Pediatric Emergency Medicine Fellowship Overview 2020

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Marideth Rus, MD, MEd

Texas Children’s Hospital

Baylor College of Medicine
Welcome to Texas!
Fellowship began in 1992

62 PEM faculty, GEMS, APPS

115 fellowship graduates across the country

Currently 17 fellows

EM and pediatrics trained

2020-Received 186 applications for 6 positions
## Texas Children’s Hospital

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
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| **Main Campus**   | • 750-bed children's hospital  
• 25,966 admissions in the most recent year  
• 9,053 annual inpatient and 16,216 outpatient surgeries |
| **Pavilion for Women** | • Comprehensive obstetrics/gynecology facility focusing on high-risk births, fetal surgery                                              |
| **West Campus**   | • Community hospital in suburban West Houston                                                                                             |
| **The Woodlands** | • Community hospital in suburban North Houston                                                                                             |
| **Legacy Tower**  | • Critical care and surgical tower constructed in 2018                                                                                   |
| **Feigin Center for Pediatric Research** |                                                                                             |
Texas Children’s – Medical Center

Main Fellowship Training Site

Emergency Center
- Level 1 pediatric trauma center
- Largest pediatric emergency center in the region
- 50+ beds (North, South)

Legacy Tower
- **High Acuity Operating Rooms**
  - 6 ORs for neurosurgery, orthopedics, plastic, transplant, general surgery
  - Integrated MRI scanner
- **Pediatric Intensive Care Units**
  - 4 Pediatric ICU floors
  - Subspecialty PICUs including dedicated neuro-ICU and Surgical ICU
  - 84 large private PICU rooms
- **Heart Center**
  - 8 floors
  - 4 cardiac catheterization labs including integrated MRI scanner
  - 4 cardiovascular ORs
  - 3 cardiovascular ICU floors with 48 private rooms
  - 2 cardiac acute care floors with 42 private patient rooms
- **Helistop**
  - Enables transport of critically ill patients
Medical Center Campus EC Expansion

Major renovation of West Tower 1

- Expand EC to 57 treatment rooms
- Phased approach to renovation
  - Design phase 2017-2019
2018 West Tower 1

- Radiology
- Lobby
- MC South
- MC North
Texas Children’s – West Campus

Community Training Site

- **Emergency Center**
  - 24 beds

- **Pediatric Intensive Care Unit**
  - 22 beds

- **Inpatient**
  - 46 beds

- **Special Isolation Unit (SIU)**
  - 8 beds
Texas Children’s – Woodlands

Community Site

- Emergency Center: 20 beds
- Pediatric Intensive Care Unit: 14 beds
- Inpatient: 32 beds
- NICU Level 3: 14
Medical Center Arrivals

Total Arrivals:
2016 75,009
2017 72,193
2018 69,851
2019 70,000

Total Arrivals:
2016 45,355
2017 43,706
2018 43,250
2019 45,000
Patient Acuity
Fellowship Goals & Objectives

- Develop proficiency in the clinical practice of PEM
- Develop competency in educating others about PEM
- Approach everyday work in a scholarly way
- Gain familiarity with administrative issues
- Prepare for a career in PEM
PEM Fellowship Curriculum

Clinical practice

Teaching and consulting

Administrative training

Quality and performance improvement

Career development

Academics & Scholarship
Clinical practice

Provide ED evaluation and management of acutely ill or injured pediatric patients

• Perform patient evaluations quickly with stabilization of life threatening processes
• Develop competency in technical/procedural and resuscitation skills necessary to practice PEM
• Academic and community experience

Prioritize and simultaneously manage the emergency care of multiple patients

Use evidence-based reasoning to guide clinical practice
Teaching and consulting

Achieve proficiency in teaching to different types of learners and in a variety of clinical settings

Teach at the bedside

• TCH main and WC (resident and med student supervision)
• Core medical student teaching shifts (1p-6p Tues and Wed)

EC rounds

Lead small and large group discussions

Prepare and present lectures

Become PALS instructors and/or simulation instructors
Administrative training

Acquire skills necessary for ED management
• Supervise physician trainees
• Manage personnel
• Serve as team lead during resuscitations
• Manage patient throughput

