

Hospital Medicine

Division Details

RESEARCH AND TRAINING DETAILS	
Faculty	40
Joint Appointment Faculty	8
Research Fellows and Post Docs	6
Total Annual Grant Award Dollars	\$1,566,798
Total Annual Industry Award Dollars	\$2,500

CLINICAL ACTIVITIES AND TRAINING

Staff Physicians	5
------------------	---



Row 1: A Jenkins, T Marshall, S Royer, L Herbst, K Jerardi, S Luthy, A Guiot, S Patel, L Herrmann, L Brower, S Tang-Girdwood, C Wolski

Row 2: Y Jones, B Herbst, C Gosdin, A Shah, J deSante-Bertkau, L Ambroggio, E Connolly, A Statile, K Auger, L Farrell, A Schondelmeyer, J Thomson, A Choe

Row 3: J Simmons, A Beck, N Unaka, P Hagedorn, D Warner, C Ohlinger, J O'Toole, K Meier, B Bolser, C White, S Shah, B Hubbell, C Schuler

Row 4: A Spooner, B Kinnear, M Tchou, E Hoefgen, A Antommaria, P Brady

Visit Hospital Medicine

Division Highlights

Pediatric Hospital Medicine Becomes a Board-Certified Subspecialty

In October 2016, the American Board of Medical Specialties officially approved the application for Pediatric Hospital Medicine (PHM) to become a board-certified specialty under the American Board of Pediatrics (ABP). Over the past two decades the practice of PHM has evolved and grown exponentially. Children now admitted to the hospital tend to be more complex and seriously ill as many conditions that previously required hospitalization are now managed in the outpatient setting. In addition, hospitalists have quickly become leaders in improving hospital systems, ensuring patient safety, educating trainees, and striving for continuous quality improvement. The creation of PHM fellowships, including the pioneering fellowship at Cincinnati Children's Hospital Medical Center led by Dr. Karen Jerardi, MD, MEd, are to prepare the next generation of pediatric hospitalists. There are currently >35 PHM fellowships across the U.S., with new programs opening every year. Recognition of PHM as a specialty worthy of advanced fellowship training, and a board certification, reflect the growth of the field and progress hospitalists have made in becoming leaders in advancing the care provided to hospitalized children and the healthcare system. Offering the first ABP PHM sub-board exam to eligible individuals will occur in the fall of 2019. Members of the Division of Hospital Medicine at Cincinnati Children's have helped lead this process. Dr. Jeffrey Simmons, MD, MSc, helped develop the initial

proposal to the ABP. Dr. Jennifer O'Toole, MD, MEd, is an inaugural member of the ABP PHM sub-board. Dr. Karen Jerardi led a national group of fellowship directors in developing a standardized PHM fellowship curriculum that was part of the proposal to the Accreditation Council for Graduate Medical Education (ACGME).

Building the Next Generation of Scientific Leaders

Career development award grants are a critical first step for faculty who aim to be independent investigators and scientific leaders. This year, three faculty, each a Cincinnati Children's Hospital Medical Center Division of Hospital Medicine fellowship graduate (Drs. Lilliam Ambroggio, PhD; Katherine Auger, MD, MSc; and Joanna Thomson, MD, MPH), began career development awards. Each award supports both research aims as well as the development of faculty into independent investigators. Dr. Ambroggio's research will better identify the infectious agent causing pneumonia, a significant challenge to evidence-based treatment, using a child's metabolite profile on a non-invasive urine sample. Dr. Auger's work will develop and validate a risk prediction tool for unplanned readmission to the hospital within 30 days; this will allow physicians to identify—and intervene—for children and families at high risk for readmission. Dr. Thomson and team focus on acute respiratory infections in children with neurologic impairment and developmental delay. Specifically, they will identify and implement evidence-based care pathways to improve health outcomes in this group. With Dr. Patrick Brady, MD, MSc, also having a career development award, the division has four such awards, a remarkable achievement for a young division. Dr. Samir Shah, MD, MSCE, is a mentor on each award.

