

# **Emergency Medicine**

#### **Division Photo**



First Row: E. Alessandrini, S. Bhatt, M. Mahabee-Gittens, S. Reeves, R. Shapiro, R. Ruddy, S. Kennebeck, M. FitzGerald, W. Pomerantz; Second Row: T. Byczkowski, J. Reed, P. Chambers; Back Row: L. Vaughn, J. Grupp-Phelan, C. Schubert, M. Mallory, C. Dixon, J. Setlik, J. Gonzalez del Rey, N. Timm, M. Gittelman, J. Luria, S. Iyer

## **Division Data Summary**

Research and Training Details	
Number of Faculty	38
Number of Joint Appointment Faculty	2
Number of Research Fellows	3
Number of Support Personnel	41
Direct Annual Grant Support	\$838,702
Direct Annual Industry Support	\$23,370
Peer Reviewed Publications	51
Clinical Activities and Training	
Number of Clinical Staff	40
Number of Clinical Fellows	8
Number of Other Students	2
Outpatient Encounters	142431

## **Significant Publications**

Kuppermann N, Holmes JF, Dayan PS, Hoyle JD Jr, Atabaki SM, Holubkov R, et al. Identification of children at very low risk of clinically-important brain injuries after head trauma: a prospective cohort study. Lancet. 2009;374(9696):1160-70

This prospective cohort included over 40,000 children with head injury from 25 emergency departments from 2004-06 where prediction rules of clinically-important brain injuries were derived and validated. In both children under 2 years and those 2-18 years of age, the absence of any of six clinical variables in patients with <24 hours from head injury and Glasgow Coma Scale at ED visit of 14 or 15 had extremely low risk of clinically significant brain injury. This should give clinicians an opportunity to reduce CT use in this population (currently in the range of 10-50%) to a very rate - reducing the exposure to ionizing radiation in pediatric patients.

Shaw KN, Ruddy RM, Olsen CS, Lillis KA, Mahajan PV, Dean JM, et al. Pediatric patient safety in emergency

departments: unit characteristics and staff perceptions. Pediatrics. 2009;124(2):485-493

Safety has been a priority for Emergency Departments, which have high risk of issues, multiple distractions, overcrowding and are often the point where serious safety events may be initiated. Within the PECARN network, 21 EDs were surveyed across structure and process issues and staff was surveyed on the climate of safety using a standard survey. Results demonstrated 48% of EDs had safety committees and 38% had safety walk rounds. Lack of CPOE (62%), ED pharmacists (81%), lack of RN/MD teams (62%) and patient beds in hallways (67%) all were noted. ED staff had higher climate of patient safety had lack of overcrowding (use of hallway beds), sick call for MD staffing, and ED safety committee. Interventions will focus on these areas in the network in future studies.

Pomerantz WJ, Timm NL, Gittelman MA. Injury patterns in obese versus nonobese children presenting to a pediatric emergency department. Pediatrics. 2010;125(4):681-685

Children with injuries from Jan 2005 through Mar 2008 from age 3-14 years had data pulled from the Electronic Health Record from ED visit. Injury types were compared for those < and > 9%ile weight for age. There were 23,349 patients in our study population (excluding those without weights recorded). The mean age was 8.2 years (SD: $\pm$ 3.6 years), 60.7% were white, and 61.7% were male and obesity represented 16.5%. Rates of upper extremity injuries were comparable, there was a greater risk of lower extremity injury in obese patients (OR: 1.71 95% confidence interval: 1.56 -1.87]; P<.001) and lower head and face injuries (OR: 0.54 [95% confidence interval: 0.50-0.58]; P<.001). Prevention strategies should consider this epidemiology in seeking solutions.

Mahajan P, Alpern ER, Grupp-Phelan J, Chamberlain J, Dong L, Holubkov R, et al. Epidemiology of psychiatric-related visits to emergency departments in a a multicenter collaborative research pediatric network. Pediatr Emerg Care. 2009;25(11):715-720.

This publication described the health services usage of pediatrics at 24 pediatric emergency departments with psychiatric related complaints from 2003-05. Characteristics of the population were that 3.3% of all visits to contributing institutions and the patients with psychiatric-related visits were older (mean  $\pm$  SD age, 12.7  $\pm$ 3.9 years vs. 5.9  $\pm$  5.6 years, P < 0.001), had a higher rate ambulance arrival (19.4% vs 8.2%, P < 0.0001), had a longer median length of stay (3.2 vs 2.1 hours, P < 0.0001), and had a higher rate of admission (30.5% vs 11.2%, P < 0.0001) when compared with non-psychiatric related patient presentations. Planning of future acute health / mental-health care for adolescents needs to be considered in our health care system in the coming decade.