Practice appropriate medical record documentation
• Relay information regarding patient care delivered
• Document medical decision-making processes
• Support billing for medical care provided

Gain exposure to financial management in health care

Develop leadership skills

Dr. Deborah Hsu
Section Chief,
Pediatric Emergency Medicine
Quality and Performance Improvement

- Gain knowledge in QI methods and data gathering
- Conduct performance improvement review
- Develop EBM guidelines
- Identify patient safety or quality issues
- Design and conduct a quality project

Dr. Binita Patel,
PEM Chief of Clinical Operations
Chief Medical Quality Officer
## Career development

- Create and revise individualized learning plan
- Build on your CV
- Receive & provide mentorship
- Balance clinical and academic duties
- Review principles of academic advancement
- Create a 5 year plan
- Gain awareness of job market demands
- Get the job you want; choose the career path that’s right for you
PEM Fellowship Curriculum

Clinical practice

Teaching and consulting

Administrative training

Quality and performance improvement

Career development

Academics & Scholarship
Fellowship Curriculum

Meets all requirements set forth by the American Board of Pediatrics and American Board of Emergency Medicine
First year curriculum – Peds trained

<table>
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<tr>
<th>Duration</th>
<th>Training Area</th>
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<tbody>
<tr>
<td>8 months PEM*</td>
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<tr>
<td>2 weeks</td>
<td>pediatric anesthesia</td>
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<tr>
<td>2 weeks</td>
<td>pediatric sedation</td>
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<tr>
<td>1 month</td>
<td>PICU (Main and West Campus)</td>
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<tr>
<td>1 month</td>
<td>adult emergency medicine - UT Memorial Hermann</td>
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<tr>
<td>1 month</td>
<td>ultrasound</td>
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</tbody>
</table>

*Total ED Time at Texas Children’s Hospital Main and West Campus = 950 Hours (approx 32 clinical hrs/week on PEM rotations)
<table>
<thead>
<tr>
<th>First year curriculum – EM trained</th>
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<tbody>
<tr>
<td>7.5 months PEM*</td>
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<tr>
<td>2 weeks pediatric anesthesia</td>
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<tr>
<td>2 weeks pediatric sedation</td>
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<tr>
<td>2 weeks child development (with child life)</td>
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<tr>
<td>1 month PICU (Main and West Campus)</td>
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<tr>
<td>1 month NICU</td>
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<tr>
<td>1 month pediatric cardiology</td>
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</tbody>
</table>

*Total ED Time at Texas Children’s Hospital Main and West Campus= 950 Hours (approx 32 clinical hrs/week on PEM rotations)
Second year curriculum – Peds trained

9.5 months PEM*

2 weeks orthopedics

2 weeks toxicology

2 weeks child protection

1 month trauma – UT Memorial Hermann

*Total ED Time at Texas Children’s Hospital Main and West Campus = 1150-1200 Hours (approx 32 clinical hrs/week on PEM rotations)
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<tr>
<th>Requirement</th>
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<td>9.5 months PEM*</td>
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<td>1 month pediatric infectious disease or neurology</td>
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<tr>
<td>1 month elective</td>
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<tr>
<td>2 weeks child protection</td>
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</tbody>
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*Total ED Time at Texas Children’s Hospital Main and West Campus= 1150 Hours (approx 32 clinical hrs/week on PEM rotations)
### Third year curriculum – Peds trained

<table>
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<tr>
<th>Duration</th>
<th>Course/Program</th>
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<td>7.75 months</td>
<td>Research (Extra hours experience)*</td>
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<tr>
<td>2 weeks</td>
<td>Anesthesia</td>
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<td>2 weeks</td>
<td>Toxicology</td>
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<td>1 month</td>
<td>Elective</td>
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<td>1 month</td>
<td>EMS</td>
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<td>1 month</td>
<td>Adult emergency medicine - Ben Taub General Hospital or Memorial Hermann</td>
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<tr>
<td>1 week</td>
<td>Radiology</td>
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</tbody>
</table>

