Research Annual Report 2010

Children's Mercy Hospital

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Dear Friends and Colleagues,

Without question, Children’s Mercy is highly regarded in our community, our region and nationally as a pediatric medical center which provides care to children and their families in a fashion that is nothing less than exemplary. While patient care is the core of what we do at Children’s Mercy, it is but one part of our tripartite institutional mission to serve, to teach and to discover. We actively embrace this mission recognizing that innovation in providing state-of-the-art patient care only comes by being dedicated to the process of discovery through the effective performance of relevant research and subsequently, translating new information into knowledge that is capable of driving critical therapeutic decisions and diagnostic interventions.

Over the past year, Children’s Mercy has undertaken an organized, focused expansion of our institutional research capacity and capabilities. This has included launching our Experimental Therapeutics Unit which emphasizes early phase clinical trials in the field of pediatric cancer and the new Center for Pediatric Genomic Medicine. This newest center is a world-class program which focuses on defining the genetic underpinning of more than 600 of the most commonly inherited disorders which afflict children and also, using integrated systems biology approaches to define cellular “targets” that could be used to drive the development of new therapeutic approaches.

Recognizing that success in science requires effective collaboration, investigators at Children’s Mercy continue to work with colleagues at the University of Missouri – Kansas City, the University of Kansas and the Stower’s Institute. These associations have been extremely fruitful as reflected by an almost three-fold increase in federal research awards to Children’s Mercy investigators during the past year, the success of the University of Kansas in receiving a Clinical Translational Science Award from the National Institutes of Health and the continued evolution of the University of Kansas Cancer Center towards its pursuit of formal designation by the National Cancer Institute. Also, during the past year, we have expanded the reach of Children’s Mercy through research activities performed in collaboration with the World Health Organization.

The report which follows describes the excellence of our research programs and many of our dedicated scientists and clinicians who make them possible. We hope that you will take a few moments to read through this report, reflect on it and most importantly, share in the celebration of success as we work together to continue the evolution of Children’s Mercy into a world-class institution for pediatric research. In attaining this goal, we will ensure that the patients we are privileged to care for and those beyond the boundaries of our institution will benefit from the very best that new discoveries and knowledge can provide.

Sincerely,

Gregory Kearns, PhD, PharmD
Department Chairman
Medical Research
“Our research energy is focused on specialty areas that leverage our strengths and offer the greatest opportunity to make a difference in the lives of children. Through our pediatric personalized medicine and genomics initiatives, we have an opportunity to redefine pediatric medicine across all subspecialties, from our basic understanding of disease and illness to developing safer and more effective treatments and therapies.”

~Gregory Kearns, PhD, PharmD
Department Chairman, Medical Research
Children’s Mercy has been conducting clinical investigations since its inception more than 100 years ago. We have participated in industry-sponsored clinical trials for more than 25 years. During this time, we have worked with nearly 60 top pharmaceutical sponsors in the areas listed below.
Acid Reflux Disease
Allergies and Allergic Rhinitis
Anti-Emetic Therapy
Anti-Fungal Treatment
Asthma
Autism
Bone Marrow Transplant
Catheter Flow
Chronic Abdominal Pain in Children
Chronic Pain
Constitutional Delay of Growth & Puberty
Cytogenetics
Diabetes Mellitus Types I & II
Diagnostic Kits
Dietetics
Drug Metabolism
Eczema
Epilepsy
Genetic Disease
Genotyping
Glaucoma
Growth Factors
Gynecomastia
Hemophilia
Hypertension
Immune Tolerance Induction
Influenza
Iron Metabolism
Juvenile Rheumatoid Arthritis
McCune Albright Syndrome
Metabolic Disorders
Muscular Dystrophy
Obesity
Otitis Media
Partial Liquid Ventilation
Pharmacokinetics
Psychiatry and Behavioral Disorders
Pulmonary Hypertension in Newborns
Rehabilitation & Physical Therapy
Renal Transplantation
Respiratory Tract Infections
Seizure Disorder
Sickle Cell Disease
Turner Syndrome
Adrenal Gland Disorders
Anemia
Antigen Challenge Testing
Attention Deficit Hyperactivity Disorder
Bladder Disorder
Bronchiolitis
Childhood Cancers
Chronic Lung Disease
Coagulation Disorders
Cystic Fibrosis
Device Studies
Diagnostic Imaging
Dialysis
Digestive Disorder
Dyspepsia
Endocrinology
Fecal Retention
Genetics
Gender Differences in Systemic Lupus
Graft vs. Host Disease
Growth Hormone Deficiency
Hepatitis
Hormone Deficiency
Icuapathic Nephroticsindrome
Infectious Diseases
Intra-Ocular Lens
Irritable Bowel Syndrome
Lymphomas
Meningitis
Migraine
Neonatal Nutrition
Organ Transplantation
Pain Treatment, Post Surgical
Pharmacogenetics
Pneumonia
Pulmonary Disease in Critical Care Patients and Newborns
Quality of Life Scale
Renal Disease
Respiratory Disease in Newborns
Sedation in Critical Care Patients
Sepsis
Skin and Soft Tissue Infections
Ulcerative Colitis
Visual Acuity
Many of the world’s leading experts in pediatric pharmacogenomics and personalized medicine gathered at Children’s Mercy for a first-of-its-kind conference, April 28-30, 2010, to change the way childhood diseases and illnesses are treated.

The goal of the conference was to advance the application of genomic tools to medical problems to tailor treatment to the unique make-up of pediatric patients and improve outcomes. The conference was supported by a grant from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD).

“Personalized medicine uses recent advancements in genomics and molecular data, and has the potential to revolutionize the way we treat illness,” said J. Steven Leeder, PharmD, PhD, conference co-organizer; Division Chief, Clinical Pharmacology and Medical Toxicology; Marion Merrell Dow Endowed Chair in Pediatric Clinical Pharmacology; and Professor of Pediatrics and Pharmacology, UMKC School of Medicine. “This conference provides a unique opportunity to explore the application of genomic tools to improve the diagnosis and treatment of disease in children.”

