunteer research assistants.

The Division has created a Research Council to review and oversee all PEM research. The Council is composed of the Division, Research and Fellowship Directors, the Associate Director of the Fellowship Program, Research Coordinator, faculty members of the Injury Prevention Program, a member of the Emergency Medicine nursing management and nursing education staff, and select senior PEM faculty. The PEM Research Council's purpose is to review and oversee all PEM research development and conduct. The council was formed in order to have a committee within the Division with research expertise to provide advice and support for projects and to help projects reach their full potential.



Dr. Ken Yen with 2016 fellow graduates,
Drs. Alice Liu, Lindsay Day and Nina Fitzgerald

Clinical Activities

Pediatric Emergency Medicine faculty and fellows provide emergency services at Children’s Medical Center Dallas for more than 70,000 patients each year, with an additional 47,000 patients treated annually at the Children’s Plano campus. The majority of these patients are high acuity ESI levels 1, 2, and 3. Our fast track, which is staffed by advanced practice providers, evaluate approximately 45,000 low acuity patients with ESI levels 4 and 5 annually. This is the only Level 1 pediatric trauma center in North Texas, and one of the busiest pediatric emergency medicine clinical services in the country. As the pediatric trauma center for Dallas County, we provide emergency care for a variety of complex problems in children with special health care needs.



Two pediatric emergency medicine faculty, Drs. Sing-Yi Feng and Collin Goto, are also certified toxicologists. They manage a special Lead Poisoning Clinic at Children’s and provide toxicology consultation service at Children’s, Parkland Memorial Hospital, and Clements University Hospital.

The emergency department serves as the clinical laboratory for the division faculty, where more than a dozen investigative studies are ongoing and designed to answer critical questions that will improve the care provided to children in crisis. Study themes include treatment of respiratory diseases, pain management and sedation, injury epidemiology, noninvasive monitoring, and brain injury research.

Telemedicine Program

The TeleER started in 2015 and evolved over the past 12 months. We currently serve 12 hospital emergency departments and have two telemedicine stations; one in the Dallas ED and one in the Plano ED. Drs. Halim Hennes, Mohamed Badawy, and Pamela Okada serve as the backup telemedicine consultants when the ED is busy and unable to respond. In 2016 we responded to 61 consults, an average of 5/month.

2016 Patient Statistics

Dallas Main Emergency Department

Annual Volume	70,260
Trauma (Patients meeting trauma criteria)	835
Admissions	12,048
Median time arrival to departure (minutes)	221

Plano Emergency Department

Annual volume	46,553
Admissions	3,647
Median time arrival to departure (minutes)	131

Dallas Fast Track

Annual volume	54,909
Admissions	394
Median time arrival to departure (minutes)	146

Current Grant Support**Mohamed Badawy**

Grantor: NIH / NICHD

Title of Project: Use of Mechanism of Injury for the Identification of Severely Injured Children

Role: Co-investigator; Site Principal Investigator

Dates: 11/2013 – 7/2017

Grantor: NICHD

Title of Project: Validation of Decision Rules for CT Use in Children with Abdominal or Head Trauma

Role: Co-principal Investigator

Dates: 7/2016 – 6/2020

Pamela Okada

Grantor: NIH / National Institute of Neurological Disorders and Stroke

Title of Project: Established Status Epilepticus Treatment Trial (ESETT)

Role: Principal Investigator; Site Investigator

Dates: 09/2014 - 08/2019

Kenneth Yen

Grantor: Texas Higher Education Coordinating Board: Emergency and Trauma Care Education Partnership Program

Title of Project: Pediatric Emergency Medicine Fellowship Expansion

Role: Project Lead

Dates: 5/2016 – 6/2018

Peer-Reviewed Publications

1. Atabaki SM, Hoyle JD, Jr., Schunk JE, Monroe DJ, Alpern ER, Quayle KS, Glass TF, **Badawy MK**, et al. [Comparison of Prediction Rules and Clinician Suspicion for Identifying Children With Clinically Important Brain Injuries After Blunt Head Trauma](#). *Acad Emerg Med* 2016;23:566-75.
2. Bal A, **Hennes H**. [Procedural Sedation for Orthopedic Fracture Reductions in the Pediatric Emergency Department](#). *J Pediatr Emerg Intensive Care Med* 2016; 3:52-61.
3. Bober J, Rochlin J, **Marneni S**. [Ventriculoperitoneal Shunt Complications In Children: An Evidence-Based Approach To Emergency Department Management](#). *Pediatr Emerg Med Pract* 2016;13:1-22; quiz -3.
4. Borgialli DA, Mahajan P, Hoyle JD, Jr., Powell EC, Nadel FM, Tunik MG, Foerster A, Dong L, Miskin M, Dayan PS, Holmes JF, Kuppermann N, Pediatric Emergency Care Applied Research, Network (**Badawy M**). [Performance of the Pediatric Glasgow Coma Scale Score in the Evaluation of Children With Blunt Head Trauma](#). *Acad Emerg Med* 2016;23:878-84.