Setlik J, Bond GR, Ho M. Adolescent prescription ADHD medication abuse is rising along with prescriptions for these medications. Pediatrics. 2009;124(3):875-880.

This paper demonstrates the increase in intentional abuse or misuse of prescription medications used for attention deficit hyperactivity disorder by adolescents age 13-19 years. The investigators queried the AAPC National Poison Data System from 1998 -2995 and compared it with Intermountain Health's National Disease and Therapeutic sales data to understand better drug availability. Results found that teenaged victims of prescription ADHD medication abuse rose 76% with annual rate of total and teen exposures unchanged. Both the number and the case severity of calls over ADHD drugs (Amphetamine133%, Methylphenidate 52%) rose out of proportion to other calls with amphetamine of most significance.

## **Division Highlights**

**Pediatric Emergency Care Applied Research Network** 

The network has continued to produce strong results with a number of new funded grants, submitted with the Emergency Medical Services for Children PAR, and continued completion and dissemination of ongoing projects. Highlights include: decision rule for head injury to reduce head CT use published (Glass T), safety work with first publication in FY 10 on ED culture of safety (Ruddy), mental health ED burden / health services publications (Grupp-Phelan), decision rule for intra-abdominal injury for imaging / CT – data completed (Kerrey B), large NIH grant started enrollment - hypothermia for cardiac arrest (Wheeler, Geis), largest cohort study regarding C-spine injury accepted for publication (Reeves, Babcock-Cimpello), Yr 3 enrollment and additional NIH funding for neonatal febrile illness to determine biosignatures for viral and bacterial illness (Ruddy), burden of pregnancy related visits in pediatric EDs (Timm, McAneney). New work and grants include implementation of head injury decision rule for trauma, safety bundles to reduce serious safety events in the ED, DKA management, Sickle Cell – management of vaso-occlusive crisis, pre-hospital management of asthma and the development of registry for PEDs using electronic health data.

Cincinnati Children's Center for Simulation and Research

The Center has continued to develop relationships resulting in strong educational and safety projects involving diverse disciplines internal and external to the Institution. Within the hospital we have developed successful collaborations with Cardiology Intensive Care (Patterson/Marino) in a just completed serious safety event reduction and translation to clinical care project, the Bone Marrow Transplant Unit, (Walker/Patterson), Extracorporeal Membrane Oxygenation Teams (Geis/Burton/Pendergrass: submitted for publication). Drs. Geis/Patterson/Falcone (Surgery) submitted an Emergency Medicine Systems for Children Grant to NIH which received scores in the excellent range and will be resubmitted in September 2010. Additional collaborations were developed with Critical Care (Wheeler) and included an R01 on team resilience. This grant was a cooperative effort of the Center, Emergency Medicine (Patterson/Taylor) and Robert Wears, Kathleen Sutcliffe, Mary Waller and Marlys Christianson, recognized experts in patient safety. An additional grant

submission on the acceleration of expertise in the recognition of sepsis was submitted by Critical Care and Emergency Medicine faculty (Wheeler/Patterson) in collaboration with Gary Klein, another internationally recognized patient safety expert.

## **Division Collaboration**

Collaboration with Center for Global Health

Collaborating Faculty: Cinnamon Dixon, DO; Mark Steinhoff, MD, MPH

International injury surveillance and prevention; development of a Peruvian dog big study.

**Collaboration with Center for Global Health** 

Collaborating Faculty: Charles Schubert, MD; Mark Steinhoff, MD, MPH

Global child health program for the residency program.

Collaboration with Center for Health Care Quality

Collaborating Faculty: Srikant Iyer, MD, MPH; Terri Byczkowski, PhD, MBA; Peter Margolis, MD, PhD

Design of a multi-component intervention to improve acute pain management in the ED.

Collaboration with Center for Health Care Quality

Collaborating Faculty: Srikant Iyer, MD, MPH; Carole Lannon, MD, MPH

Improvement advisor for the Joint Commission on Congenital Heart Disease Improvement Collaborative.