The conference opened with a keynote speech delivered by Gregory Downing, DO, PhD, Office of the Secretary, U.S. Department of Health and Human Services. Dr. Downing was followed by international experts from academia, government and the private sector, who exchanged knowledge centering on opportunities and barriers to development of pediatric personalized medicine programs, clinical applications, and ethical, legal and societal implications.

Among the clinical applications discussed were some of the research programs being conducted at Children’s Mercy addressing important patient challenges, such as:

- Applying genomic strategies to improve the safety and efficacy of medications used to treat cancer in children
- Improving the effectiveness and benefit/risk ratio of a common therapeutic agent in treating Juvenile Idiopathic Arthritis, where inter-patient variability results in up to 40 percent of patients failing to achieve remission
- Uncovering genetic and developmental factors contributing to the risk of serious adverse drug reactions in children

The conference also facilitated exchanges on navigating concerns posed by personalized medicine.

“Genetic discrimination, cost-benefit analysis, universal standards for managing genomic information in electronic medical records, biobanking, and strategies to educate practitioners and patients are all hot topics in personalized medicine,” said Dr. Leeder. “Our goal is to bring together the top minds in genomics and pediatric pharmacogenomics to address these and other issues that are changing the way we care for pediatric patients.”
AWARDS OF NOTE
The study has discovered that “lecturing” a student about the dangers of his or her behavior is unproductive.
What are the words, the phrases — the approach — that can help a young person make better choices when it come to alcohol consumption during the college years?

That’s the question that Timothy Apodaca, PhD, seeks to answer through his project “Sequential and Component Analyses of MI (Motivational Interview) Mechanisms in College Drinkers.”

His research delves into the nuances of intervention-type conversations that take place between a health care provider (typically one associated with a college or university student health service) and a student who has demonstrated difficulty in adhering to the school’s alcohol policy. The conversation is intended to redirect the student’s behavior. The question, of course, is how best to accomplish this.

Audiotapes and transcripts from such focused conversations are being evaluated for distinct messages on the part of the health care provider and the student that are more likely to have a behavioral impact.

To date, the study has discovered that “lecturing” a student about the dangers of his or her behavior is unproductive. Rather, greater success appears to come from conversations where the clinician asks the student to react to his or her own behavior, and to express whether that behavior fits with the student’s own goals and values.

Students who are willing to make a commitment to the health care provider they are speaking with — or at least to state an intention to improve — appear to have better results, at this point in the study.

The expectation is that this data will lead to concrete information that can be shared with providers faced with the same types of conversations, so that they can understand the words and actions that will enhance the likelihood of a productive change in a patient’s behavior.
It’s not exactly news that a year or two in a child’s life brings about changes that are exponentially more remarkable than would be seen in the same time span for an adult.

However, while many of the changes are obvious to even the most casual observer, the impact of the immense physiological changes underway – plus the variability in the level of a critical enzyme – may provide insight into how to more effectively prescribe medications for different children at different ages.

This study seeks to determine the impact of a specific enzyme on how a drug is metabolized, and to learn whether a child’s stage of development, his or her genetics, or some combination of these factors plays the critical role. The goal is to understand how to more effectively serve the needs of children and adolescents who fall outside of the norm in terms of this enzyme and, therefore, have difficulty receiving the desired benefits of numerous types of pharmaceutical products.

The enzyme in question – CYP2D6 – is involved in the metabolism of approximately 25 percent of the drugs used clinically, several of which are commonly used in children of various ages. It has already been determined that this enzyme is subject to some genetic variation, meaning that while most children and adults are typical, a small percentage received none from their parents, while others receive multiple copies.

Such information can help physicians understand why “standard” dosing levels may be too much for some patients, and too little for others. If such information would be important for adults who seem to be outliers in terms of drug metabolizing, it can be life-saving for children, considering the rapid changes they experience as they mature.

J. STEVEN LEEDER, PharmD, PhD
EXOGENOUS AND ENDOGENOUS BIOMARKERS OF CYP2D6 TOTAL AMOUNT -- $2,900,000 (2010-2015)
This study seeks to determine the impact of a specific enzyme on how a drug is metabolized, and to learn whether a child’s stage of development, his or her genetics, or some combination of these factors plays the critical role.
An initial group of 600 patients being followed was expanded in 2011 by an additional 280 patients, and the total group is being tracked through 48 clinical sites across the United States and Canada.
Children’s Mercy Hospital has been one of two clinical coordinating centers for a long-term study of children with mild to moderate chronic kidney disease (CKD), seeking to better understand the risk factors that affect disease progression, along with other medical and quality of life impacts of CKD in a child’s life.

An initial group of 600 patients being followed was expanded in 2011 by an additional 280 patients, and the total group is being tracked through 48 clinical sites across the United States and Canada.

The primary function of the research is to determine the risk factors that lead to a more rapid decline in kidney function. The first step was to develop a method of estimating Glomerular Filtration Rate (GFR) – the key factor in evaluating the status of kidney disease – that would be a more effective method of tracking the status of a patient with CKD. This evolved approach is helping to more accurately measure such known risk factors as the amount of protein in the urine, providing an improved assessment of its impact on disease progression.

In addition, the study is also evaluating the impact of CKD on a patient’s neurocognition, cardiovascular health, and issues related to physical growth and development.

In terms of neurocognition, the study is evaluating quality of life issues in patients with CKD, such as school performance, incontinence, and sleep and fatigue. Both patients and their parents are providing input on the quality of life assessment.

The cardiovascular component is measuring the impact of cardiovascular issues – such as the connection between under-treatment of hypertension in pediatric patients, and the progression of CKD – while the growth and development aspect is tracking the relationship of factors such as low birth weight and premature delivery on the prevalence of CKD.
Acute Lung Injury (ALI), or acute respiratory distress syndrome, is a refractory lung disease whose pathogenetic basis is not well understood and whose outcomes can be devastating. It is characterized by severe hypoxemia, and the mortality rate can range from 30 to 50 percent.

