

Emergency Medicine

Division Photo



Front Row: M. Mallory, R. Ruddy, N. Timm; Middle Row: J. Reed, L. Johnson, S. Kennebeck, J. Luria, R. Bond, E. Duma, B. Bennett, S. Iyer, M. Gittelman; Back Row: M. Patterson, M. Mahabee-Gittens, L. Babcock Cimpello, R. Shapiro, R. Strait, M. Mittiga, H. Schwartz, T. Byczkowski

Division Data Summary

Research and Training Details		
Number of Faculty	34	
Number of Joint Appointment Faculty	3	
Number of Research Fellows	3	
Number of Support Personnel	39	
Direct Annual Grant Support	\$720,508	
Peer Reviewed Publications	36	
Clinical Activities and Training		
Number of Clinical Staff	34	
Number of Clinical Fellows	6	
Number of Other Students	2	
Outpatient Encounters	143074	

Significant Publications

Bond GR, Pieche S, Sonicki Z, Gamaluddin H, El Guindi M, Sakr M, El Seddawy A, Abouzaid M, Youssef A. A clinical decision aid for triage of children younger than 5 years and with organophosphate or carbamate insecticide exposure in developing countries. Ann Emerg Med. 2008; 52: 617-22.

In developing countries, a decision rule to determine who required treatment with an expensive resource is important. We determined that using the two simple physical findings, small pupils and CNS depression, physicians could determine two risk groups of children very early after exposure to an organophosphate or carbamate insecticide. Absence of either finding predicts an uncomplicated course and determines no need for referral to more expensive resources.

Grupp-Phelan J, Mahajan P, Foltin GL, Jacobs E, Tunik M, Sonnett M, Miller S, Dayan P. Referral and

resource use patterns for psychiatric-related visits to pediatric emergency departments. Pediatr Emerg Care. 2009: 25: 217-20.

The study, using a generalizable sample of pediatric hospitals within the Pediatric Emergency Care Applied Research Network reports the high volume and resource intensity of psychiatric visits to pediatric emergency departments. Key findings include the scope of pediatric emergency psychiatric care and high variability to resource use and management in a similar setting.

Kerrey BT, Geis GL, Quinn AM, Hornung RW, Ruddy RM. A prospective comparison of diaphragmatic ultrasound and chest radiography to determine endotracheal tube position in a pediatric emergency department. Pediatrics. 2009; 123: e1039-44.

Diaphragmatic ultrasound is one of several potential applications of sonography to confirm endotracheal intubation. Previous work without a gold standard found diaphragmatic ultrasound accurate for both mainstem and esophageal misplacement. The novel application demonstrated rapid and highly reproducible results confirming ETT position within the airway in emergently intubated children. X-ray appears to verify level of mainstem intubation in a cohort of children, particularly the infant under 2 years of age.

Mahabee-Gittens EM, Gordon JS, Krugh ME, Henry B, Leonard AC. A smoking cessation intervention plus proactive quitline referral in the pediatric emergency department: a pilot study. Nicotine Tob Res. 2008; 10: 1745-51.

This manuscript describes the results of the effect of a brief tobacco cessation intervention delivered to parental smokers in a pediatric emergency department (ED). A prospective randomized control trial design was used and participants were either given usual care or a brief intervention using tobacco cessation advice to quit based on the first 2 of the 5A's of the Clinical Practice Guidelines and fax referral to the state telephone-based tobacco Quitline. The results were encouraging and suggest that the ED may be both a novel and important venue in which to deliver tobacco cessation counseling in a population with a high prevalence of tobacco use.

Timm NL, Ho ML, Luria JW. Pediatric emergency department overcrowding and impact on patient flow outcomes. Acad Emerg Med. 2008; 15: 832-7.

Crowding in emergency departments (EDs) is a growing, system wide problem in the United States. This study demonstrated that ED boarding of admitted patients and the number of daily visits are independently associated with increasing the length of stay, time to physician, and number of patient elopements in a pediatric emergency department.