Collaboration with Center for Innovation in Chronic Disease

Collaborating Faculty: Terri Byczkowski, PhD, MBA; Maria Britto, MD, MPH

Chronic Care Innovation Lab: Improving outcomes for adolescents with asthma.

Collaboration with Center for Simulation and Research; Section of Neonatology, Perinatal and Pulmonary **Biology** 

Collaborating Faculty: Gary Geis, MD; Tara Lang, MD; Elizabeth Wetzel, MD; Beth Haberman, MD Provide education in the simulation lab for CCHMC RCNIC staff in order to improve both clinical and behavioral outcomes and subsequently improve the quality and safety of care that neonatal patients receive at CCHMC.

Collaboration with Center for Simulation and Research: Division of Hematology/Oncology, Bone Marrow Transplant Program

Collaborating Faculty: Mary Patterson, MD, MEd; Stella Davies, MBBS, PhD, MRCP

Meeting the Goal of Changing the Outcomes: Evaluating simulation training on technical and teamwork skills of BMT staff, care processes, and serious safety events on blood and marrow transplant patients.

Collaboration with Center for Simulation and Research; Cardiac Intensive Care Unit

Collaborating Faculty: Mary Patterson, MD, MEd; Terri Byczkowski, PhD, MBA; Bradley Marino, MD, MPP, MSCE; Catherine Dent Krawczeski, MD

Evaluating the impact of simulation training on technical and non-technical skills of personnel, clinical processes and teamwork within the Cardiac Intensive Care Unit (CICU).

Collaboration with Center for Simulation and Research; Division of Critical Care Medicine

Collaborating Faculty: Mary Patterson, MD, MEd; Derek Wheeler, MD

Implementation of in situ simulations: Mock codes on clinical units.

Collaboration with Division of Adolescent Medicine

Collaborating Faculty: Michael FitzGerald, PhD; Corinne Lehrman, MD, MEd
A computer-based tool for providing frequent and specific feedback to residents, its feasibility and impact when used for formative assessment.

Collaboration with Division of Adolescent Medicine; Behavioral Medicine and Clinical Psychology

Collaborating Faculty: Melinda Mahabee-Gittens, MD, MS; Lorah Dorn, PhD; Robert Ammerman, PhD, APBB Adolescent smoking prevention.

Collaboration with Division of Adolescent Medicine

Collaborating Faculty: Jennifer Reed, MD; Jill Huppert, MD, MPH; Rick Strait, MD

Research on use of biomarkers to evaluate for ovarian torsion versus other acute abdominal/pelvic conditions.

Collaboration with Division of Adolescent Medicine

Collaborating Faculty: Jennifer Reed, MD; Jill Huppert, MD, MPH; Carolyn Holland, MD, MEd

Research on improving notification of STI results to adolescents and feasibility of universal STI screening in the ED. Collaboration with Division of Allergy and Immunology

Collaborating Faculty: Laurie Johnson, MD; Rick Strait, MD; Richard Ruddy, MD; Gurjit Khurana Hershey, MD, PhD

Gene expression profiles of acute asthma and subphenotypes of treatment response.

Collaboration with Division of Allergy and Immunology

Collaborating Faculty: Laurie Johnson, MD; Michelle Lierl, MD

Inter-rater reliability between physicians and respiratory therapists in pediatric asthmatic patients presenting to an urban emergency department.

Collaboration with Division of Allergy and Immunology

Collaborating Faculty: Rick Strait, MD: Simon Hogan, PhD; Marc Rothenberg, MD, PhD

Role of IL-9 and IgA in intestinal anaphylaxis.

Collaboration with Division of Allergy and Immunology

Collaborating Faculty: Rick Strait, MD; Yesim Kucuk, MD

Inhibitory Ig in anaphylaxis.

Collaboration with Division of Anesthesiology

Collaborating Faculty: Berkeley Bennett, MD, MS: Jennifer Setlik, MD: Jagueline Morillo-Delerme, MD

Development of program for Emergency Medicine faculty to maintain intubation skills.

Collaboration with Division of Biomedical Informatics

Collaborating Faculty: Andrea Rinderknecht, MD; Jacqueline Grupp-Phelan, MD, MPH; John Pestian, PhD, MBA; Pawel Matykiewicz

Identifying research subjects from free text electronic documentation through natural language processing methods.

