



DIVISION OF PEDIATRIC EMERGENCY MEDICINE

Mission

The division strives to have the **best** pediatric emergency department because it has the **best** people who provide the **best** patient care, keeping in mind that patients and families believe that **best** means timely care accompanied by compassion, communication, and partnered decision making.

Specific elements of the mission of the Division of Pediatric Emergency Medicine include:

- To deliver the highest quality of care to children with acute illnesses and injuries and to do so efficiently and with attention to safety and cost
- To provide excellence in service to patients, families, and referring clinicians
- To educate fellows, residents, students, nurses, advanced practice providers, and prehospital care personnel
- To pursue scholarly clinical and laboratory research questions
- To advance the field of pediatric emergency medicine both clinically and academically

FACULTY AND STAFF

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 Chief, Division of Pediatric
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Assistant Professor of
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Associate Professor of Pediatrics
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ADVANCED PRACTICE PROVIDERS

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Laura Pete, PA-C

Jodee Stevens, PA-C

OVERVIEW OF DIVISION

The objective of the Division of Pediatric Emergency Medicine is to be a “quadruple-threat” division focused on clinical care, education, scholarly pursuit, and quality science. The division has created an environment that provides excellence in clinical care and a dense educational experience at every level, including students, house staff, fellows, faculty, nurses, and advanced practice providers. Scholarly opportunities for division members have their origins in the fertile clinical environment of the emergency department and are a result of a wide collaborative research network.

CLINICAL ACTIVITIES

The division’s attending physicians are all board eligible or certified in pediatrics and pediatric emergency medicine and staff the emergency department 24 hours per day. The emergency department at Children’s Hospital had an annual patient volume of nearly 82,000 during fiscal year 2017, an increase of more than 51% during the past decade. Approximately 19% of patients who presented to the emergency department were admitted to the hospital.

The emergency department cares for children with both medical and surgical problems, including traumatic injuries. Children’s Hospital is the only level 1 pediatric trauma care facility in the tristate region and includes a catchment area spanning all of Western Pennsylvania, northern West Virginia, and northeastern Ohio. As a tertiary-care referral center, the hospital admits approximately 1,700 children with traumatic injuries each year.

RESEARCH AND OTHER SCHOLARLY ACTIVITIES

The Division of Pediatric Emergency Medicine has a robust research infrastructure that includes a 120-square-foot office dedicated to research and located adjacent to the emergency department. Research assistants screen and enroll study patients seven days per week. The research staff includes three registered nurses and two undergraduate students. A partial list of research topics includes: treatment of urinary tract infections (UTIs), computer-based adaptive screening for risk of suicide, non-invasive detection of ventriculoperitoneal shunt malfunction, and prevalence of influenza. The emergency department research group has partnered with other divisions in the Department of Pediatrics, including General Academic Pediatrics, Pediatric Infectious Diseases, Pulmonology, and Hematology/Oncology, to collaborate on several additional studies related to pediatric acute and emergency care.



Richard A. Saladino, MD

Richard A. Saladino is chief of the Division of Pediatric Emergency Medicine.

MENTORSHIP AND RESEARCH

Saladino’s mentorship efforts blend his past laboratory interests (pathophysiology and prevention and treatment of serious bacterial infections) and current clinical interests (process improvement, biosurveillance, procedural sedation, and evaluation and management of traumatic injuries). Saladino currently is a co-investigator on two major grants: a National Institutes of Health R01 grant titled “Novel Approaches to Screening for Inflicted Childhood Neurotrauma” and a Patient-Centered Outcomes Research Institute grant titled “Using the Electronic Medical Record to Improve Outcomes and Decrease Disparities in Screening for Child Physical Abuse.” He has mentored numerous

students, residents, fellows, MD-PhD students, and junior faculty in their clinical and scholarly projects.

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- Society for Pediatric Research
- American Academy of Pediatrics
- Section on Emergency Medicine, American Academy of Pediatrics
- Academy of Master Educators, University of Pittsburgh School of Medicine



Richard A. Saladino, MD
Division Chief, Pediatric Emergency Medicine

Michael Abesamis, MD, MPH

RESEARCH

Michael Abesamis’ research interests include novel antidotes for anticoagulant toxicity and toxicity associated with hydraulic fracturing.