Finish in July whatever required clinical hours not completed in years 1 and 2; otherwise no required ED shifts; Extra hours experience available to maintain clinical skills (approximately 60 clinical hours/month)
Extra Hours Experience (EHE)

Clinical opportunity offered only to fellows in their 3rd year of training

Successful completion of all PEM ED clinical requirements

Opt to take this opportunity to maintain clinical skills during a primarily research year of their fellowship

Placed as second attending in TCH North/South and West Campus

Moonlighting rates apply
Electives

4 weeks of elective(s) required

- Administrative elective
- Adolescent medicine/gynecology
- Adolescent medicine/sports medicine
- Dermatology
- Disaster Preparedness
- Global health- Malawi, Belize
- Neurosurgery
- Ophthalmology
- Otolaryngology
- Pediatric Dentistry
- Plastic/Hand Surgery
- Pediatric Injury
- Quality and Safety
- Simulation
- Create your own elective
All Fellows

Complete 2136 clinical hours in the PEM ED setting around the end of 2nd year of fellowship

TCH Main EC
- Weekdays: 6a-2p, 2p-10p, 6p-2a, 10p-6a
- Tues/Wed medical student teaching shifts: 1p-6p
- Weekends and holidays: 6a-4p, 4p-2a, 8p-6a

TCH West Campus
- Weekdays: 3pm-11pm
- Weekends and holidays: 3pm-1am
### Main Campus

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### Fellow Shift Schedule

- **Fellow 6a-2p weekdays/6a-4pm weekends**
- **Fellow 2p-10p/4p-2a weekends**
- **Fellow 6p-2a (weekdays)**
- **Fellow 3p-11p weekdays/3p-1am weekends**
PEM Rotations

Combined clinical and research time for fellows, based on a 50-hour work week

- **1st year & 2nd year** - 65% clinical and 35% research
- **3rd year** - 25% clinical and 75% research if they choose to take the Extra Hours Experience; 100% research if approved not to take the Extra Hours Experience.

**Pediatric trained fellows**

- 65% clinical and 35% research both years.
- Given the time constraints modifications to the requirement of scholarly activity during fellowship are made based on individual fellows’ needs and interests.
Global Health
Rotation schedule is modified to include global health rotations (counts as electives)

Some rotations will be delayed to the following academic year

Scholarly project focused on global health

Commitment for additional year after PEM fellowship to complete GH requirements (working as faculty)
PEM-Global Health Track

Dr. Marideth Rus, Director, Global Health Track

**Traditional PEM Fellowship**

ALL GH FELLOWS COMPLETE THE FOLLOWING:

- International Fieldwork Rotation
- Scholarly activity project or needs-based research abroad
- Disaster Medicine Training (Health Emergencies in Large Populations (HELP) Course)
- Foundations in Global Health didactic curricular series
- Quarterly Global Health Journal Club

**Diploma in Tropical Medicine & Hygiene (DTMH) + Public Health Certificate**

**DTMH + Master of Public Health (MPH) Diploma or Other approved advanced degree**

**MPH Diploma or Other approved advanced degree**
### PEM-GH Track Year 1

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<thead>
<tr>
<th>8 months PEM</th>
<th>6 months PEM</th>
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<tbody>
<tr>
<td>2 weeks pediatric anesthesia</td>
<td>2 weeks pediatric anesthesia</td>
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<tr>
<td>2 weeks pediatric sedation</td>
<td>2 weeks pediatric sedation</td>
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<tr>
<td>1 month PICU</td>
<td>1 month PICU</td>
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<tr>
<td>1 month adult emergency medicine</td>
<td>1 month adult emergency medicine</td>
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<tr>
<td>1 month ultrasound</td>
<td>1 month ultrasound</td>
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<td></td>
<td>2 months international fieldwork rotation</td>
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<td>PEM-GH Track Year 2</td>
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<td>9.5 months PEM</td>
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<tr>
<td>2 weeks orthopedics</td>
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<td>2 weeks toxicology</td>
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<tr>
<td>2 weeks child protection</td>
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<td>1 month trauma</td>
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<td>6.5 months PEM</td>
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<td>2 weeks orthopedics</td>
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<td>1 month trauma</td>
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<td>3 months GH</td>
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<td>PEM-GH Track Year 3</td>
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<td><strong>7.75 months Research (Extra hours experience)</strong></td>
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<td><strong>2 weeks anesthesia</strong></td>
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<td><strong>2 weeks toxicology</strong></td>
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<td><strong>1 month elective</strong></td>
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<td><strong>1 month EMS</strong></td>
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<td><strong>1 month adult EM</strong></td>
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<td><strong>1 week radiology</strong></td>
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<td><strong>4-5 months PEM</strong></td>
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<td><strong>1-2 months Research (Extra hours experience)</strong></td>
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<td><strong>1 month adult EM</strong></td>
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<td><strong>1 week radiology</strong></td>
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<td><strong>3 months GH</strong></td>
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PEM-GH Track Year 4