Collaboration with Division of Biomedical Informatics

Collaborating Faculty: Hamilton Schwartz, MD; John Hutton, MD

Development of a transport team quality improvement tracking database.

Collaboration with Division of Cardiology; Clinical Laboratory

Collaborating Faculty: Berkeley Bennett, MD, MS; Melinda Mahabee-Gittens, MD, MS; Russel Hirsch, MD; Michael Chua, MD; Paul Steele, MD; Elena Duma, MD

Prospective study of Troponin I to detect cardiac insult in non-accidental trauma.

Collaboration with Division of Child Psychiatry: Psychiatry Intake Response Team

Collaborating Faculty: Jacqueline Grupp-Phelan, MD, MPH; Robert Kowatch, MD, PhD, Linda Richey, LISW Predictors of mental health follow up among adolescents with suicidal ideation after emergency department discharge.

Collaboration with Division of Child Psychiatry; Division of Biomedical Informatics

Collaborating Faculty: Jacqueline Grupp-Phelan, MD, MPH; Robert Kowatch, MD, PhD; John Pestian, PhD, MBA

Suicide risk assessment and prevention.

Collaboration with Division of Critical Care Medicine; Center for Simulation and Research

Collaborating Faculty: Constance McAneney, MD, MS; Kenneth Tegtmeyer, MD; Mary Patterson, MD, MEd; Matthew Mittiga, MD; Gary Geis, MD; Hector Wong, MD; Selena Hariharan, MD

Boot camp for new fellows.

Collaboration with Division of Endocrinology; General and Community Pediatrics

Collaborating Faculty: Michael Gittelman, MD; Wendy Pomerantz, MD, MD; David Klein, MD, PhD; Christopher Bolling, MD; Mona Ho, MS; Amy Bernard, PhD

Screen and provide a program to reduce the obesity problem among youth in Avondale, providing after school curriculum. **Collaboration with Division of Immunobiology** 

Collaborating Faculty: Rick Strait, MD; Fred Finkelman, MD

Anaphylaxis, role of inhibitory IgG1 in rheumatic disease, IgG1 as an inhibitor of IgG3 immunocomplex mediated glomerular disease, TRALI.

Collaboration with Division of Immunology

Collaborating Faculty: Rick Strait, MD; Marat Khodoun, PhD

Development of a biomarker for IgG-mediated disease in mice and humans, TRALI, inhibitory Ig in anaphylaxis.

Collaboration with Division of Neonatology; Division of Critcal Care

Collaborating Faculty: Hamilton Schwartz, MD; Beth Haberman, MD; Derek Wheeler, MD; Becky Baute

Assessing utility of video television in the acute care setting.

Collaboration with Division of Nephrology

Collaborating Faculty: Lynn Babcock Cimpello, MD; Prasad Devarajan, MD

Axonal injury.

Collaboration with Division of Neurosurgery

Collaborating Faculty: Lynn Babcock Cimpello, MD; Todd Maugans, MD

Pediatric concussion: pilot study using advanced magnetic resonance imaging techniques.

Collaboration with Division of Pediatric and Thoracic Surgery

Collaborating Faculty: Gary Geis, MD; Terri Byczkowski, PhD, MBA; Richard Falcone, Jr., MD, MPH

Evaluating the use of simulation training on technical and teamwork skills of personnel, care processes, and serious safety events on Extracorporeal Membrane Oxygenation.

Collaboration with Division of Pediatric and Thoracid Surgery; Trauma Services; Health Policy and Clinical Effectiveness

Collaborating Faculty: Michael Gittelman, MD; Wendy Pomerantz, MD, MS; Richard Falcone, Jr., MD; Lisa Simpson, MB, BCH, MPH

Develop a center with coordination of research and outreach efforts to prevent injuries.

Collaboration with Division of Pediatric Physical Medicine and Rehabilitation

Collaborating Faculty: Lynn Babcock Cimpello, MD; Shari Wade, PhD

Axonal injury.

Collaboration with Division of Pediatric Urology

Collaborating Faculty: Nathan Timm, MD; William Robert DeFoor, Jr., MD

Evaluation and management of STIs in adolescent males.

Collaboration with Division of Radiology

Collaborating Faculty: Lynn Babcock Cimpello, MD; Daniel Podberesky, MD

CT Scan with Contrast Alone (CT IV): The role of intra-abdominal fat (IAF) on the sensitivity of CT IV to visualize the normal appendix.