5. Chao JH, Lin RC, **Marneni S**, Pandya S, Alhajri S, Sinert R. [Predictors of Airspace Disease on Chest X-ray in Emergency Department Patients With Clinical Bronchiolitis: A Systematic Review and Meta-analysis](#). *Acad Emerg Med* 2016;23:1107-18.
6. Day L, Kleinschmidt K, Forrester MB, **Feng SY**. [Comparison of Unintentional Exposures to Codeine and Hydrocodone Reported to Texas Poison Centers](#). *J Emerg Med* 2016;50:744-52.
7. Depinet H, Copeland K, Gogain J, **Hennes H**, et al. [Addition of a biomarker panel to a clinical score to identify patients at low risk for appendicitis](#). *Am J Emerg Med* 2016; 34:2266-71.
8. Gold JM, Hall M, Shah SS, Thomson J, Subramony A, Mahant S, Mittal V, Wilson KM, **Morse R**, et al. [Long length of hospital stay in children with medical complexity](#). *J Hosp Med* 2016;11:750-6.
9. Ho C, Phelps J, Evans N, **Okada P**, Wilson P. [Pediatric Fractures Secondary to Trampoline Injury: A Prospective Analysis of User Circumstances and Injury Severity with Respect to American Academy of Pediatrics Policy Statement](#). *J Pediatr Emerg Intensive Care Med* 2016; 3:1-10.
10. Huckins DS, Simon HK, Copeland K, Milling TJ Jr, Spandorfer PR, **Hennes H**, et al. [Prospective validation of a biomarker panel to identify pediatric ED patients with abdominal pain who are at low risk for acute appendicitis](#). *Am J Emerg Med* 2016;34:1373-82.
11. Kim IK, Zuckerbraun N, Kou M, Vu T, Levasseur K, **Yen K**, et al. [Essentials of Pediatric Emergency Medicine Fellowship: Part 6: Program Administration](#). *Pediatr Emerg Care* 2016;32:726-30.
12. Lerner EB, Drendel AL, Cushman JT, **Badawy M**, et al. [Ability of the Physiologic Criteria of the Field Triage Guidelines to Identify Children Who Need the Resources of a Trauma Center](#). *Prehosp Emerg Care* 2016:1-5.
13. Pandya L, **Nesiama JA**. [Pneumoparotid in an Adolescent](#). *CFP* 2016;15:477-8.
14. Reynolds S, Chang T, Iyer S, Mann C, Wilkinson M, **Yen K**, et al. [Essentials of PEM Fellowship: Part 5: Scholarship Prepares Fellows to Lead as Pediatric Emergency Specialists](#). *Pediatr Emerg Care* 2016;32:645-7.
15. Shah SA, Chen K, **Marneni S**, et al. [Hepatitis B awareness and knowledge in hepatitis B surface antigen-positive parturient immigrant women from West Africa in the Bronx, New York](#). *J Immigr Minor Health* 2015;17:302-5.
16. Sheth KR, Keays M, Grimsby GM, Granberg CF, Menon VS, DaJusta DG, Ostrov L, Hill M, Sanchez E, Kuppermann D, Harrison CB, Jacobs MA, Huang R, Burgu B, **Hennes H**, Schlomer BJ, Baker LA. [Diagnosing Testicular Torsion before Urological Consultation and Imaging: Validation of the TWIST Score](#). *J Urol* 2016;195:1870-6.
17. Sills MR, Hall M, Colvin JD, Macy ML, Cutler GJ, Bettenhausen JL, **Morse RB**, et al. [Association of Social Determinants With Children's Hospitals' Preventable Readmissions Performance](#). *JAMA Pediatr* 2016;170:350-8.
18. Zonfrillo MR, Zaniletti I, Hall M, Fieldston ES, Colvin JD, Bettenhausen JL, Macy ML, Alpern ER, Cutler GJ, Raphael JL, **Morse RB**, Sills MR, Shah SS. [Socioeconomic Status and Hospitalization Costs for Children with Brain and Spinal Cord Injury](#). *J Pediatr* 2016;169:250-5.