This study is seeking to identify novel biochemical and genetic markers for ALI that can provide insights into pathogenic mechanisms and that can help pinpoint new therapeutic approaches.

The focus, specifically, is on pre-B-cell colony enhancing factor (PBEF), which has been previously implicated in the inflammatory reaction exhibited in ALI and in ventilator-induced lung injury (VILI).

It was previously discovered by Dr. Ye’s group that the PBEF gene was more prevalent in dogs, mice and humans suffering from ALI. Further research revealed that mice that had a 50 percent reduction in the PBEF gene (or that were treated with a PBEF neutralizing antibody to produce a similar effect) experienced a significantly decreased risk of Ventilator Induced Lung Injury. The current work in this study is using animal models to test gene therapy and drug therapy methodologies for reducing PBEF, and thereby limiting the devastating effects of ALI. Human testing of these alternative therapies is anticipated in the near future.

In addition, Dr. Ye’s group discovered an increased PBEF concentration in the plasma of juvenile idiopathic arthritis patients, and that methotretate – which is used to treat such patients – can lower the concentration of PBEF in the plasma. Additional discoveries have been made related to the concentration of PBEF in asthma, and work on these two findings continues today at Children’s Mercy Hospital.
Dr. Ye’s group discovered an increased PBEF concentration in the plasma of juvenile idiopathic arthritis patients, and that Methotrexate – which is used to treat such patients – can lower the concentration of PBEF in the plasma.
A joint program of Children’s Mercy Hospital and KU Medical Center, the Center for Children’s Healthy Lifestyles and Nutrition is focused on research to determine how best to increase the quality and quantity of information and advocacy on pediatric obesity and childhood nutrition issues. The work toward this goal is evident in a variety of ways.

For example, the Center has a grant to better understand how health insurance companies evaluate the effectiveness of Stage 3 Pediatric Obesity Programs, which involve family-based behavioral groups. The objective of these groups is to educate patients and their families over a period of several weeks about nutrition, behavioral components related to effective weight management, and exercise. The goal of the grant is to learn through multiple forms of primary market research what insurance companies are looking for that would help to unlock programs like this for more insured patients and families who could benefit.

Another project at the Center involves validating a Spanish-language version of a Quality of Life survey titled “Sizing Them Up.” The intent is to make certain that the benefits of this survey’s data that have already been seen in the English-language version transfer to those who require a Spanish-language survey instead.

The Center is also the home of three students – shared jointly by Children’s Mercy Hospital and KU Medical Center – who are working on a grant, and who are engaged in dissertation work detailing methods of tailoring family-based behavioral groups to better serve the Latino community.

The Center represents a true partnership between two institutions that are Kansas City landmarks. The funding is shared, decisions for the Center are made by co-directors (one from each hospital), and patients’ clinical care remains with the institution at which they were introduced to the Center.
The Center has a grant to better understand how health insurance companies evaluate the effectiveness of Stage 3 Pediatric Obesity Programs, which involve family-based behavioral groups.

**Directors:**
Ann Davis, PhD, MPH, ABPP
Gregory L. Kearns, PharmD, PhD

**Faculty:**
Meredith Dreyer, PhD
Sarah Hampi, MD
The objective is better patient outcomes, by putting to use data that already exists – but may not have been readily available – to enhance both quality and safety.
Providing safe and effective care while improving clinical outcomes is an ever-present goal at Children’s Mercy Hospitals and Clinics, and numerous components and professionals throughout the organization have long played a key role in moving care in that direction. Now, all those aspects are organized under the Center for Clinical Effectiveness and, as a result, the goals have broadened.

The Center links the organization’s operational goal to provide safe, effective, equitable, efficient, timely, and patient centered care with a well defined research agenda. Comparative effectiveness research seeks to inform health care decisions by providing scientific evidence on different treatment and health care delivery options and explore the relationships between the actual care people receive and the outcomes they experience. The ultimate goal is to use this increased knowledge to develop better ways to deliver and evaluate clinical care. For example developing and implementing clinical practice guidelines based on data from the literature and our experience with similar cases within Children’s Mercy can improve patient outcomes today. This, coupled with research focused on the processes associated with improved outcomes, has the ability to improve patient care in the future.

The creation of clinical practice guidelines for common pediatric conditions, such as pneumonia, provides an evidence-based starting point for treatment that can assist physicians and others on the patient care team. Physicians benefit from having a protocol that standardizes care based on hundreds, and sometimes thousands, of similar cases, while also having the flexibility to adjust treatment based on how each patient responds.

Methodically measuring the impact of these guidelines on clinical outcomes comprises one important aspect of the research agenda. The objective is better patient outcomes, by putting to use data that already exists – but may not have been readily available– to enhance both quality and safety.

Another aspect of the research within the Center seeks to improve health care delivery to patients. For example, it’s no surprise that rapid access to information about a patient’s medical history, current condition and response to treatment would improve the accuracy and speed of decision-making by all members of the care team. The research aspect of the Center for Clinical Effectiveness takes on the challenge of identifying how to more effectively identify and utilize that information to help clinicians make the right decisions for patients. The objective is to identify methods to enhance health services delivery which will result in improved health outcomes over the long-term.
Why do some babies face severe pulmonary issues that imperil their health and well-being from the moment of birth, while others with seemingly similar risk factors have no pulmonary difficulties? How can the quality of life be improved for those babies who face these conditions?

These vexing questions are what drive the work of the Center for Infant Pulmonary Disorders, a world leader in the field that engages in clinical and translational research focusing on finding better treatments, interventions and use of medications to treat pulmonary diseases and disorders in infants.

Physicians affiliated with the Center are also testing newly available ventilator modes that have been approved for adult use, but whose benefits and risks to infants need to be determined. While the FDA has evaluated these products for safety and for manufacturing quality, it is important to determine if this mode of treatment is the best fit for the unique ventilator needs (and challenges) of infant patients.