Division Highlights

Pediatric Emergency Care Applied Research Network

The network has continued to thrive since formation in 2001 with 21 Emergency Departments and over 900,000 encounters to study patients from. The site leaders are Andrea Quinn, CRC, and Richard Ruddy, MD. CCHMC collaborators include Benjamin Kerrey, MD, (development of decision tool to reduce CT in intra-abdominal injury), Scott Reeves, MD, (development of decision tool for cervical spine injury), Jacqueline Grupp-Phelan, MD, MPH, (mental health emergencies - health services analysis), Richard Ruddy, MD, (core data project, biosignatures in infants with febrile illness, patient safety study), Gary Geis, MD, and Derek Wheeler, MD, (hypothermia to improve outcome in CPA), Hamilton Schwartz, MD, (pre-hospital care for children), Lynn Babcock Cimpello, MD, (intra-abdominal fat and appendix study and progesterone for traumatic brain injury), and Todd Glass, MD, MS (development of decision tool for CT and head injuries).

National Improvement Collaborative in Pediatric Emergency Care

In partnership with NACHRI, the ABP, and PEM leadership around the country, CCHMC is taking a leadership role in the development of a clinical/improvement science and research effort with Richard Ruddy, MD, and Evaline Alessandrini, MD, MSCE.

Prevention Science in the Pediatric ED

Using the ED as a platform to engage families into healthier behaviors, the Prevention Focus Group continues to be successful in funding research in mental health service engagement (Jacqueline Grupp-Phelan, MD, MPH), tobacco cessation interventions (Melinda Mahabee-Gittens, MD, MS) and Injury Prevention (Michael Gittelman, MD, and Wendy Pomerantz, MD, MS). The group has been using these interest areas as a basis for collaboration to further the understanding of best practices for screening and interventions in the ED.

Division Collaboration

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; Division of Hematology/Oncology, Bone Marrow Transplant Program

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

Development and implementation of serious safety event reduction training, and evaluation of outcomes for BMT.

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

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

Development, implementation and evaluation of outcomes of serious safety event reduction training in the ICU.

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 Lehmann, 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

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

Collaboration with Division of Allergy and Immunology

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

Nebulized magnesium in acute asthma, inter-rater reliability of asthma score and provider impression of clinical severity of exacerbation.

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: Rick Strait, MD: Fred Finkelman, MD

Immunology of anaphylaxis and of transfusion related acute lung injury.

Collaboration with Division of Allergy and Immunology

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

Collaboration with Division of Allergy and Immunology

Collaborating Faculty: Rick Strait, MD; Joerg Koehl, MD TRALI and complement activation including FcRs.

Collaboration with Division of Biomedical Informatics

Collaborating Faculty: Richard Ruddy, MD; John Pestian, PhD, MBA

Use of natural language for patient care improvement.

Collaboration with Division of Endocrinology; General and Community Pediatrics

Collaborating Faculty: Michael Gittelman, MD; Wendy Pomerantz, MD, MS; 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 Infectious Diseases

Collaborating Faculty: Rick Strait, MD; Ramu Subbramanian, PhD; Rebecca Brady, MD T-cell response in naive influenza infection in infants.

Collaboration with Division of Pediatric Surgery: Trauma Services

Collaborating Faculty: Berkeley Bennett, MD, MS; Richard Falcone, Jr., MD

Racial bias in evaluation of children for non-accidental trauma.

Collaboration with Division of Pediatric 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 Surgery; Trauma Services

Collaborating Faculty: Mary Patterson, MD, MEd; Richard Falcone, Jr., MD; Margot Daugherty, MSN, MEd, RN, EMT-P; Lynn Schweer, RN, CNP; Victor Garcia, MD

Multidisciplinary pediatric trauma team training and utilizing high fidelity trauma simulation.

Collaboration with Division of 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 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; Janet Forbes, MSEd Resilience and cultural issues.

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 Mayerson Center for Safe and Health Children

Collaborating Faculty: Berkeley Bennett, MD, MS; Robert Shapiro, MD; Kathi Makoroff, MD Utility of follow up skeletal surveys in suspected victims of physical abuse.