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American College of Medical Toxicology
- American Academy of Clinical Toxicology

Mananda S. Bhende, MD

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics
- American College of Emergency Physicians
- American Association of Physicians of Indian Origin

Kristin M. Farrell, MD

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics

Martin G. Hellman, MD

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics
- American College of Emergency Physicians

Robert W. Hickey, MD

RESEARCH

Robert W. Hickey is director of research for the division. He has a track record of laboratory-based research related to *in vitro* and *in vivo* models that examine the molecular basis for hypoxic-ischemic brain injury following resuscitation from cardiac arrest.

Hickey’s clinical research has encompassed common pediatric emergency medicine conditions (e.g., UTI, bronchiolitis, pneumonia), with a special emphasis on cardiopulmonary resuscitation (CPR). Selected contributions include describing the prevalence of UTI in young febrile children, showing that outpatient therapy is equivalent to inpatient therapy for infants with UTI, defining the role of imaging in young children with UTI, comparing automated with manual urinalysis, demonstrating that blood cultures are unnecessary in management of patients with uncomplicated pneumonia, describing the prevalence of retinal hemorrhages in child-abuse victims presenting with apparent life-threatening events, describing the occurrence and success of bystander CPR in pediatric cardiac arrest, showing that children resuscitated from cardiac arrest frequently develop hypothermia followed by fever, and showing that hyperoxia secondary to supplemental oxygen administration is common (and prolonged) in children resuscitated from cardiac arrest.

Selected ongoing projects include investigating paraspinal, intramuscular injection of ropivacaine for treatment of headache; investigating a non-invasive device for detecting

ventriculoperitoneal shunt malfunction; investigating steroids for prevention of scarring in pyelonephritis; comparing short-course versus traditional-course antimicrobial therapy for UTI; testing a computer-based screening algorithm for detecting adolescents at risk for suicide; and comparing anti-epileptic medications for treatment of children with benzodiazepine-resistant seizures.

Hickey has an established reputation as an expert in pediatric CPR. He has served as the co-chair of the International Liaison Committee on Resuscitation (ILCOR) Pediatric Task Force and as the co-chair for the ILCOR Conference on Emergency Cardiovascular Care and CPR.

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- Society for Pediatric Research
- American Academy of Pediatrics
- American Heart Association
- Society for Neuroscience
- ILCOR

Janet M. Kinnane, MD

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics

Rhett H. Lieberman, MD

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics
- American Academy of Pediatric Program Directors

Amanda Lovallo, MD

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics

Michael Lynch, MD

RESEARCH

Michael Lynch's research interests include novel treatments for withdrawal conditions, novel methods of mortality prediction in acetaminophen toxicity, and illicit drug adulterants and their medical consequences.

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American College of Medical Toxicology
- American Academy of Clinical Toxicology

Mioara D. Manole, MD

RESEARCH

Mioara D. Manole continues her investigation of the cerebral effects of pediatric asphyxial cardiac arrest in a small-animal model. She is the primary investigator for a National Institutes of Health R01 grant titled "CYP 450-Mediated CBF Dysregulation and Neurotoxicity in Pediatric Cardiac Arrest."

ADVISORY COMMITTEE MEMBERSHIPS

- Chair, Scholarly Oversight Committee, Division of Pediatric Emergency Medicine

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics
- Society for Pediatric Research

Jennifer R. Marin, MD

Jennifer Marin has significant training and experience in ultrasound. She developed the curriculum for training and assessing competency in bedside ultrasound for faculty and fellows in the Division of Pediatric Emergency Medicine. She was appointed quality director for point-of-care ultrasound for Children's Hospital and, as such, oversees the use of bedside ultrasound by other divisions in the hospital. Marin also co-chaired an international multidisciplinary consensus on emergency diagnostic imaging.