Collaboration with Divisions of Radiology/Pediatric Neuroimaging Research Consortium

Collaborating Faculty: Lynn Babcock Cimpello, MD; Weihong Yuan, PhD; James Leach, MD; Blaise Jones, MD

Axonal injury.

Collaboration with Division of Rheumatology

Collaborating Faculty: Rick Strait, MD; Sherry Thorton, PhD Role of IgG1 in the prevention of collagen-induced arthritis in mice.

**Collaboration with Division of Sports Medicine** 

Collaborating Faculty: Lynn Babcock Cimpello, MD; Jon Divine, MD

Axonal injury.

**Collaboration with Education and Training Department** 

Collaborating Faculty: Hamilton Schwartz, MD; Ken Crank, NEMT-P; Lynn Standen; Dan McLinden, EdD

Development of on-line pediatric education for EMTs and paramedics.

**Collaboration with Education and Training Department** 

Collaborating Faculty: Lisa Vaughn, PhD; Janet Forbes, MSEd

Resilience and cultural issues.

**Collaboration with Education and Training Department** 

Collaborating Faculty: Lisa Vaughn, PhD; Rebecca Phillips, PhD

Intercultural adjustment.

**Collaboration with Education and Training Department** 

Collaborating Faculty: Lisa Vaughn, PhD; Daniel McLinden. EdD

Cultural health attributions questionnaire.

**Collaboration with General and Community Pediatrics** 

Collaborating Faculty: Lisa Vaughn, PhD; Raymond Baker, MD, MEd

Cultural dimensions of medical education.

**Collaboration with General and Community Pediatrics** 

Collaborating Faculty: Stephanie Kennebeck, MD; Nathan Timm, MD; S. Andrew Spooner, MD; Michael Farrell, MD

Examining methods to improve efficiency during implementation of electronic medical record systems.

Collaboration with Health Policy and Clinical Effectiveness

Collaborating Faculty: Terri Byczkowski, PhD, MBA; Evaline Alessandrini, MD, MSCE

The pediatric emergency department experience: measurable family-centered care.

Collaboration with Psychiatry Intake Response Team

Collaborating Faculty: Jacqueline Grupp-Phelan, MD, MPH; Linda Richey, LISW

An assessment of voluntary adolescent mental health screening and referral in a children's hospital emergency department. **Collaboration with Trauma Services** 

Collaborating Faculty: Michael Gittelman, MD; Wendy Pomerantz, MD, MS; Dawne Gardner-Davis; Deatra Greene. MS

Injury Free Coalition for Kids of Cincinnati (Emergency Medicine) and Safe Kids Coalition (Trauma) working together on multiple community outreach programs, including Walk Child to School.

## **Faculty Members**

Richard M. Ruddy, MD, Professor Clinical; Division Director

Research Interests: Pediatric Emergency Care Applied Research Network Multicenter Trials, Asthma and Quality Research

Lynn Babcock Cimpello, MD, Associate Professor Clinical

Research Interests: Closed Head Injury (translational research including clinical and psychometric outcomes with biomarkers and research imaging to identify and treat high risk patients)

Berkeley L. Bennett, MD, MS, Adjunct Assistant Professor; Fellow, Child Abuse Pediatrics

Research Interests: Cardiac Injury in Association with Non-Accidental Trauma, Optimal Utilization of Skeletal Surveys for Identification of Non-Accidental Trauma

G. Randall Bond, MD, Professor Clinical; Medical Director, Drug Poison Information Center

Research Interests: Improvement of Outcomes in Victims of Acute Poisoning

Terri L. Byczkowski, PhD, MBA, Field Service Assistant Professor

Research Interests: Patient and Family Experience of Emergency Care

Patricia Chambers, MD, Adjunct Assistant Professor

Research Interests: Quality Care

**Elena Duma, MD,** Assistant Professor Clinical; *Clinical Staff Coordinator* **Research Interests:** Pediatric Emergency Medicine, Child Abuse

Mary Jo-Ellen Erickson, MD, Assistant Professor Clinical

Research Interests: Use of Ultrasound in ED

Michael FitzGerald, PhD, Field Service Assistant Professor

Research Interests: Feedback in Medical Education, Assessment and Evaluation of Medical Learners