Improving Value of Care

The goal of high-value healthcare is to produce the best health outcomes at the lowest cost. Several efforts within the division aimed to improve the value of care. Dr. Michael Tchou, MD, senior fellow and quality scholar, led a project to decrease overuse of electrolyte laboratory testing. His team focused on tests that were unlikely to change patient management but may cause the patient unnecessary pain from phlebotomy, and increase nursing workload and costs of care. Through interventions focused upon improved provider awareness, electrolyte testing reduces by 35%, and the usage of highest cost panels by 60%. Over a 9-month period, there was an estimated \$292,000 charge savings. Dr. Erik Hoefgen, MD, senior fellow, led an interdisciplinary team to redesign the process for ordering inhaled controller medications for children admitted with asthma exacerbation. The goal was to eliminate wasted medication doses by ensuring that medications prescribed in the hospital would be the same as those continued after discharge. In partnership with the outpatient pharmacy, the team created a process to verify formulary coverage and supply these medications at a lower price, resulting in a \$59,000 reduction in patient charges over a 6-month period. Dr. Benjamin Kinnear, MD, led an interdisciplinary team to standardize the use of intravenous (IV) fluids in Hospital Medicine patients. The team designed a process by which nurses discontinue IV fluids when a patient meets a minimum goal of oral intake, instead of relying on less frequent physician assessment. Over 80% of children receive this new process, which has a goal to reduce the amount of time children receive IV fluids, reduce waste related to nursing work flow and decrease the risk of complications, such as IV extravasation.

Innovation in the Care of Hospitalized Children

The Division of Hospital Medicine has contributed to innovation in the care of hospitalized children both locally and nationally through research, quality improvement, and operations. Some highlights of this work are below:

- With a focus on health literacy, Dr. Ndidi Unaka, MD, MEd, has led a project to simplify and standardize instructions provided to families upon hospital discharge. This project, focusing of health literacy, has championed clear and concise language to enhance medication instructions, follow up recommendations and return guidance for families admitted to Cincinnati Children's Hospital Medical Center. This project increased the proportion of discharge instructions written at or below the 7th grade level (as recommended by the Institute of Medicine and The Joint Commission) from 13% to 98%, and has served as a model for hospital wide improvements to discharge instructions.
- Extending this work, Dr. Katie Meier, MD, focused on families whose children have undergone surgery. To date, her team increased the proportion of discharge instructions written at or below the 7th grade level, containing all necessary components from 0% to 55%.
- The Hospital Medicine Adult Care Service team (HMACS), under the leadership of Dr. Brian Herbst, PhD, developed institutional
 protocols to standardize the care we provide to adult survivors of childhood acquired conditions since its advent in 2014. This includes a
 current project to identify what risk factors put this special population at risk for developing a deep venous thrombosis (blood clots). This

project is led by Dr. Stephanie Royer, MD, to inform development of a standard prevention protocol for these adults. HMACS physicians have also developed protocols for adults with chest pain, cerebrovascular accident, and pulmonary embolism.

• The Hospital Medicine Surgical Service (HMSS), under the direction of Dr. Katie Meier, has led multiple projects to improve the postoperative care for surgical patients. Drs. Katie Meier and Lisa Benz have standardized the recognition and management of urinary retention in orthopaedic patients. This work decreased the need for repeat catheterization (which can cause pain/discomfort and increase the risk of infection) from 28 to 6%. In conjunction with the Division of Orthopaedics, Dr. Blair Simpson, MD, led the standardization of the posterior spinal fusion postoperative care pathway. Their work decreased the length of hospital stays from four to three days, and has served a model for other surgical services similarly working to improve their care protocols. Building on the discharge readiness work by other members of the division, Dr. Laura Brower, MD, has partnered with our surgical teams to expand this program to include all surgical programs at Cincinnati Children's with the goal of improving patient flow and patient satisfaction.