RESEARCH

Marin's research focus is on diagnostic imaging, including the use of point-of-care ultrasound and computed tomography utilization and variation. She serves as a research mentor for pediatric emergency medicine fellows. Marin was co-lead author of the "Policy Statement and Technical Report on Point-of-Care Ultrasound," recently published by the American Academy of Pediatrics.

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- Co-chair, American College of Emergency Physicians
- Member, sections on Emergency Ultrasound, Policy and Government Relations, and Ultrasound, American College of Emergency Physicians
- Section on Emergency Ultrasound, Society for Academic Emergency Medicine
- American Institute of Ultrasound in Medicine
- American Academy of Pediatrics
- Chair, Pediatric Emergency Medicine Point-of-Care Ultrasound (P2)

EDITORSHIPS

- Associate editor, *Pediatric Emergency Care*

Brett L. McAninch, MD**PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics

Erin D. Phrampus, MD

Erin Phrampus has established a collaborative relationship with the WISER Center, where she has developed a simulation-based curriculum for the pediatric emergency medicine and pediatric critical care programs. She directs a number of courses held at both the WISER Center and Children's Hospital of Pittsburgh Pediatric Simulation Center.

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics

Raymond D. Pitetti, MD**RESEARCH**

Raymond D. Pitetti's research interests include the laboratory detection, evaluation, and management of apparent life-threatening events in children. He continues to develop a comprehensive research program designed to evaluate the use of various medications for procedural sedation, such as dexmedetomidine, nitrous oxide, and propofol, as well as evaluate programmatic changes, such as the behavioral aspects of children undergoing sedation and the impact of cancelled and failed sedations.

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics
- Section on Emergency Medicine, American Academy of Pediatrics
- Society for Pediatric Research
- Section on Complementary, Holistic, and Integrative Medicine, American Academy of Pediatrics
- Society for Pediatric Sedation

Anthony F. Pizon, MD**RESEARCH**

Anthony Pizon's research interests include snake envenomations, novel treatments for withdrawal conditions, novel methods of mortality prediction in acetaminophen toxicity, and illicit drug adulterants and their medical consequences.

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- Board of Directors, American College of Medical Toxicology
- American Academy of Clinical Toxicology

Johanna R. Rosen, MD

Johanna Rosen is the director of quality and process improvement for the Division of Pediatric Emergency Medicine. She has developed a broad-based program to support initiatives that focus on quality and process improvement as well as patient safety.

RESEARCH

Rosen's research and scholarly interests are focused on quality science. Her projects include initiatives related to early identification and treatment of children with septic shock, timely pain reduction for children with acute fractures, and reduction in time to corticosteroids for children with asthma exacerbation.

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- American Academy of Pediatrics

Melissa A. Vitale, MD**PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS**

- American Academy of Pediatrics

Joseph H. Yanta, MD**RESEARCH**

Joseph Yanta's research interests include novel interventions to link those with opioid addiction to outpatient resources and prevent early relapse after discharge from the emergency department, novel methods of mortality prediction in acetaminophen toxicity, and illicit drug adulterants and their medical consequences.

PROFESSIONAL AFFILIATIONS/SOCIETY MEMBERSHIPS

- Toxicology Section, American College of Emergency Physicians
- American College of Medical Toxicology
- American Academy of Clinical Toxicology

Noel S. Zuckerbraun, MD

Noel Zuckerbraun is the director of the fellowship program in pediatric emergency medicine. She continues to develop curricula, with a recent focus on developing the research and academic skills curricula, restructuring both into longitudinal courses. She continues to direct and enhance simulation programming for pediatric emergency medicine fellows and emergency medicine and pediatric residents. She directs a number of courses held at both the WISER Center and Children's Hospital of Pittsburgh Pediatric Simulation Center. In addition, Zuckerbraun is one of the creators of the Department of Pediatrics faculty development series

and a member of the Department of Pediatrics Bridges workgroup for faculty development.

RESEARCH

Zuckerbraun's research and scholarly activities continue to focus on clinical pediatric emergency medicine, including injury, medical education, and ongoing quality improvement in the emergency department.

THREE-YEAR BIBLIOGRAPHY

2015

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2017

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