Gary L. Geis, MD, Assistant Professor Clinical; Assistant Medical Director, The Cincinnati Children's Center for Simulation and Research

Research Interests: Resuscitation, Febrile Infants, Medical Simulation

Michael Gittelman, MD, Associate Professor Clinical; Co-Director, Injury Free Coalition for Kids; Co-Director, Safety Store

Research Interests: Injury Control, Behavior Change Counseling, Community Prevention

**Todd Glass, MD, MS,** Associate Professor Clinical; *Medical Director, Liberty Campus Emergency Department* **Research Interests:** Pediatric Trauma, Traumatic Brain Injury, Care Delivery Systems Design and Improvement

**Javier Gonzalez del Rey, MD, MEd,** Professor Clinical; *Associate Director, Division of Emergency Medicine; Director, Pediatric Residency Training Program* 

Research Interests: Medical Education and Training

Jacqueline Grupp-Phelan, MD, MPH, Associate Professor Clinical; The Richard Ruddy and Barbara Wriston-Ruddy Endowed Chair for Pediatric Research; Associate Director, Division of Emergency Medicine; Director of Research Research Interests: Mental Health Services and Treatment Engagement; Health Services Research, Cost-Effectiveness, Clinical Effectiveness and Utilization

Selena Hariharan, MD, Associate Professor Clinical

Research Interests: Prevention

Srikant Iyer, MD, MPH, Assistant Professor Clinical

Research Interests: Systems and Process Improvement, Patient Flow, and Acute ED Pain Management

Laurie H. Johnson, MD, Assistant Professor Clinical

Research Interests: Asthma

Stephanie Kennebeck, MD, Assistant Professor Clinical; EPIC IT Leadership

Research Interests: Quality Care, Overcrowding in ED

Benjamin Kerrey, MD, Assistant Professor Clinical

**Research Interests:** Procedural Education for Pediatric Residents, Quality of the Intubation and Confirmatory Process in Emergent Pediatric Intubations. Need for Imaging in Pediatric Blunt Abdominal Trauma

**Joseph Luria**, **MD**, Professor Clinical; *Associate Director, Division of Emergency Medicine; Medical Director, Emergency Department* 

Research Interests: Improvement Related to ED Quality; Patient Safety, Efficiency and Flow

Melinda Mahabee-Gittens, MD, MS, Associate Professor Clinical

Research Interests: Adolescent Tobacco Prevention, Adult Tobacco Cessation, Intervention Development

Mia L. Mallory, MD, Assistant Professor Clinical; Associate Director, Pediatric Residency Training Program Research Interests: Resident Education

**Constance McAneney, MD, MS,** Associate Professor Clinical; Associate Director, Division of Emergency Medicine; Director, Pediatric Emergency Medicine Fellowship Program; Director, Medical Student Education

Research Interests: Medical Student Education

Matthew Mittiga, MD, Assistant Professor Clinical

**Research Interests:** Resuscitation Team Training and Communication, Critical Care in the Pediatric ED, Pediatric Airway Management/Complications, Resident and Fellow PEM Education

Mary Patterson, MD, MEd, Associate Professor Clinical; Medical Director, The Cincinnati Children's Center for Simulation and Research

Research Interests: Simulation in Healthcare, Patient Safety, Teamwork and Communication

Wendy Pomerantz, MD, MS, Associate Professor Clinical; Co-Director, Injury Free Coalition for Kids; Co-Director, Safety Resource Center

**Research Interests:** Injury and Poison Prevention, Epidemiology, Geographic Information Systems, Playground Related Injuries, ATV and Motorbike-Related Injuries

Jennifer Reed, MD, Assistant Professor Clinical

Research Interests: Adolescent Health Issues in the ED Including STI Testing

Scott Reeves, MD, Associate Professor Clinical; Coordinator, Emergency Department Resident Education

Research Interests: Quality Care, Network Research - PECARN Multicenter Trials

Charles J. Schubert, MD, Professor Clinical

Research Interests: Global Child Health and Vulnerable Populations

Hamilton P. Schwartz, MD, Assistant Professor Clinical; Medical Director, Transport Team; Medical Director, Statline;

Pediatric Director, Assistant Medical Director, Cincinnati Fire Department

Research Interests: Pediatric EMS and Transport Medicine

Robert Allan Shapiro, MD, Professor Clinical; Medical Director, Mayerson Center for Safe and Healthy Children