- Currently graduate PEM after 3 years
- Year 4 as PEM faculty 75%, 25% GH activities
- Possibility to convert structure of 4th year to PGY-7 PEM-GH fellowship year with designation as TMB approved fellowship
Academics: Conferences and Lectures

PEM conference Thursday 9am-1pm

- Clinical protection Wed overnight and Thurs morning

Conferences which you will present or require your preparation:

- Quality and Performance Improvement (M&M)
- Board Review
- Fellow lectures
- Fellow’s follow-up rounds
- Radiology Rounds
- National conference presentations
Conferences Series- 24 month Curriculum

- July core clinical lectures/workshops
- Administrative
- Allergy/Immunology
- Cardiology
- Child Protection
- Endocrine
- EMS/Disaster medicine
- Ethics
- Hematology series
Conferences Series - 24 month Curriculum

- Gastroenterology
- Global Health
- Neurology
- Obstetrics and gynecology
- Orthopedics
- PEM Joint Conferences
  - Critical Care Medicine
  - Hospital Medicine
  - CVICU
- Plastic Surgery
- Psychiatry
- Quality
- Radiology
- Renal
- Sports medicine
- Surgical
- Trauma
- Toxicology
PEM Domains of Interests

- Information technology
- Disaster preparedness
- Telemedicine
- Sedation and pain management
- Education
Education

Simulation Director

Peds Residency PD

PEM Chief
PEM Domains of Interests

- Airway
- Customer Service and Communication
- Advocacy, Wellness
- EMS
PEM Domains of Interest

- Asthma
- Bronchiolitis
- POCUS (Team Grayscale)
Global Health
PEM Point-of Care Ultrasound

One month Ultrasound rotation during first year

- PEM
- Adult EM
- Radiology
- Cardiology

Ultrasound during your core PEM shifts and adult EM shifts

Ultrasound research

Ultrasound fellowship

Dr. Kiyetta Alade, Director PEM POCUS

Dr. Stephanie Leung, POCUS Fellowship Director
POCUS Training

- POCUS training required for PEM fellow graduation
  1) 150 scans by fellowship completion
  2) 10 proctored scans with ultrasound faculty

- POCUS training completion by March of 2nd year allows for ultrasound privileges as 3rd year "pretendings"
PEM simulation

Involving all fellows:

- Fellows simulation days
  - 4 per year
- EC in-situ simulation
  - Full teams, 4 per month, unannounced
- Procedural teaching
  - Central lines
  - Chest tubes
- Boot camp with PICU

Good to know about:

- RCDP
  - resident and nursing sim training - Thursdays after conferences
- Medical students
  - During core rotation, sim for procedural training
- Pre-hospital training
  - Pediatric resuscitation for HFD providers, trained over 1200 providers
- Global health simulation
PEM outreach and service
New Faculty 2020-21
PEM Research
Scholarship

- Critically assess scientific merit of research protocols & publications
- Gain knowledge in basic clinical epidemiologic principles & biostatistics
- Explore non-traditional avenues for demonstrating scholarship
- Design & conduct a hypothesis driven scholarly project
- Analyze & interpret data
- Acquire knowledge in grant funding mechanisms
- Attain and hone writing skills
## How Are Academic Skills Developed in PEM Fellowship?