The presence of the Center has contributed to the successful application of Children’s Mercy Hospitals and Clinics and Truman Medical Center to join the 2011-2016 cycle of the Eunice Kennedy Shriver National Institute of Child Health & Human Development Neonatal Research Network, a group of sites that are called upon to conduct a wide variety of trials for conditions affecting high-risk infants – including conditions that directly or indirectly affect the lungs. The Center’s contribution to the success of our application to join the Network was critical because of its history of success, and because of its access to numerous patients who can benefit from the work that will be undertaken through the Network.

Surfactant, a complex material that is a combination of fats and proteins, has become a staple in the immediate treatment of infants who are born with pulmonary issues, because it provides a temporary solution until the baby begins to produce sufficient surfactant on his or her own. The Center is currently involved in an NIH-sponsored trial to determine if additional surfactant doses – given in the second and third weeks of life – offer added benefit that would lead to a better long-term outcome for such infants.
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**Director:**
William Truog, MD

**Affiliates:**
Hugo Escobar, MD
Linda Gratny, MD
Ayman Khmour, MD
Howard Kilbride, MD
Charisse Lachica, MD
Steven Leeder, PharmD, PhD
Winston Manintim, MD
Okunola Oluola, MD
Adebayo Oshodi, MD
Eugenia Pallotto, MD
The first evidence of the transformation envisioned by the team at the Center was the creation of a test that can identify genomic information associated with some 600 severe childhood illnesses.
It’s long been common knowledge that early disease detection offers patients the best chance for a cure – if one exists – or for more effective management of chronic conditions. What has been missing, however, is the opportunity to accurately detect diseases and chronic conditions before symptoms appear, when intervention would have the greatest chance to be meaningful.

The Center for Pediatric Genomic Medicine wants to change that, and its vision is a bold one: Transforming Children’s Medicine by Genomic Interpretation.

The first evidence of the transformation envisioned by the team at the Center was the creation of a test that can identify genomic information associated with some 600 severe childhood illnesses. Revolutionary as this test may seem, it is seen by the Center leadership and faculty as only the beginning of what is possible – and necessary – if genomic testing is to fulfill its true potential.

In fact, with 10,000 new disease genes already identified, the task is far from complete. Research is ongoing to identify the next generation of testing that will expand into these new areas, while also seeking to bring down the cost, and speed up access to the information even further. The belief is that by doing so, physician-ordered genomic testing of patients will one day become much more of a routine diagnostic step.

The role of primary care physicians in the process is a critical factor that distinguishes the work of the Center. While Direct to Consumer genetic testing is attracting a lot of media attention today, the Center believes it is essential that a patient’s physician manage the process of genomic testing by ordering the tests, and then by utilizing the results to create a treatment plan. To that end, the Center has a full-time staff position dedicated to educating physicians on genomic testing and how to maximize its role in caring for patients.
“One size fits all” medicine is rapidly making way for an increasing focus on personalized therapeutic intervention for each pediatric patient, thanks to the work of the Center for Personalized Medicine and Therapeutic Innovation.

The goal of the Center is to improve patient outcomes through a multi-disciplinary approach that involves collaboration among researchers, clinicians, and patients and families themselves, so that the future of pediatric therapeutics can begin making a difference for patients today.

The Individual Pediatric Therapeutics Clinic at Children’s Mercy is the most public component of the Center’s work, evaluating patients who are not responding (or who have an unusual reaction) to treatment or medication at a normal dose, who have an unexplained or unexpected reaction to a treatment or medication, or who are not responding to a variety of medications or treatments that typically are used for a specific condition. The clinic also sees patients who have known genetic abnormalities related to drug biotransformation.

Outside of the Clinic setting, the Center’s staff is actively involved in training and mentoring pediatricians and other members of the patient care team – both inside Children’s Mercy Hospital and in the community – on the expanding tools and information in the field of personalized medicine. It’s an ongoing assignment, as the knowledge is changing rapidly, and the discoveries that are occurring are making a meaningful difference in the lives of patients every day.

The third component of the Center’s work is, of course, research that was born out of Children’s Mercy Hospital’s long-standing leadership in clinical pharmacology. The Center uses translational teams that test hypothesis about the utility and validity of using genomic information to improve diagnosis. The Center also impacts drug development, by envisioning – and then validating – how new medicines are used in the context of improved diagnostic precision so that each patient receives the right medicine at the right dose.
The goal of the Center is to improve patient outcomes through a multi-disciplinary approach that involves collaboration among researchers, clinicians, and patients and families themselves, so that the future of pediatric therapeutics can begin making a difference for patients today.

**Director:**
Stephen Leeder, PharmD, PhD

**Faculty:**
Mara Becker, MD, MSCE
Bridgette L. Jones, MD
Jennifer Lowry, MD
Kathleen Neville, MD, MS
As part of a network of facilities scattered across the United States, the Vaccine Research Group at Children’s Mercy Hospital provides a ready resource for the fielding of clinical trails to evaluate promising vaccines and treatments for infectious diseases.

**Director:**
Christopher Harrison, MD

**Investigators:**
Mary Anne Jackson, MD
Robyn Livingston, MD
Angela Myers, MD
Kirsten Weltmer, MD
Barbara Pahud, MD
Laurie Hornberger, MD
Josh Petrikin, MD
Raj Selvarangan, PhD, BVSc
As part of a network of facilities scattered across the United States, the Vaccine Research Group at Children’s Mercy Hospital provides a ready resource for the fielding of clinical trials to evaluate promising vaccines and treatments for infectious diseases.

The division of the Group that is funded by the National Institutes of Health and The Division of Microbiology and Infectious Diseases is called the Vaccine and Treatment Evaluation Unit, or VTEU, and it is the pediatric component of the University of Iowa site in the network. The VTEU is regularly chosen to participate in such trials, because the region’s population is highly representative of the proportions of racial and ethnic groups found nationally.

The work of the VTEU typically falls into one of two categories.

The first involves clinical trials that require a rapid response to a critical need. For example, the VTEU was among the sites for clinical trials for the H1N1 pandemic influenza vaccine, a situation where speed was certainly of the essence. The Unit has also participated in the trial for a new vaccine for smallpox, a disease that has not made headlines for decades, but which some are concerned might resurface because of international terrorism.