Leadership in Medical Education

The Division of Hospital Medicine has a strong history of leadership, innovation, and scholarship in medical education. This includes the oversight of over 500 learners annually on its various service lines; presentation of teaching conferences for various groups locally, regionally, and nationally; involvement in multi-site educational research initiatives; and funded scholarship related to research in medical education. This excellence has led to leadership positions locally, within both Cincinnati Children's Hospital Medical Center and the UC College of Medicine, and nationally for the division's large contingent of medical educators. Internal Medicine and Pediatric (med-peds) residency training program based at Cincinnati Children's, and the University of Cincinnati Medical Center, named Dr. Jennifer O'Toole, MD, MEd, as program director . Dr. O'Toole previously served as associate director of the med-peds residency program since 2008, and in this new role, will provide administrative oversight and mentorship to 28 med-peds residents. She will also work closely with the leadership of the core categorical programs on clinical and educational initiatives.

Alongside Dr. O'Toole, Dr. Benjamin Kinnear, MD, continues to serve in the role of assistant program director for quality improvement initiatives for the med-peds residency, a role he has held since 2015. In this role, he leads quality improvement training for the med-peds residents.

Dr. Angela Statile, MD, MEd, promoted to assistant program director for the Cincinnati Children's Pediatrics Residency Training Program. She will work with the residency leadership team to recruit, develop and evaluate pediatric trainees, as well as implement innovative educational initiatives to maximize their experience. She joins Dr. Ndidi Unaka, MD, MEd, an associate program director since 2011.

Dr. Matthew Kelleher, MD, MEd, a graduate of IMSTAR Medical Education Fellowship in the UC Department of Internal Medicine, is now associate program director for the UC Internal Medicine Residency as well as co-director of the clinical skills course for the 1st and 2nd year medical students at the UC College of Medicine.

Dr. Amy Beth Guiot, MD, continues in her role as associate director of the pediatric clerkship at UC College of Medicine and Cincinnati Children's, and in 2016 assumed the role of director of intersessions for the 3rd year medical students at UC College of Medicine. The intersession modules for the 3rd year medical students provide diverse educational experiences to prepare the students to practice medicine in the 21st century.

Dr. Yemisi Jones, MD, was recently named the new medical director of continuing medical education at Cincinnati Children's. In this role, she will oversee the more than 900 educational activities sponsored by the Office of Continuing Medical Education, including Pediatric Grand Rounds.

Other Significant Accomplishments

John M. Eisenberg Award for Innovation in Patient Safety and Quality. In spring 2017, the I-PASS Study Group received the prestigious 2016 John M. Eisenberg Patient Safety and Quality Award from The Joint Commission and the National Quality Forum (NQF), two leading organizations that set standards in patient care. Since its inception in 2010, members of the Division of Hospital Medicine, including Drs. Jennifer O'Toole, MD, MEd; Amy Beth Guiot, MD; Samir S. Shah, MD, MSCE, and former division fellows Drs. Lauren Solan and Aarti Patel, have been active participants, and leaders, within I-PASS Study Group. This group represents more than 50 hospitals from across North America dedicated to improving patient safety by standardizing provider communication during patient hand-offs to reduce miscommunication that can lead to harmful medical errors. In a large multi-center study published in the *New England Journal of Medicine*,

implementation of I-PASS associates with a 30% reduction in medical errors that harm patients. As part of the national study group, division physicians played a prominent role in developing and studying the I-PASS program.

Society for Pediatric Research. The prestigious Society for Pediatric Research (SPR) elected five faculty members: Drs. Lilliam Ambroggio, PhD; Katherine Auger, MD, MSc; Patrick Brady, MD, MSc; Amanda Schondelmeyer, MD; and Joanna Thomson, MD, MPH. The SPR mission is to create a network of multidisciplinary researchers to improve child health. Criteria for membership includes demonstration of exceptional scholarship, and leadership in pediatrics. Dr. Samir S. Shah serves as a member of the SPR leadership council.