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 Trauma Services

Collaborating Faculty: Michael Gittelman, MD; Wendy Pomerantz, MD, MS; Talicia McNealy, MBA; 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
- Kate Balkoweic, MD
- Courtenay Barlow, MD
- Eunice Blackmon, MD

- Kamali Bouvay, MD
- o 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
- 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
- o 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
- o 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
- o 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

Quality Research

This research team led by Scott Reeves, MD, and Mike Buncher, MBA, has demonstrated improvement in outcomes for patients with painful fractures and in the development of measures and interventions to handle ED overcrowding, a national issue.

Prevention Research

This research team led by Jacqueline Grupp-Phelan, MD, MPH, and Michael Gittelman, MD, has led Emergency Medicine with the development of prevention program strategies in the ED. The areas include key national priorities,

including screening for mental health issues (Grupp-Phelan), smoke prevention in children (Mahabee-Gittens) and injury control (Gittelman, Pomerantz) through interventions that cut across the larger health care system.

Clinical Program

Liberty Township Campus Freestanding Emergency Department: The ED on the Liberty Township Campus opened in August 2008, with 24 hour pediatric emergency medicine attending coverage, and extended coverage with a pediatrician under the leadership of Medical Director, Todd Glass, MD, MS, and Clinical Director, Nancy Zahradnik, RN. Growth was rapid to an 11 month annual visit count of 24,812 children. Key components: Accepts all acuities and life squads, integration of pediatric transport to insure rapid transfer for teritiary care, integrated direct transfer to observation beds at Liberty Campus and to inpatient and higher level subspeciality care at the main hospital.

CCHMC ED: Clinical Systems Improvement led by Medical Director, Joe Luria, MD, and Senior Clinical Director, Julie Shaw, RN, MSN, had significant accomplishments.

- Evidence-based care led by Scott Reeves, MD, and Eric Mailloux, RN, in treatment across the spectrum of painful conditions.
- Safety with leadership of Rima Rusnak, MD, and Sharon Foreman, RN, has shown increases in safety culture and the department had zero serious safety events this year.
- Partnership with the resuscitation / simulation team has led to dramatic changs in communication around high risk patients through consistent use of communication tools.

Division Publications

- 1. Budryte D, Vaughn LM, Riegg NT. <u>Feminist conversations: women, trauma and empowerment in post-transitional societies</u>. Lanham, Md.; University Press of America
- 2. Vaughn LM, Phillips R. <u>Intercultural adjustment for cultural competency in shared context: "The company we keep"</u>. *Int J Interdisc Soc Sci.* 2009; 3: 1-12.
- 3. Bailey JE, Campagna E, Dart RC, Bond GR, et al. <u>The underrecognized toll of prescription opioid abuse on young children</u>. *Ann Emerg Med.* 2009; 53: 419-24.
- 4. Dart RC, Paul IM, Bond GR, Winston DC, Manoguerra AS, Palmer RB, Kauffman RE, Banner W, Green JL, Rumack BH. <u>Pediatric fatalities associated with over the counter (nonprescription) cough and cold medications</u>. *Ann Emerg Med.* 2009; 53: 411-7.
- Grupp-Phelan J, Mahajan P, Foltin GL, Jacobs E, Tunik M, Sonnett M, Miller S, Dayan P. Referral and resource use patterns for psychiatric-related visits to pediatric emergency departments. Pediatr Emerg Care. 2009; 25: 217-20.
- Tzimenatos L, Bond GR. <u>Severe injury or death in young children from therapeutic errors: a summary of 238 cases from the American Association of Poison Control Centers</u>. Clin Toxicol (Phila). 2009; 47: 348-54.
- 7. Vaughn LM, Forbes J, Howell B. <u>Enhancing home visitation programs: input from a participatory evaluation using photovoice</u>. *Infants Young Child.* 2009; 22: 132-145.
- 8. Khodoun M, Strait R, Orekov T, Hogan S, Karasuyama H, Herbert DR, Kohl J, Finkelman FD. <u>Peanuts can contribute to anaphylactic shock by activating complement</u>. *J Allergy Clin Immunol.* 2009; 123: 342-51.
- 9. Bond GR. Acetaminophen protein adducts: a review. Clin Toxicol (Phila). 2009; 47: 2-7.
- 10. Pattullo L, Griffeth S, Ding L, Mortensen J, Reed J, Kahn J, Huppert J. <u>Stepwise diagnosis of Trichomonas vaginalis infection in adolescent women</u>. *J Clin Microbiol*. 2009; 47: 59-63.
- 11. Bechtel K, Bennett BL. (2009) <u>Evaluation of sexual abuse in children and adolescents</u>. UpToDate. Waltham, MA, UpToDate.
- 12. Pomerantz WJ. (2009) <u>Septic shock: initial evaluation and management in children</u>. UpToDate. Wellesley, MA, UpToDate. 2009:
- 13. Kerrey BT, Geis GL, Quinn AM, Hornung RW, Ruddy RM. <u>A prospective comparison of diaphragmatic ultrasound and chest radiography to determine endotracheal tube position in a pediatric emergency department</u>.