The VTEU’s other clinical trials test novel investigational product delivery systems and the re-evaluation of current vaccine formulas or delivery schedules.

Currently, the Unit is conducting a trial on the impact of off-schedule delivery of HPV vaccine, combined with seeking data regarding why young female patients have difficulty maintaining the preferred schedule of vaccines. Another trail seeks to understand whether administering the two different types of available rotavirus vaccines – rather than two doses of the same type – impacts the level of protection received.

Additional trials being evaluated right now include testing of a high-dose influenza vaccine for children 6 months to 3 years old, and a trial of new strategies to help prevent MRSA.
Young children who have cardiac valve problems have long faced a future marked by the multiple surgeries that are necessary, because of the need to continually replace their prosthetic implant with larger versions as they grow. Whether the implanted valve is mechanical, a human heart valve collected through organ donation, or animal-based, it’s always been a short-term solution until the patient reaches maturity.

The Cardiac Surgery Research Laboratories of The Ward Family Center for Congenital Heart Disease at Children’s Mercy Hospital is working to create a more permanent solution for these patients through tissue engineering that uses a patient’s own cells to create a replacement heart valve that will grow along with him or her, because it is genetically identical.

Using stem cells derived from a patient’s blood or bone marrow, the laboratory is devising methods to transform these cells into functioning tissue that can then be used to repair congenital defects in the heart and potentially, other organs. Utilizing specialized resources created at off-site facilities, these tissues are evaluated using well characterized surgical animal models which includes a complete characterization of their physical, chemical and structural properties.

The Laboratory is also home to other translational research projects focused on medical devices; all of which fit with four core principles established by the program: Does it solve a real clinical problem? Is it clinically realistic? Can it be approved through the appropriate regulatory bodies? Is it something that is economically viable for eventual use in pediatric patients?

In the future, the Vision is to expand beyond long-term solutions for heart valve issues and the other projects underway in the Laboratory, to determine how to further customize the tissue engineering process to address other medical problems discovered through genomic testing. The possibility of modifying a patient’s own cells to bring about a cure – even before symptoms appear – demonstrates just how exciting and potentially important the future could be in the emerging field of tissue engineering.
Using stem cells derived from a patient’s blood or bone marrow, the laboratory is devising methods to transform these cells into functioning tissue that can then be used to repair congenital defects in the heart and potentially, other organs.
INTERNAL AWARDS
Rangaraj Selvarangan, BV, SC, PhD, D(ABMM)
Director of Clinical Microbiology and Virology Laboratories;
Associate Professor of Pediatrics, University of Missouri-Kansas City School of Medicine

The Kreamer Research Excellence Award is presented each year to a member of the Children’s Mercy staff whose work shows evidence of continuing excellence in research impacting pediatric health care. The award provides $5,000 to be spent at the recipient’s discretion on his or her research projects. Nominees for this award must have been full-time active members of the medical/dental or research staff of Children’s Mercy for at least five years; must hold the academic rank of Associate Professor or above at the University of Missouri – Kansas City; must perform research that has an impact on improving health care for children; must have their research published in peer-reviewed journals; and must show evidence of continuing excellence in research. The Department of Medical Research solicits nominations and asks selected reviewers to vote for an awardee.
The Dee Lyons Nursing Research Scholarships are designed to support research by novice nurse investigators investigating a clinical area of concern. It is suggested that the research proposal aims to improve the effectiveness, timeliness, efficiency, safety or equity of care provided within the Patient Care Services division of Children’s Mercy Hospitals and Clinics.
Angela Myers, MD

Director, Infectious Diseases Fellowship Program;
Assistant Professor of Pediatrics, University of Missouri-Kansas City School of Medicine

“Process to Improve Influenza Immunization in the High Risk Child (PIIHRC)”

The Cross Foundation Clinical Scholar Award in Behavioral Medicine was established to provide competitive, intramural grants to promising Children’s Mercy researchers seeking to launch or expand their research in behavioral medicine, including psychiatry, developmental medicine, and outcome-based research.
Each spring and fall, an internal competition is held for the Katharine Berry Richardson (KBR) awards. Among the proposals submitted for the competition, the two top-rated projects are designated the William Randolph Hearst Endowment Fund awardees and receive a portion of their support from this fund.
The Marion Merrell Dow Clinical Scholar Award supports new or existing Medical and Research Staff who are expanding their research or establishing a new research program. To be eligible for this award, an applicant must hold an MD or PhD, and may not be a previous recipient of a Clinical Scholar award. Consideration is given to new investigators in the first five years of faculty appointment at Children’s Mercy.
Each spring and fall, an internal competition is held for the Katharine Berry Richardson (KBR) awards. Among the proposals submitted for the competition, the two top-rated projects are designated the William Randolph Hearst Endowment Fund awardees and receive a portion of their support from this fund.
The Paul Henson Endowment has generously supported research awards at Children’s Mercy Hospitals and Clinics. These awards were originally established by motion of Board of Trustees in 1997, and announced at the KBR Symposium in September of that year. The Board of Trustees gave seed money to establish the fund, and all memorial gifts were placed in this endowed fund. The fund was restricted for pediatric immunology research according to Mrs. Henson’s wishes. Mrs. Henson has chosen to expand the scope of funding to all facets of basic and translational research associated with immunology or inflammation.
As part of the hospital’s ongoing commitment to pediatric research and education, each year Children’s Mercy hosts Research Days presentations by residents and fellows. A panel of judges confers Research Days awards on the presenters of the best papers.