Dr. Armand Antommaria, MD, PhD, FAAP, was The Laura Mirkinson, MD, FAAP, lecturer at the American Academy of Pediatrics National Conference and Exhibition. The Academy's Section on Hospital Medicine bestows this award.

Dr. Patrick Brady served on the executive leadership council of the Pediatric Research in Inpatient Settings (PRIS) Network, a hospitalbased research network with over 120 hospital members. The PRIS Network conducts multicenter research in areas of inpatient pediatric care that are relevant to clinicians and the decisions they face when caring for children and their families in everyday clinical practice. Dr. Samir S. Shah serves as the PRIS Network vice chair.

Dr. Lori Herbst, MD, received the Young Scholar Abstract Award from the American Academy of Pediatrics Section on Hospice and Palliative Medicine for her work highlighting the need for more robust resident education in end of life care.

Dr. Karen Jerardi, MD, MEd, received the Cincinnati Children's Hospital Medical Center junior faculty Educational Achievement Award for her leadership in the development and implementation of a novel curriculum to train advanced practice nurses into their new roles as independent providers in inpatient care, and for her leadership of the renowned Pediatric Hospital Medicine Fellowship Program, which serves as a national model for training leaders in the field.

Drs. Yemisi Jones, MD, and Amy Rule are co-directors of the Division of Hospital Medicine Liberty Campus simulation program, a program that emphasizes multidisciplinary training to improve teamwork during emergencies. This work is crucial for providers who are responsible for situational awareness and code response on the liberty campus and, from a systems perspective, important as we learn to harness telemedicine during emergency scenarios across the institution.

Dr. Katie Meier, MD, received the Division of Hospital Medicine Clinical Care Award for her dedication to providing the highest level of, and leading improvements in, clinical care, noteworthy dedication to providing patient- and family-centered care, outstanding leadership of the inter-professional team, and exemplary role modeling of professionalism to colleagues, learners, and patients.

Dr. Jennifer O'Toole was the inaugural recipient of the Brendan Kelly Award from the Medicine-Pediatrics Program Director Association (MPPDA) in April 2017. This award commissioned by the MPPDA, celebrates the life of Brendan Kelly, MD, an associate program director of the med-peds residency program at Baystate Medical Center/Baystate Children's Hospital, who passed away in May 2016. The award honors a med-peds associate residency director who, like Kelly, models the exemplary traits of teaching excellence, collaborative leadership, and compassionate patient care.

Dr. Jennifer O'Toole will assume the role of program director for the Internal Medicine and Pediatric (med-peds) residency training program based at Cincinnati Children's and the University of Cincinnati Medical Center in September 2017. Dr. O'Toole has served as associate director of the med-peds residency program since 2008. In this new role, Dr. O'Toole will provide administrative oversight and mentorship to 28 med-peds residents, and will work closely with the leadership of the core categorical programs on clinical and educational to ensure continuation of a world-class training experience for the residents.

Dr. Sarah Riddle, MD, IBCLC, FAAP, is now the medical director of Cincinnati Children's Home Care Services, encompassing home health nursing, private duty nursing, pharmacy, home medical equipment, and rehabilitation service lines. In this role, she is partnering with patient services leadership to build a structure which integrates patient services and medical leadership to advance clinical, quality improvement, value and patient experience goals in the home care setting.

Dr. Erin Shaughnessy received the Cincinnati Children's junior faculty Clinical Care Achievement Award for her leading role in developing, and implementing, evidence-based standards of care for medically complex children undergoing surgery, and systematically evaluating the effectiveness of these standards. Specific innovations include a care algorithm that decreased post-operative respiratory complications,

and creation and implementation of a standardized approach to prevent venous thromboembolism, a serious blood clot acquired in patients with prolonged hospitalization. Division members, Drs. Brittany Hubbell, MD; Katie Meier; and Christine White, MD, MAT, collaborated in this multidisciplinary work.