Research Interests: Sexually Transmitted Disease, Fractures Caused by Abuse

Stephanie Spanos, MD, Assistant Professor Clinical

Richard Strait, MD, Assistant Professor Clinical

Research Interests: Early Immunologic Response to Infectious Disease, Immunologic Response to Anaphylaxis,

Procedural Sedation

Nathan Timm, MD, Assistant Professor Clinical; CCHMC Emergency Preparedness Officer

Research Interests: Hospital Emergency Management, Quality Care, Overcrowding in ED

## **Joint Appointment Faculty Members**

Evaline Alessandrini, MD, MSE, Professor Clinical

Health Policy & Clinical Effectiveness

Outcomes and Risk-Adjustment in Pediatric Emergency Care, Quality Measurement

Lisa Vaughn, PhD, Field Service Associate Professor

General and Community Pediatrics

Cross-Cultural Psychology Issues Especially with Latinos, Women and Children; Dyadic Relationships (i.e. Parent-Child, Teacher-Learner, etc.); International Global Studies; Social Psychology Related

### **Clinical Staff Members**

- Kirsten Ahrens, MD
- Arash Babaoff, MD
- o Kate Balkoweic, MD
- Courtenay Barlow, MD
- Eunice Blackmon, MD
- Kamali Bouvay, MD
- Michael Chua, MD
- Jenny Lynn DeBruer, MD
- Kristen DeMarco, MD
- Emily Eagen, MD
- Michelle Eckerle, MD
- Kerry Gorman, MD
- Catherine Gouldin, MD
- Laura Howell, MD
- Pamela Kingma, MD, PhD
- o Lisa Lewis, MD
- Dawn Manfroy, MD
- Joanna Nacopoulos, MD
- Margaret Orcutt-Tuddenham, DO
- Kristen Paddon, MD
- Janice Roeder, MD
- o Rima Rusnak, MD
- Radhika Shah, MD
- Kristin Stackpole, MD

- Karen Szczepanski, MD
- Elizabeth Templin, MD
- Kerry Wilkes, MD
- Evan Yeung, MD
- Angela Brown, PNP
- Rachael Ekstrand, PNP
- Karen Ford, PNP
- Michelle Schrand, PNP
- Molly Stenger, PNP
- Michelle Widecan, PNP

## **Trainees**

- · Holly Brodzinski, MD, PL-VI, Children's Hospital of Philadelphia, Philadelphia, PA
- Andrea Rinderknecht, MD, PL-VI, Cincinnati Children's Hospital Medical Center, Cincinnati, OH
- · Jennifer Setlik, MD, PL-VI, Washington University, St. Louis, MO
- Carolyn Holland, MD, MEd, PL-VI, University Hospital, University of Cincinnati College of Medicine, Cincinnati, OH
- · Cinnamon Dixon, DO, PL-V, Kirksville College of Osteopathic Medicine, Bolder, CO
- · Carla Pruden, MD, MPH, PL-V, Children's Hospital at Montefiore, New York, NY
- Brad Sobolewski, MD, PL-V, Cincinnati Children's Hospital Medical Center, Cincinnati, OH
- · Brian Hang, MD, PL-IV, New York University, New York, NY
- Eileen Murtagh-Kurowski, MD, PL-IV, University of Pittsburgh Medical Center, Pittsburgh, PA

## Significant Accomplishments

### Research surpasses funding goals

Our research focus groups submitted 27 grants including three R01s, surpassing our funding goals. Three of the four focus groups received significant funding and had strong accomplishments.

### Clinical and prevention research

Lynn Babcock Cimpello, MD, was awarded a CTSA grant for her work with minor head injuries. Brian Hang, MD, received a grant to develop a clinical tool to predict length of symptoms in concussions. Meanwhile, a clinical decision rule for identifying cases at low risk for brain injury -- published in Lancet, Oct. 3, 2009 -- should help reduce unnecessary head CTs and exposure to radiation. Todd Glass MD, MS, was the site principal investigator for that project.

Our prevention research team under Jacqueline Grupp-Phelan, MD, MPH, and Michael Gittelman, MD, led the development of key national Emergency Medical Services for Children priorities, including mental health screening, smoking prevention in children, and injury control through community interventions.