**Fellows Category**

**First place winner(s):**

Michael Levas, MD
“Effects of parental limited English proficiency on length of hospital stay and home health care utilization for children with home health eligible infections”

Stephanie Page, MD
“Retrospective Analysis of Maintenance Therapy for Eosinophilic Esophagitis”

**Second place winner:**

J. Christopher Day, MD
“Impact of Reflex Viral Testing on Clinical Management of Hospitalized Children”

**Resident Category**

**First place winner:**

Olawale Olabiyi, MD
“Assessment of Recurrent Aortic Arch Obstruction after Norwood Operation”

**Second place winner:**

Lindsey E. Malloy, DO, MPH
“Arrhythmias After the Fontan Operation: Extra-cardiac Conduit”
FACTS, FIGURES, LISTS
CHILDREN’S MERCY HOSPITAL FACULTY AS INTERNATIONAL VISITING PROFESSORS

Bioethics
John Lantos, MD

November 13-20, 2010
Ben Gurion University
Be’er Sheva, Israel
“What makes the gray zone gray?”
“Some complexities of substituted judgment”
“Doctors are all alike, parents are all different.”
“Are newborns worth less than older patients?”
“Case conference: a Bedouin family with a critically ill newborn”

Clinical Pharmacology/Medical Toxicology
J. Steven Leeder, PharmD, PhD

June 29-July 1, 2010
Showa Pharmaceutical University
Machida, Tokyo, Japan
“Role of Maturation and Developmental Context for Pharmacogenomic Studies in Children”

Graduate School of Pharmaceutical Sciences
The University of Tokyo
Tokyo, Japan
“Characterizing Drug Biotransformation in Children: Ontogeny vs Pharmacogenetics”

National Center for Child Health and Development
National Medical Center for Children and Mothers
Tokyo, Japan
“Pharmacogenetics for Children: Integrating Genetic Variation into Pediatric Clinical Pharmacology Research”

Omics Science Center, RIKEN Yokohama Institute
Yokohama, Japan
“Pediatric Pharmacogenetics: Challenges for Exploring Variability in Drug Response in Children”

Gastroenterology
Ding-You Li, MD, PhD

June 15, 2010
Guangzhou Children and Women’s Medical Center
Guangzhou, China
“Neonatal Cholestasis”

Medical Research
Gregory L. Kearns, PharmD, PhD

February 9-11, 2010
Aberdeen Maternity Hospital
Aberdeen, Scotland
“Opportunities and Challenges for Translational Research in Support of Medicines for Children”

Child Life and Health and Royal Hospital for Sick Children
Edinburgh, Scotland
“Opportunities and Challenges for Translational Research in Support of Medicines for Children”

Nephrology
Bradley A. Warady, MD

September 27-October 1, 2010
National University Hospital – Shaw Kidney Center
Singapore
“Chronic Kidney Disease in Children and Adolescents: Early Lessons from the NIH-CKD Study”
“Non-Adherence in Children and Adolescents with Chronic Kidney Disease”
“Improving PD for Children Worldwide: The Impact of the International Pediatric Peritoneal Dialysis Network”
“Key Concepts of Anemia Management”
“Understanding Growth in Kidney Disease”
Orthopaedics
Richard Schwend, MD, FAAP

May 30-June 5, 2010
Roberto Gilbert Children’s Hospital
Guayaquil, Ecuador
“Ponseti Method of Clubfoot Casting in Ecuador”
“Developmental Hip Dysplasia Ecuador Project”

Pathology and Laboratory Medicine
Eugenio M. Taboada, MD, FCAP

November 5, 2010
Nicaraguan Association of Pathologists
Managua, Nicaragua
“Pediatric Posterior Fossa Brain Tumors, Current Topics and Controversies”

CHILDREN’S MERCY HOSPITAL AS HOST TO INTERNATIONAL VISITING PROFESSORS

Clinical Pharmacology/Medical Toxicology
Miki Katoh, PhD

March 31, 2010--March 23, 2011
Associate Professor
Meijo University
Nagoya, Japan

Department of Endocrinology
Marcus Lind, MD, PhD

October 15, 2010
Specialist in Diabetology and Endocrinology
Department of Molecular and Clinical Medicine Diabetes Section
Sahlgrenska University Hospital
Sweden
“Metabolic Memory Hypothesis of Glycaemic Control and its Implications for Prognosis, Pathogenesis of Diabetic Complications, and Clinical Trials”

Hematology/Oncology
Lillian Sung, MD, PhD

May 27, 2010
The Hospital for Sick Children
Toronto, Ontario, Canada
“Improving Outcomes in El Salvador, a Low Income Country, Challenges and Rewards of Research in the Developing World”

Medical Research
Catherine Tuleu, PhD

November 12, 2010
Centre for Paediatric Pharmacy Research
University of London
London, England
“Palatability of Medicines for Children: Taste, Taste Masking and Taste Assessment Considerations”
<table>
<thead>
<tr>
<th><strong>Patents Issued</strong></th>
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| **Peter Rogan, PhD **<br>Joan Knoll, PhD | United States Mar 22, 2010  
Continuation in Part  
Single Copy Genomic Hybridization Probes and Method of Generating Same |
| **Peter Rogan, PhD  **<br>Joan Knoll, PhD | Israel May 18, 2010  
Utility Foreign  
Single Copy Genomic Hybridization Probes and Method of Generating Same |
| **Jill Jacobson, MD** | Hong Kong Jan 12, 2010  
Utility Foreign  
Prevention of Diabetes by Administration of GnRH Antagonists |
| **Robert White, PhD  **<br>Roger Gaedigk, PhD  
Kathleen Fitzgerald-Gustafson, PhD | New Zealand Mar 11, 2010  
Utility Foreign  
Retinal Dystrophin Transgene and Methods of Use Thereof |
**2010 RESEARCH COUNCIL MEMBERS**

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**Rebecca Ballard, JD, MA**  
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Director, Office of Research Integrity

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Director, Medical Research Department

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Executive Vice President/Co-Chief Operating Officer

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Vacant

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The Dee Lyons/Missouri Chair in Pediatric Immunology Research
Held by Lanny J. Rosenwasser, MD

The Marion Merrell Dow/Missouri Chair in Pediatric Clinical Pharmacology
Held by J. Steven Leeder, PharmD, PhD, Chief, Developmental Pharmacology and Experimental Therapeutics

The Marion Merrell Dow/Missouri Chair in Pediatric Medical Research
Held by Gregory L. Kearns, PharmD, PhD, Associate Chairman, Department of Medical Research