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Why</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACER</td>
<td>Project specific guidance from time of initiation</td>
<td>Thursdays year round</td>
</tr>
<tr>
<td>Journal club</td>
<td>In depth review of single recent article; fellow-led</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Thurs</td>
</tr>
<tr>
<td>Topics in Research</td>
<td>Rotating topics (q2-3 yrs) presented by faculty</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Thurs</td>
</tr>
<tr>
<td>Literature Review</td>
<td>Review of recent hot articles and historical PEM topics</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Progress in Research</td>
<td>Updates on research progress, obstacles</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Scholarly oversight committees (SOC)</td>
<td>Help fellow track progress, meet benchmarks</td>
<td>Semi-annually</td>
</tr>
</tbody>
</table>
Advisory Committee on Excellence in Research (ACER)

Small group setting where faculty focus on thorough development of research projects

Faculty with expertise in quantitative and qualitative research, education, quality improvement, and global health

Receive written and verbal feedback on:

- Study question
- Study design
- Analysis plan

1st year fellows required to attend 4 sessions
# Topics in Research Series: 2020-2021 Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Track 1 (Meeting Locations Listed Below)</th>
<th>Track 1 Presenter</th>
<th>Track 2 (PEM Large Conference Room)</th>
<th>Track 2 Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 6, 2020</td>
<td>Felgin Tower Conf Room FC 01A Question Development Workshop (Homework)</td>
<td>Singh/Ashby</td>
<td>Stats III (Homework)</td>
<td>Meskill and Camp</td>
</tr>
<tr>
<td>Sep 10, 2020</td>
<td>Literature Search Workshop (Homework: Complete 2 CITI training courses and turn in certificates) (Bring Laptop)</td>
<td>Chumpitazi</td>
<td>Abstract Workshop (Homework)</td>
<td>Singh (Lead) and faculty*</td>
</tr>
<tr>
<td>Oct 1, 2020</td>
<td>Pavilion for Women Conference Rm B/C Literature Appraisal</td>
<td>Shah</td>
<td>Navigating Rocky Research Waters</td>
<td>Sampayo</td>
</tr>
<tr>
<td>Nov 5, 2020</td>
<td>Pavilion for Women Conference Rm D/E IRB Navigation</td>
<td>Cruz Gonzalez</td>
<td>Writing Workshop #2 (Homework)</td>
<td>Shah (Lead) and faculty*</td>
</tr>
<tr>
<td>Dec 3, 2020</td>
<td>Felgin Tower Conf Room FC 01A Study Design/Stats I (Homework)</td>
<td>Meskill</td>
<td>Educational Research</td>
<td>Doughty</td>
</tr>
<tr>
<td>Jan 7, 2021</td>
<td>PEM Education Rm A210 Study Design/Stats II (Homework)</td>
<td>Meskill and Camp</td>
<td>Poster Preparation Workshop (Homework)</td>
<td>Bachim and faculty*</td>
</tr>
<tr>
<td>Feb 4, 2021</td>
<td>PEM Education Rm A210 Scientific Presentation Skills Workshop</td>
<td>Cruz</td>
<td>Presenting at Conferences: Poster and Elevator Pitch Workshop (Homework)</td>
<td>Ashby and faculty*</td>
</tr>
<tr>
<td>Mar 4, 2021</td>
<td>PEM Education Rm A210 Qualitative Research Pt. 1</td>
<td>Sampayo</td>
<td>Writing Workshop #3 (Homework)</td>
<td>Cruz (Lead) and faculty*</td>
</tr>
<tr>
<td>Apr 1, 2021</td>
<td>PEM Education Rm A210 Writing Workshop #1 (Homework)</td>
<td>Chumpitazi (Lead) and faculty*</td>
<td>Qualitative Research Pt. 2 (Homework)</td>
<td>Sampayo</td>
</tr>
<tr>
<td>May 6, 2021</td>
<td>PEM Education Rm A210 Survey Methodology PEM Education Rm A210 Data Collection and Quality</td>
<td>Sampayo</td>
<td>Writing Workshop #4 (Homework)</td>
<td>Doughty and faculty*</td>
</tr>
<tr>
<td>Jun 3, 2021</td>
<td>PEM Education Rm A210</td>
<td>Shenoi J Jones</td>
<td>Case Report Workshop (Homework)</td>
<td>Meskill (Lead) and faculty*</td>
</tr>
</tbody>
</table>
# Department of Pediatrics Fellows’ College