Dr. Angela Statile, MD, MEd, will serve as an assistant program director for the Cincinnati Children's Pediatrics Residency Training Program. She will work with the residency leadership team to recruit, develop and evaluate pediatric trainees, as well as implement innovative educational initiatives to maximize their experience. She joins Dr. Ndidi Unaka, MD, MEd, an associate program director.

Dr. Ndidi Unaka ia an at-large associate program director member for the Association of Pediatric Program Directors (APPD) executive committee for a three-year term (2017-2020). APPD strives to "lead the advancement of education to ensure the health and well-being of children". The organization provides support of pediatric training programs and members in their efforts towards academic growth, rigorous educational research, innovation and collaboration. As a member of the APPD executive committee, Dr. Unaka will ensure representation of the unique needs and perspectives of associate program director;, participate in the development and execution of the organization's strategic plan; and play an active role in developing content for the annual meetings.

Dr. Ndidi Unaka led a team including multiple division members, Drs. Patrick Brady, Karen Jerardi, Blair Simpson, and Angela Statile, as well as nurse practitioners Randi Mullaney and Jodi Kelley, and clinical research coordinator Michelle Durling, received the 2016 Cincinnati Children's Patient Education Advocacy Award for their health literacy-focused project to improve discharge instructions for Division of Hospital Medicine patients discharged from the Burnet and Liberty campuses.

Division Publications

- Sanderson SC; Brothers KB; Mercaldo ND; Clayton EW; Antommaria AHM; Aufox SA; Brilliant MH; Campos D; Carrell DS; Connolly J. Public Attitudes toward Consent and Data Sharing in Biobank Research: A Large Multi-site Experimental Survey in the US. The American Journal of Human Genetics. 2017; 100:414-427.
- Hagedorn PA; Kirkendall ES; Kouril M; Dexheimer JW; Courter J; Minich T; Spooner SA. Assessing Frequency and Risk of Weight Entry Errors in Pediatrics. JAMA Pediatrics. 2017; 171:392-393.
- Khan A; Coffey M; Litterer KP; Baird JD; Furtak SL; Garcia BM; Ashland MA; Calaman S; Kuzma NC; O'Toole JK. Families as Partners in Hospital Error and Adverse Event Surveillance. JAMA Pediatrics. 2017; 171:372-381.
- 4. Sheanon N; Simpson B; Shaughnessy E. Teenager With Hip Pain and Limp. JAMA Pediatrics. 2017; 171:297-298.
- Colvin JD; Hall M; Berry JG; Gottlieb LM; Bettenhausen JL; Shah SS; Fieldston ES; Conway PH; Chung PJ. Financial Loss for Inpatient Care of Medicaid-Insured Children. JAMA Pediatrics. 2016; 170:1055-1062.
- Florin TA; Carron H; Huang G; Shah SS; Ruddy R; Ambroggio L. Pneumonia in Children Presenting to the Emergency Department With an Asthma Exacerbation. JAMA Pediatrics. 2016; 170:803-805.
- Bonafide CP; Roland D; Brady PW. Rapid Response Systems 20 Years Later New Approaches, Old Challenges. JAMA Pediatrics. 2016; 170:729-730.
- Beck AF; Huang B; Auger KA; Ryan PH; Chen C; Kahn RS. Explaining Racial Disparities in Child Asthma Readmission Using a Causal Inference Approach. JAMA Pediatrics. 2016; 170:695-703.
- Garrison NA; Sathe NA; Antommaria AHM; Holm IA; Sanderson SC; Smith ME; McPheeters ML; Clayton EW. A systematic literature review of individuals' perspectives on broad consent and data sharing in the United States. *Genetics in Medicine*. 2016; 18:663-671.