The Katharine B. Richardson Chair in Pediatric Surgery
Held by George Whitfield Holcomb III, MD, MBA, Surgeon-In-Chief

The Marion Merrell Dow Chair in Pediatric Pharmacogenomics
Held by Stephen Spielberg, MD, PhD, Director, Personalized Medicine & Therapeutics

The Jerry A. Smith Chair in Pediatrics
Vacant

The Sosland Chair in Neonatal Research
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The Dr. Rex and Lillian Dively Chair in Pediatric Orthopaedic Surgery
Held by Brad W. Olney, MD, Chief, Orthopaedic Surgery
Source of Sponsored Research Funds—2010

- Federal: $5,090,710
- Foundation: $1,096,118
- Industry: $1,024,091
- State: $1,051,484
- Local/Corporation: $109,807

Research Expenditures from External Funding—2010

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- State: $1,051,484
- Local/Corporation: $109,807

Growth Chart for 2009/2010
MANUSCRIPTS PUBLISHED IN PEER-REVIEWED JOURNALS

**Allergy, Asthma and Immunology**


**Anesthesiology**


**Bioethics**


**Cardiology & Cardiovascular Surgery**


**Child Abuse and Neglect**


**Clinical Pharmacology & Medical Toxicology**


Becker, ML. Orthopedics Today Europe; Commentary on Methotrexate Withdrawal at 6 and 12 Months in Juvenile Idiopathic Arthritis in Remission. JAMA 303(13): 1266-1273 (2010)


Critical Care Medicine


Dermatology


**Developmental and Behavioral**


**Emergency Medical Services**


**Endocrinology**


**Gastroenterology**


**General Pediatrics**


**General Surgery**


Genetics


Graduate Medical Education


Hematology/Oncology


Infectious Diseases


**Medical Library**


**Medical Research**


**Neonatology**


**Nephrology**


Orthopaedic Surgery


Schwend RM, Vitale MG. Orthopedists Share Lessons Learned During Haitian Relief Effort. AAP News 31(9): 21 (2010)

Otolaryngology


**Pain Management**


**Pathology and Laboratory Medicine**


Patient Care Services and Health Outcomes


**Pediatric Immunology Research**


**Pulmonary Medicine**


**Radiology**

Fickenscher KA, Dean JS, Mena DC, Green BA, Lowe LH. Occult Cranial Injuries Found with Neuroimaging in Clinically Asymptomatic Young Children Due to Abusive Compared to Accidental Head Trauma. South Med J 103(2): 121-125 (2010)


**Rheumatology**


**Weight Management**

BOOKS OR BOOK CHAPTERS

**Allergy, Asthma, Immunology**


**Child Abuse & Neglect**


**Clinical Pharmacology and Medical Toxicology**


**Critical Care Medicine**


**Emergency Medical Services**


**General Pediatrics**


**General Surgery**


**Genetics**


**Neonatology**


**Nephrology**


Orthopaedic Surgery


Pathology and Laboratory Medicine


Patient Care Services and Health Outcomes


Weight Management

**Allergy, Asthma, Immunology**

Ciaccio CE, Pacheco F, Kennedy K, Gard LC, Allenbrand R, Portnoy JM, Barnes CS “Indoor Allergen Exposure in Asthmatic Children from the Greater Kansas City Area” American College of Allergy, Asthma, and Immunology, Phoenix, AZ, November 2010 [Poster]

Dinakar C “Evidence-Based Management of Asthma and Allergies” Pediatrics for the Practitioner, Big Island, HI, October 2010 [Oral]

Dinakar C “Food for Thought: Food Allergies in Children” Pediatrics for the Practitioner, Big Island, HI, October 2010 [Oral]


Dinakar C “Plenary: How to Best Define Asthma Control” Eastern Allergy Conference, Palm Beach, FL, May 2010 [Oral]

Dinakarpandian D, Dinakar C “Physician Needs in Health Informatics: Just Ask the Docs” American Academy of Allergy, Asthma and Immunology, New Orleans, LA, February 2010 [Poster]

Jacobs Z, Dai H, Dinakar C “Quantitative Increase in Age-Related IgE in United States Population” American College of Allergy, Asthma and Immunology, Phoenix, AZ, November 2010 [Oral]

Meng JF, Bi CP, McKnight C, Handoyo S, Rosenwasser LJ “Genome Wide Screening Snaps with Arginine to Tryptophan The 1st World Congress of Immunodiseases and Therapy, Beijing, China, May 2010 [Oral]


**Bioethics**


Garrett JR “Federally Funded Elective Abortion: They Can Run, but They Can’t Hyde” Rocky Mountain Ethics Congress, Boulder, CO, August 2010 [Oral]


Lantos J “Are Preemies Valued Less Than Older Children?” Dozor Foundation, Ben-Gurion University of the Negev, Beersheba, Israel, November 2010 [Oral]


Lantos J “Did Medicine Really Save the Life of Ethics?” The 22nd Annual Dorothy J MacLean Fellows Conference, Chicago, IL, November 2010 [Oral]

Lantos J “Do We Still Need Pediatricians?” The 22nd Annual Dorothy J MacLean Fellows Conference, Chicago, IL, November 2010 [Oral]

Lantos J “Doctors Are All Alike, Parents Are All Different” Dozor Foundation, Ben-Gurion University of the Negev Be’ersheba, Israel, November 2010 [Oral]

Lantos J “Does Pediatrics Need Its Own Bioethics?” UAMS College of Medicine, Little Rock, AR, August 2010 [Oral]

Lantos J “Enhancement” 7th Annual Great Plains Pediatric Endocrine Symposium, Overland Park, KS, October 2010 [Oral]

Lantos J “Ethics and Economics in Neonatal Care” Dozor Foundation, Ben-Gurion University of the Negev, Beersheba, Israel, November 2010 [Oral]

Lantos J “Futile Treatment, Bedouin Culture, and Moral Distress” Dozor Foundation, Ben-Gurion University of the Negev, Beersheba, Israel, November 2010 [Oral]