## Fellows College Fall 2020

<table>
<thead>
<tr>
<th>Date</th>
<th>RM</th>
<th>Title</th>
<th>Speaker</th>
<th>Date</th>
<th>RM</th>
<th>Title</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td></td>
<td>FC Virtual Orientation</td>
<td></td>
<td>July</td>
<td></td>
<td>FC Virtual Orientation</td>
<td></td>
</tr>
<tr>
<td>7/14</td>
<td></td>
<td>TCH Aud Institutional Updates</td>
<td>Dr. Schutze</td>
<td>7/14</td>
<td></td>
<td>TCH Aud Institutional Updates</td>
<td>Dr. Schutze</td>
</tr>
<tr>
<td>Aug</td>
<td></td>
<td>VIRTUAL RES- Question dev</td>
<td>Singh/Ashby</td>
<td>Aug</td>
<td></td>
<td>VIRTUAL ACD-Interviewing skills</td>
<td>S. Whitney</td>
</tr>
<tr>
<td>8/6</td>
<td>VIRTUAL</td>
<td>FAE-Autonomy/Supervision</td>
<td>Barak/Singhal</td>
<td>8/11</td>
<td>VIRTUAL</td>
<td>ACD-Negotiating skills</td>
<td>S. Blaney</td>
</tr>
<tr>
<td>Sept</td>
<td></td>
<td>FC 1A RES-Lit search</td>
<td>A. Bachim</td>
<td>9/8</td>
<td>FC 1A</td>
<td>ACD- Productivity &amp; Promotion</td>
<td>G. Singhal</td>
</tr>
<tr>
<td>9/18</td>
<td></td>
<td>ACD- Acad Pathways</td>
<td>Vashni/Kecoy/Herzog</td>
<td>9/15</td>
<td>FC 14D</td>
<td>QI-Intro</td>
<td>F. Okcu &amp; team</td>
</tr>
<tr>
<td>Oct</td>
<td></td>
<td>PFW D,E RES-Lit appraisal</td>
<td>M. Shah</td>
<td>9/24</td>
<td>FC 14D</td>
<td>ACD- Employment Contracts</td>
<td>James Sanfield</td>
</tr>
<tr>
<td>10/1</td>
<td>PFW D,E</td>
<td>RES-Lit appraisal</td>
<td>M. Shah</td>
<td>10/6</td>
<td>FC 1A</td>
<td>RES-Poster Preparation</td>
<td>Bachim</td>
</tr>
<tr>
<td>10/13</td>
<td>LT 1520.20</td>
<td>QI-2 Smart Aims</td>
<td></td>
<td>10/19</td>
<td>FC 14D</td>
<td>SBP- Safety II</td>
<td>Goldman/Patel</td>
</tr>
<tr>
<td>10/30</td>
<td>FC 1A</td>
<td>QI 3- Key Driver</td>
<td>F. Okcu &amp; team</td>
<td>11/2</td>
<td>FC 14D</td>
<td>RES-Specific Aims Writing</td>
<td>K. Murray</td>
</tr>
<tr>
<td>11/5</td>
<td></td>
<td>FC 1A SE-Time Management</td>
<td>Vachani</td>
<td>11/13</td>
<td>FC 14D</td>
<td>QI 4- Data Display</td>
<td>F. Okcu &amp; team</td>
</tr>
<tr>
<td>11/19</td>
<td></td>
<td>FC 1A RES-Study Design/ Stats</td>
<td>S. Meskill</td>
<td>11/30</td>
<td>FC 1A</td>
<td>QI 5- Research vs QI</td>
<td>F. Okcu &amp; team</td>
</tr>
<tr>
<td>Dec</td>
<td></td>
<td>FC 1A</td>
<td></td>
<td></td>
<td></td>
<td>FC 14D SBP-Health Equity and COVID</td>
<td>J. Raphael</td>
</tr>
<tr>
<td>12/3</td>
<td></td>
<td>FC 1A</td>
<td></td>
<td></td>
<td></td>
<td>FC 1A QI-5 Research vs QI</td>
<td>F. Okcu &amp; team</td>
</tr>
</tbody>
</table>
National presentations
QI PROJECT IMPROVES PREHOSPITAL PROTOCOL COMPLIANCE