### **Quality Improvement and Education**

Led by Evie Alessandrini, MD, and Scott Reeves, MD, our quality improvement group continues to study the impact of ED crowding on quality of clinical care. Terri Byczkowski, PhD, was awarded an AHRQ grant to study the quality of family-centered care provided in the ED.

The Division also received the Pediatric Resident Teaching Award in 2010. Faculty contributed significantly to the Textbook of Pediatric Emergency Medicine's 6th Edition.

#### H1N1 Pandemic

The interdisciplinary work to address the H1N1 influenza pandemic in fall 2009 was an outstanding accomplishment. The medical center significantly expanded ED capacity for influenza patients via overflow clinics at the Burnet and Liberty campuses. This effort was accomplished under the leadership of Joseph Luria, MD, and Julie Shaw, RN, MSN, Senior Clinical Director, with the senior leadership of Michael Farrell, MD, Chief of Staff, Jackie Hausfeld, RN, MSN, and Char Mason, RN.

#### Safety

Our Emergency Services Safety Team, led by Holly Brodzinski, MD, MPH, Rima Rusnak, MD, and Sharon Foreman, RN, also reached a major milestone in July 2010 by reporting 1,000 days between safety events.

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## Grants, Contracts, and Industry Agreements

## **Grant and Contract Awards**

**Annual Direct / Project Period Direct** 

Bond, G

**Lamp Oil Ingestion** 

American Association of Poison Control Centers

04/01/10 - 03/31/11

\$3.650 / \$3.650

\$116,205 / \$116,205

Gittelman, M

Determining Efficacy of a Kiosk-Based Injury Prevention Education System in a Children's Emergency Department

Ohio Department of Public Safety

07/01/09 - 12/30/10

Injury Free Coalition for Kids Midnight Basketball Program

City of Cincinnati

09/01/09 - 08/31/10 \$4,545 / \$4,545

Injury Free Coalition for Kids Home Safety Equipment

Manuel D and Rhoda Mayerson Foundation

12/02/09 - 12/01/10 \$25,000 / \$25,000

Grupp-Phelan, J

K30 Training Program - Cincinnati Center for Clinical and Translational Sciences and Training

University of Cincinnati (National Institutes of Health)

UL RR 026314 04/01/10 - 03/31/14 \$28,690 / \$65,047

lyer, S

Design of a Multi-Component Intervention to Improve Pain Management in the Pediatric Emergency Department

The Mayday Fund

09/01/08 - 08/31/10 \$94,750 / \$179,109

Johnson, L

Molecular Epidemiology in Children's Environmental Health Training Program

University of Cincinnati (National Institutes of Health)

T32 ES 010957 04/01/08 - 03/31/11 \$51,036 / \$102,072

Mahabee-Gittens, M

Improving Parent/Adolescent Communication about Tobacco

National Institutes of Health

K23 CA 117864 07/01/06 - 06/30/11 \$123,750 / \$616,500

Improving Parent/Adolescent Communication about Tobacco

National Institutes of Health

K23 CA 117864 09/30/09 - 09/29/10 \$46,228 / \$46,228

Exploring the Role of Race/Ethnicity & Family Influences to Reduce Youth Smoking

National Institutes of Health

R03 CA 142099 07/01/09 - 06/30/11 \$50,000 / \$100,000

Ruddy, R

**EMSC Network Development Demonstration Project** 

University of California-Davis (Health Resources & Services Administration)

Schwartz, H.

Rapid Anticonvulsant Medication Prior to Arrival Trial (RAMPART)

University of Cincinnati (National Institutes of Health)

	Current Year Direct Receipts	3	\$ 23,370
AspenBio Pharma, Inc			\$ 23,37
dustry Contracts Ruddy, R			
destar Osabasta	Current Year Direc	t	\$838,70
National Institutes of Health P30 AR 047363	07/01/10 - 06/30/11	\$50	,000 / \$50,00
Cincinnati Rheumatic Diseases Core	e Center - Pilot and Feasibililty Study		
IGG Isotype Regulation of Antibody- University of Cincinnati (National Institu R01 Al 072040		\$57,4	156 / \$301,44
Strait, R			
	01/01/99 - 12/31/10	\$88,	190 / \$845,60
City of Cincinnati (Ohio Department of			
CDC Immunization Action Plan Proje	act		
Schubert, Charles			
U01 NS 056975	01/01/09 - 07/31/12	\$6	,594 / \$26,59