 Pediatrics. 2009; 123: e1039-44.
- 14. Rangel EL, Cook BS, Bennett BL, Shebesta K, Ying J, Falcone RA. <u>Eliminating disparity in evaluation for abuse in infants with head injury: use of a screening quideline</u>. *J Pediatr Surg.* 2009; 44: 1229-34; discussion 1234-5.
- 15. Gittelman MA, Pomerantz WJ. <u>Starting a pediatric emergency department Safety Resource Center</u>. *Pediatr Ann.* 2009; 38: 149-55.
- 16. Brodzinski H, Ruddy RM. Review of new and newly discovered respiratory tract viruses in children. Pediatr

- Emerg Care. 2009; 25: 352-60.
- 17. Tenney J, Johnson LH. <u>Moyamoya disease in an 8-year-old boy presenting with weakness</u>. *Pediatr Emerg Care*. 2009; 25: 336-8.
- 18. Patterson M, Blike G, Nadkarni V. "In situ simulation: challenges and results." Advances in patient safety: new directions and alternative approaches. V.3. Performance and tools.. Rockville, MD: Agency for Healthcare Research and Quality; 2008: 113-130.
- 19. Gittelman MA, Pomerantz WJ, Fitzgerald MR, Williams K. <u>Injury prevention in the emergency department: a caregiver's perspective</u>. *Pediatr Emerg Care*. 2008; 24: 524-8.
- Reed JL, Huppert JS. <u>Predictors of adolescent participation in sexually transmitted infection research: brief report</u>. J Adolesc Health. 2008; 43: 195-7.
- 21. Ruddy RM, Mace SE, Shaw K, Percelay J. <u>Pediatric emergency care in community hospitals with non-pediatric emergency medicine providers</u>. *Pediatr Emerg Care*. 2008; 24: 582-5.
- 22. Spanos S, Booth R, Koenig H, Sikes K, Gracely E, Kim IK. <u>Jet Injection of 1% buffered lidocaine versus topical ELA-Max for anesthesia before peripheral intravenous catheterization in children: a randomized controlled trial. Pediatr Emerg Care. 2008; 24: 511-5.</u>
- 23. Bond GR, Pieche S, Sonicki Z, Gamaluddin H, El Guindi M, Sakr M, El Seddawy A, Abouzaid M, Youssef A. <u>A clinical decision aid for triage of children younger than 5 years and with organophosphate or carbamate insecticide exposure in developing countries</u>. *Ann Emerg Med.* 2008; 52: 617-22.
- 24. Mahabee-Gittens EM, Gordon JS, Krugh ME, Henry B, Leonard AC. <u>A smoking cessation intervention plus proactive quitline referral in the pediatric emergency department: a pilot study</u>. *Nicotine Tob Res.* 2008; 10: 1745-51.
- 25. Sobolewski BA, Mittiga MR, Reed JL. <u>Atlantoaxial rotary subluxation after minor trauma</u>. *Pediatr Emerg Care*. 2008; 24: 852-6.