Fellows National Conference 2018
Advocacy on Capitol Hill
EMS for children

2018 Harvard Humanitarian Response Intensive Course

2017 American Academy of Pediatrics First place PediSonoFest Competition
Texas Pediatric Society E-Poster Contest Winners

Bryan Greenfield and Abhay Kulkarni

FIRST PLACE for your poster in the Evidence Based Medicine/QI category:

#60minutes: Improving Timeliness of Antibiotic Delivery to Patients with Febrile Neutropenia

Micheal Arroyo:
Best original research award and platform presentation at the Injury Free Coalition for Kids Conference, December, 2019, Ft. Lauderdale, Florida

Asha Morrow
2019 Best and Outstanding Center of Excellence Clinical Fellow Scholar Award

Justin Moher
Best Trainee Abstract SOICH AAP, 2019
Faculty & Research Mentor Roles

**Mentor**
- Attend journal club, fellow lecture, follow-up rounds and QPI presentation for mentee
- Give quarterly feedback to mentee on clinical/academic performance

**Research Mentor**
- Participate in ACER sessions with fellow
- Review the fellow’s proposal prior to submission to ACER
- Review the fellow’s IRB prior to submission
- Review abstracts and manuscripts prior to submission

**Both**
- Review posters and slides prior to presentations
- Attend 2 SOC meetings per year
Other Scholarly Activities

- Case submissions (PEMPix, EmergiQuiz, Case Reports)
- Participation in National PEM Fellows’ Conference
- Feedback on presentations for conferences
- Career workshop in July
- Final year career planning at orientation
- BCM Fellows’ Day abstract presentations
Other Activities (Optional)

- Career dinners
- Advanced degrees (MPH, MBA, MEd, Master’s Clinical Research)
- Writing book chapters or review articles
- Teaching residents, medical students, paramedics
- Evidence-Based Medicine course
- Serving on section or hospital-wide committees
PEM RESEARCH STRUCTURE

Research Chief

Directors of Research Education

Research Coordinators

Research Assistants

Academic Associates

PEM Section Support Staff

- Epidemiologist and database manager
- Biostatistician
- Accountant
National PEM research network, 18 sites

TCH is a member site

Enables multicenter studies:

• Decision rules for CTs after head injuries
• DKA
• Meningitis prediction rules
• Disparities in pain management
• Multiple publications

www.pecarn.org
Research: ongoing studies

**PECARN**
- C-spine prediction (Rubalcava)
- Arginine for sickle cell crisis (Chumpitazi)
- Identification of pulmonary emboli (Chumpitazi)
- Febrile baby study (Cruz)
- Screening for sexually transmitted infections in the ED (Cruz)
- Non-operative management of appendicitis (planning grant)
- Infections in solid organ transplant recipients (Cruz, nodal study)
- Interobserver agreement in historical and examination variables for headaches (Cruz)

**PEM CRC**
- Submersion (Shenoi)
- IBIs in acute otitis media (Cruz)
- HUS (Cruz)
- HSV (Cruz)
- Omphalitis/mastitis (Cruz)
- Short gut and CLABSI (Cruz)
- Survey competition (quarterly)

**PERN**
- Medical errors (Lewis)
- Influenza (Meskill)
- Sedation for Intussusception Reduction (Ojo)

**Society for Pediatric Sedation**
- Sedation Satisfaction (Chumpitazi)

**Industry**
- Bluetooth monitoring of vital signs
- New diagnostic platforms for rapid strep
- Salivary biomarkers for traumatic brain injury
Current Single-Center Studies  
(just a sampling)