- Goldstein SL; Mottes T; Simpson K; Barclay C; Muething S; Haslam DB; Kirkendall ES. A sustained quality improvement program reduces nephrotoxic medication-associated acute kidney injury. *Kidney international*. 2016; 90:212-221.
- 11. Antommaria AHM. Issues of Fidelity and Trust Are Intrinsic to Uncontrolled Donation After Circulatory Determination of Death and Arise Again With Each New Resuscitation Method. *The American Journal of Bioethics*. 2017; 17:20-22.
- 12. Antommaria AHM; King R. Moral hazard and transparency in pediatrics: A different problem requiring a different solution. *The American Journal of Bioethics*. 2016; 16:39-40.
- Sauers-Ford HS; Gold JM; Statile AM; Tubbs-Cooley HL; Simmons JM; Shah SS; Bell K; Pfefferman C; Moore MJ; Auger KA. Improving Recruitment and Retention Rates in a Randomized Controlled Trial. *Pediatrics*. 2017; 139:e20162770.
- Williams DJ; Hall M; Gerber JS; Neuman MI; Hersh AL; Brogan TV; Parikh K; Mahant S; Blaschke AJ; Shah SS. Impact of a National Guideline on Antibiotic Selection for Hospitalized Pneumonia. *Pediatrics*. 2017; 139:e20163231.
- Auger KA; Teufel RJ; Harris JM; Gay JC; Del Beccaro MA; Neuman MI; Tejedor-Sojo J; Agrawal RK; Morse RB; Eghtesady P. Children's Hospital Characteristics and Readmission Metrics. *Pediatrics*. 2017; 139:e20161720.
- Gipson DS; Kirkendall ES; Gumbs-Petty B; Quinn T; Steen A; Hicks A; McMahon A; Nicholas S; Zhao-Wong A; Taylor-Zapata P.
 Development of a Pediatric Adverse Events Terminology. Pediatrics. 2017; 139:e20160985.
- Shah SS; Srivastava R; Wu S; Colvin JD; Williams DJ; Rangel SJ; Samady W; Rao S; Miller C; Cross C. Intravenous Versus Oral Antibiotics for Postdischarge Treatment of Complicated Pneumonia. *Pediatrics*. 2016; 138:e20161692.
- Agrawal R; Hall M; Cohen E; Goodman DM; Kuo DZ; Neff JM; ONeill M; Thomson J; Berry JG. Trends in Health Care Spending for Children in Medicaid With High Resource Use. *Pediatrics*. 2016; 138:e20160682.
- Statile AM; Schondelmeyer AC; Thomson JE; Brower LH; Davis B; Redel J; Hausfeld J; Tucker K; White DL; White CM. Improving Discharge Efficiency in Medically Complex Pediatric Patients. *Pediatrics*. 2016; 138:e20153832.
- Brittan M; Shah SS; Auger KA. Preventing Pediatric Readmissions: How Does the Hospital Fit In?. Pediatrics. 2016; 138:e20161643.
- 21. Lyons TW; Cruz AT; Freedman SB; Neuman MI; Balamuth F; Mistry RD; Mahajan P; Aronson PL; Thomson JE; Pruitt CM. Interpretation of Cerebrospinal Fluid White Blood Cell Counts in Young Infants With a Traumatic Lumbar Puncture. Annals of Emergency Medicine. 2017; 69:622-631.
- Beck AF; Solan LG; Brunswick SA; Sauers-Ford H; Simmons JM; Shah S; Gold J; Sherman SN; H2O Study Group. Socioeconomic status influences the toll paediatric hospitalisations take on families: a qualitative study. *BMJ Quality and Safety*. 2017; 26:304-311.
- 23. Meystre S; Gouripeddi R; Tieder J; Simmons J; Srivastava R; Shah S. Enhancing Comparative Effectiveness Research With Automated Pediatric Pneumonia Detection in a Multi-Institutional Clinical Repository: A PHIS+ Pilot Study. Journal of Medical Internet Research. 2017; 19:e162-e162.
- Berry JG; Rodean J; Hall M; Alpern ER; Aronson PL; Freedman SB; Brousseau DC; Shah SS; Simon HK; Cohen E. Impact of Chronic Conditions on Emergency Department Visits of Children Using Medicaid. The Journal of Pediatrics. 2017; 182:267-274.
- 25. Brittan M; Richardson T; Kenyon C; Sills MR; Fieldston E; Hall M; Fox D; Shah S; Berry J. Association between Postdischarge Oral Corticosteroid Prescription Fills and Readmission in Children with Asthma. The Journal of Pediatrics. 2017; 180:163-169.e1.