- 26. Berkoff MC, Zolotor AJ, Makoroff KL, Thackeray JD, Shapiro RA, Runyan DK. <u>Has this prepubertal girl been sexually abused?</u>. *JAMA*. 2008; 300: 2779-92.
- 27. Mahabee-Gittens EM, Gordon JS. Review of adult smoking cessation interventions conducted in the emergency department and application to the pediatric emergency department setting. US Respir Dis. 2008; 4: 125-128.
- 28. Pittsenbarger ZE, Grupp-Phelan J, Phelan KJ. <u>Comparing the frequency of unrecognized attention deficit</u> <u>hyperactivity disorder symptoms in injured versus noninjured patients presenting for care in the pediatric emergency department</u>. *Pediatr Emerg Care*. 2008; 24: 438-41.
- 29. Kobayashi L, Overly FL, Fairbanks RJ, Patterson M, Kaji AH, Bruno EC, Kirchhoff MA, Strother CG, Sucov A, Wears RL. <u>Advanced medical simulation applications for emergency medicine microsystems evaluation and training</u>. *Acad Emerg Med.* 2008; 15: 1058-70.
- 30. Kobayashi L, Patterson MD, Overly FL, Shapiro MJ, Williams KA, Jay GD. <u>Educational and research implications of portable human patient simulation in acute care medicine</u>. *Acad Emerg Med.* 2008; 15: 1166-74.
- 31. Ruddy RM, Patterson MD. <u>Medical simulation: a tool for recognition of and response to risk</u>. *Pediatr Radiol.* 2008; 38 Suppl 4: S700-6.
- 32. Yee EL, Staat MA, Azimi P, Bernstein DI, Ward RL, Schubert C, Matson DO, Turcios-Ruiz RM, Parashar U, Widdowson MA, Glass RI. <u>Burden of rotavirus disease among children visiting pediatric emergency departments in Cincinnati, Ohio, and Oakland, California, in 1999-2000</u>. *Pediatrics*. 2008; 122: 971-7.
- 33. Sharek PJ, McClead RE, Jr., Taketomo C, Luria JW, Takata GS, Walti B, Tanski M, Nelson C, Logsdon TR, Thurm C, Federico F. <u>An intervention to decrease narcotic-related adverse drug events in children's hospitals</u>. *Pediatrics*. 2008; 122: e861-6.
- 34. Dixon C, Gittelman MA. <u>Pediatric helmet use: teaching patients to use their heads</u>. *Pediatr Ann.* 2008; 37: 606-12.
- 35. Heil JW, Malinowski L, Rinderknecht A, Broderick JP, Franz D. <u>Use of intravenous tissue plasminogen activator in a 16-year-old patient with basilar occlusion</u>. *J Child Neurol*. 2008; 23: 1049-53.
- 36. Timm NL, Ho ML, Luria JW. <u>Pediatric emergency department overcrowding and impact on patient flow outcomes</u>. *Acad Emerg Med.* 2008; 15: 832-7.