- **Quality improvement projects:** intubation, pain control in sickle cell patients, pain reassessment, resuscitation/communication, asthma controllers, apneic oxygenation
- **Educational projects:** ultrasound, simulation, rubrics, bad news delivery, e-learning, debriefing
- **Global health:** triage, resuscitation, simulation, POCUS, education
- **Trauma:** trampoline injuries, cognitive impact of mild traumatic brain injury, abuse in the NICU
# Examples of Fellows’ Scholarly Activity
## 2016-current

<table>
<thead>
<tr>
<th>Administration</th>
<th>Asthma: Standing Delegation Orders and Triage Steroids, Evaluating the inter-rater reliability and validity of the CRS in asthma patients, LEP</th>
<th>Bronchiolitis: High Flow Nasal Cannula and Intubation risk</th>
<th>Quality Improvement: Barriers to Flu vaccination Best practice advisory, Intubation check list, Apneic Oxygenation, PICU Handoffs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disparities:</strong> Pediatric submersions and safety violations in city swimming pools, Demographic Discordances Between Patient Reported and Electronic Medical Records</td>
<td><strong>EMS:</strong> Prehospital administration of steroids, Mixed-methods study on adherence to pediatric seizure protocols QUALITATIVE, Weight Tools</td>
<td><strong>POCUS:</strong> inferior vena cava (IVC) measurements to assess the severity of dehydration; Novel Point-of-Care Ultrasound Training for Pediatric Providers in Malawi”</td>
<td><strong>Global Health:</strong> Pediatric tropical infectious diseases in emergency medicine utilizing the MODIFIED DELPHI METHOD, Healthcare Provider Attitudes Toward the Emergency Triage System in Belize, Curriculum</td>
</tr>
<tr>
<td><strong>Education:</strong> Simulation- RCDP, Debriefing Tools, PEM Fellow Procedures; Essential components for debriefing pediatric residents returning from global health experiences, Humanism curriculum</td>
<td><strong>Infectious Disease:</strong> Neonatal FEVER, RRTs, Shock protocol, Viral Co-infections and Intubation</td>
<td><strong>Health Policy:</strong> Medicaid/CHIP eligibility in foreign born children</td>
<td><strong>Innovation:</strong> COVID ARC BOX for intubation</td>
</tr>
</tbody>
</table>
Moonlighting

1st years can start moonlighting after 2 quarterly evaluations cycles complete and competency ascertained

TX license, DEA and DPS numbers

Hospital credentialing papers and GME moonlighting approval must be obtained

Prior to completion of 2136 required clinical hours: moonlight only at non training sites

After completion of 2136 hours, moonlight anywhere
PEM Chief Fellows

Shelease O’Bryant MD
Shelease.O’Bryant@bcm.edu

Ellie Souganidis MD
Ellie.Souganidis@bcm.edu
Explore our section website to learn more about all of our education, patient care, and research activities. Tour Texas Children’s Hospital with our 2020-2021 chief residents. View the ED near the end of the video.

Learn more!

Follow us! @TXChildrensPEM

Follow TCH and BCM

Learn more about how we are prioritizing the health and safety of our fellows, caring for our patients and helping our community throughout the pandemic. Check out our TMC COVID Dashboard for the most up to date statistics.

Learn more about this award winning program.

We know that fostering a diverse and inclusive environment is a prerequisite to achieving excellence. Learn more about how we do this.

Learn more about how we do this.

Texas Medical Center

Our location in the heart of the world’s largest medical center provides exceptional opportunities for our residents/fellows. Explore here!

Diversity and Inclusion

BCM BeWell Program

BCM is Houston Business Journal’s “Healthiest Employers” of 2019. Learn more about this award winning program.

Life in Houston

Houston is the 4th largest city in the US and the most diverse. With a cost of living significantly below other major cities and abundant opportunities for pursuing diverse interests, the city has a lot to offer. Learn more!

Welcome Video

We look forward to meeting you!

BCM/TCH Pediatric Emergency Medicine

We look forward to meeting you!