Grants, Contracts, and Industry Agreements

Annual Grant Award Dollars

Investigator	Title	Sponsor	ID	Dates	Amount
Samir Shah, MD	Understanding Quality and Costs in Congenital Heart Surgery	National Institutes of Health (University of Michigan)	R01 HL122261	04/01/2014 - 03/31/2019	\$18,814
Samir Shah, MD	Improving Post-discharge Outcomes by Facilitating Family-centered Transitions from Hospital to Home	Patient-Centered Outcome Research Inst.	IHS-1306-00811	05/01/2014 - 04/30/2018	\$707,698.20
Patrick Brady, MD	Family-Clinician Partnerships to Improve Child Safety in the Hospital	Agcy for Healthcare Research and Quality	K08 HS023827	05/01/2015 - 04/30/2020	\$75,210
Eric Kirkendall, MD Kristin R Melton	Improving Intensive Care Medication Safety through EHR-based Algorithms.	National Institutes of Health	R01 LM012230	09/15/2015 - 08/31/2019	\$170,959
Samir Shah, MD	Burden of Neonatal Herpes SimplexVirus Infections: Disease Incidence, Adequacy of Diagnostic Assessment, Disease Outcome, and Societal Costs.	National Institutes of Health (University of Alabama-Birmingham)	HHSN272201600018C	08/01/2016 - 07/31/2018	\$147,930
Mia Lynn Mallory, MD	Pathways for Emerging Healthcare Leaders	Department of Health and Human Services (University of Cincinnati)	CPIMP151094	08/15/2015 - 07/31/2020	\$7,219
Samir Shah, MD	Children's Hospital(s) Initiative for Research in Pneumonia	Ohio Department of Medicaid (ODM) (The Research Instit at Nationwide Hosp)	82125015	07/01/2015 - 06/30/2017	\$4,538
Samir Shah, MD	Children's Hospital(s) Initiative for Research in Pneumonia	Ohio Department of Medicaid (ODM) (The Research Instit at Nationwide Hosp)	82125015	07/01/2015 - 06/30/2017	\$4,180
Catherine Forster	Molecular Changes in Genes of Antimicrobial Resistance in Bacteria Cultured in Urine from Children on CIC	National Institutes of Health (University of Cincinnati)	P30 ES006096	04/01/2016 - 02/28/2017	\$5,000
Joanna Elaine Thomson, MD	Hospital Management of Acute Respiratory Illness in Children with Neurologic Impairment.	Agcy for Healthcare Research and Quality	K08 HS025138	04/01/2017 - 03/31/2022	\$148,500

	Katherine A Auger, MD	Predicting Pediatr	ic	Agcy for Healthcare	K08 HS024735	04/01/2017	\$148,500			
		Readmission:		Research and Quality		-				
		Development of a				03/31/2022				
		Validated Risk Pre	ediction							
		Tool								
	Lilliam Ambroggio, PhD	oggio. PhD Metabolomics Evalua	aluation	National Institutes of	K01 AI125413	03/07/2017	\$128,250			
		of the Etiology of		Health		-				
		Pneumonia				02/28/2022				
							\$4 E00 E00 00			
	Total Annual Grant Awar	d Dollars					\$1,566,798.20			
	Annual Industry Award Dollars									
Investigator		Industry Sponsor		Amount						
	Joanna Elaine Thomson, MD		Pfizer, Inc. (Children's Hospital of		\$2,500					
		Philadelphia)		· /						
				,						
	Total Annual Industry Aw	ard Dollars			\$2,500					