Grants, Contracts, and Industry Agreements

Grant and Contract Awards

Annual Direct / Project Period Direct

United Way		
	01/01/08 - 12/31/09	\$45,000 / \$90,000
GRUPP-PHELAN, J		
Teen Screen		
Columbia University		
	01/01/09 - 12/31/09	\$110,000 / \$110,000
University of Cincinnati Clinical National Institutes of Health (Unive		
K30 RR 022273	08/01/08 - 07/31/09	\$31,669 / \$31,669
CTSA: K30 Training Program National Institutes of Health (Unive	rsity of Cincinnati)	
UL1 RR 026314	04/03/09 - 03/31/14	\$36,357 / \$36,357
YER, S		
Multi-Dimensional Intervention to	o Improve Pain Management	
The Mayday Fund		
JOHNSON, L	09/01/08 - 08/31/10	\$84,359 / \$168,718
JOHNSON, L Molecular Epidemiology in Child National Institutes of Health (Unive	ren's Environmental Health Training Grant rsity of Cincinnati)	
JOHNSON, L Molecular Epidemiology in Child National Institutes of Health (Unive	ren's Environmental Health Training Grant	
JOHNSON, L Molecular Epidemiology in Child National Institutes of Health (University T32 ES 010957 KERREY, B	ren's Environmental Health Training Grant rsity of Cincinnati) 04/01/08 - 03/31/10	
JOHNSON, L Molecular Epidemiology in Child National Institutes of Health (Unive T32 ES 010957 KERREY, B Decision Rule for Identifying Inti	ren's Environmental Health Training Grant rsity of Cincinnati) 04/01/08 - 03/31/10 ra-Abdominal Injuries	
JOHNSON, L Molecular Epidemiology in Child National Institutes of Health (Unive T32 ES 010957 KERREY, B Decision Rule for Identifying Into	ren's Environmental Health Training Grant rsity of Cincinnati) 04/01/08 - 03/31/10	\$84,359 / \$168,718 \$51,036 / \$102,072 \$12,112 / \$31,390
JOHNSON, L Molecular Epidemiology in Child National Institutes of Health (University T32 ES 010957 KERREY, B Decision Rule for Identifying Interpretation of the property o	ren's Environmental Health Training Grant rsity of Cincinnati) 04/01/08 - 03/31/10 ra-Abdominal Injuries revention (University of California-Davis)	\$51,036 / \$102,072
JOHNSON, L Molecular Epidemiology in Child National Institutes of Health (University T32 ES 010957) KERREY, B Decision Rule for Identifying Interpretation of Parameters for Disease Control and Disea	ren's Environmental Health Training Grant rsity of Cincinnati) 04/01/08 - 03/31/10 ra-Abdominal Injuries revention (University of California-Davis) 09/01/06 - 08/31/09	\$51,036 / \$102,072
JOHNSON, L Molecular Epidemiology in Child National Institutes of Health (Universal T32 ES 010957 KERREY, B Decision Rule for Identifying Interpretation of Centers for Disease Control and P R49 CE 001002 MAHABEE-GITTENS, M	ren's Environmental Health Training Grant rsity of Cincinnati) 04/01/08 - 03/31/10 ra-Abdominal Injuries revention (University of California-Davis) 09/01/06 - 08/31/09	\$51,036 / \$102,072
JOHNSON, L Molecular Epidemiology in Child National Institutes of Health (University T32 ES 010957) KERREY, B Decision Rule for Identifying Intersection Contents for Disease Control and PR49 CE 001002 MAHABEE-GITTENS, M Improving Parent/Adolescent Contents National Institutes of Health	ren's Environmental Health Training Grant rsity of Cincinnati) 04/01/08 - 03/31/10 ra-Abdominal Injuries revention (University of California-Davis) 09/01/06 - 08/31/09 mmunication about Tobacco	\$51,036 / \$102,072 \$12,112 / \$31,390
Molecular Epidemiology in Child National Institutes of Health (University T32 ES 010957 KERREY, B Decision Rule for Identifying Interpretation Centers for Disease Control and PR49 CE 001002 MAHABEE-GITTENS, M Improving Parent/Adolescent Convarional Institutes of Health K23 CA 117864 RUDDY, R EMSC Network Development Decisional Institutes Decisional Institut	ren's Environmental Health Training Grant rsity of Cincinnati) 04/01/08 - 03/31/10 ra-Abdominal Injuries revention (University of California-Davis) 09/01/06 - 08/31/09 mmunication about Tobacco 07/01/06 - 06/30/11	\$51,036 / \$102,072 \$12,112 / \$31,390

CDC Immunization Action Plan Project

Ohio Department of Health/CDC (City of Cincinnati)

P00 25X9098 01/01/00 - 12/31/09

\$83,976 / \$664,574

STRAIT, R

IgG Isotype Regulation of Antibody-Mediated Disorders

National Institutes of Health (University of Cincinnati)

R01 AI 072040 08/15/07 - 07/31/12

\$57,706 / \$306,244

Current Year Direct

\$ 720,508

Total \$ 720,508