Lantos J “Hot Topics in Bioethics” Beaumont Hospital, Royal Oak, MI, March 2010 [Oral]

Lantos J “How Accurate Is Substituted Judgment: Do We Really Know What Our Loved Ones Want?” Dozor Foundation, Ben-Gurion University of the Negev, Beersheba, Israel, November 2010 [Oral]


Lantos J “Newborn Screening Ethics” 3rd District VI Neonatology Meeting-Controversies in Neonatal Care, Chicago, IL, September 2010 [Oral]


Lantos J “What Makes the Gray Zone Gray?” Indiana University School of Medicine/Riley Hospital for Children, Indianapolis, IN, September 2010 [Oral]


Lantos J, Plantz D “Controversies in Withdrawing Medically Provided Fluid and Nutrition in Pediatrics” American Society of Bioethics & Humanities (ASBH), San Diego, CA, October 2010 [Oral]

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Cardiology and Cardiovascular Surgery


Decoteau D, Zhang L, Hopkins RA, Mathiowitz E “Effect of Protein Molecular Weight on Release from Wet Spun Plga and Plia Fibers by Phase-Inversion” Biomedical Engineering Society Annual Fall Scientific Meetings, Austin, TX, October 2010 [Poster]

Hopkins RA “Human Macrophage Cytokine Profiles to Assess Inflammatory Potential of Metallic, Polymer and Tissue-Based Biomaterials for Cardiovascular Tissue Engineering Aortic Valves” Second Annual Joint Scientific Meeting of the Heart Valve Society of America and Society for Heart Valve Disease, New York City, NY, April 2010 [Oral]


Sabath R, Teson K, Hulse J, Gelatt M “Pediatric Treadmill Testing: Comparison of Peak Exercise Parameters Using the Bruce Protocol and a Novel Treadmill Test” The European Group for Pediatric Work Physiology and The North American Society for Pediatric Exercise Medicine, Ontario, Canada, September 2010 [Oral]

Wagner J, Sabath R, Teson K, Gelatt M “Prediction of Exercise Induced Hypertension in Repaired and Native Coarctation of the Aorta” Annual Update on Pediatric Cardiovascular Disease, Lake Buena Vista, FL, February 2010 [Poster]


**Child Abuse and Neglect**


Anderst JD “The Evaluation for Bleeding Disorders When Child Abuse Is Suspected” Eleventh International Conference on Shaken Baby Syndrome/Abusive Head Trauma, Atlanta, GA, September 2010 [Oral]

Rabbit AL, Anderst J, Dowd D “Analysis of Web-Based Information Related to Sexual Assault: An Exploratory Study” Pediatric Academic Societies Meeting, Vancouver, British Columbia, May 2010 [Poster]

**Clinical Pharmacology and Medical Toxicology**


Becker ML “Using Pharmacogenomics to Improve Therapy for Pediatric Patients” American College of Rheumatology, Atlanta, GA, November 2010 [Oral]


Leeder JS “Challenges and Opportunities for Pediatric Pharmacogenomics and Personalized Medicine in Children” University of Florida College of Pharmacy, Gainesville, FL, January 2010 [Oral]

Leeder JS “Characterizing Drug Biotransformation in Children: Ontogeny Vs Pharmacogenetics” Graduate School of Pharmaceutical Sciences, The University of Tokyo, Tokyo, Japan, June 2010 [Oral]

Leeder JS “Developmental Considerations for Severe Adverse Drug Reactions in Children” IUPHAR World Congress of Basic and Clinical Pharmacology, Copenhagen, Denmark, July 2010 [Oral]

Leeder JS “Drug Biotransformation in Children: Role of Ontogeny” 5th Annual Great Lakes Drug Metabolism Discussion Group, St. Louis, MO, May 2010 [Oral]

Leeder JS “Incorporating Pediatric Pharmacogenetics into the Drug Regulatory Environment” CDER wide Scientific Seminar Series, FDA, Silver Springs, MD, October 2010 [Oral]

Leeder JS “Opportunities for Pharmacogenomics Studies in Children” American Society of Clinical Pharmacology & Therapeutics (ASCPT), Atlanta, GA, March 2010 [Oral]

Leeder JS “Pediatric Pharmacogenetics: Challenges for Exploring Variability in Drug Response in Children” Omics Science Center, RIKEN Yokohama Institute, Yokohama, Japan, July 2010 [Oral]

Leeder JS “Pediatric Pharmacogenetics: Strategies to Elucidate the Relative Contribution of Ontogeny and Genetic Variation to Drug Safety in Children” 18th International Symposium on Microsomes and Drug Oxidations, Beijing, China, May 2010 [Oral]


Leeder JS “Pharmacogenetics for Children: Integrating Genetic Variation into Pediatric Clinical Pharmacology Research” National Center for Child Health and Development, National Medical Center for Children and Mothers, Tokyo, Japan, June 2010 [Oral]


Leeder JS “Prenatal Ontogeny and Capabilities of Phase I and Phase II Enzymes” Teratology Society, Louisville, KY, June 2010 [Oral]

Leeder JS “Role of Maturation and Developmental Context for Pharmacogenomic Studies in Children” Showa Pharmaceutical University, Machida, Tokyo, Japan, June 2010 [Oral]

Leeder JS “Translating Pediatric Pharmacogenetics into Personalized Medicine for Children” Children’s Hospital of Oakland, Oakland, CA, February 2010 [Oral]

Myers A, Stach L, Sandritter TL “Impact of Pharmacist’s Intervention in Preventing Serum Concentrations in Uncomplicated Pediatric Patients Receiving Vancomycin for Less Than 72 Hours” The Pediatric Pharmacy Conference and PPAG Annual Meeting, St. Charles, MO, October 2010 [Poster]

Sandritter T “Assessing Drug Safety in Pediatric Patients” Drug Information Association, Bethesda, MD, October 2010 [Oral]

Vyhlidal CA, Riffel AK, Ito S “Expression of Nfat5 in Human Fetal Liver: Correlation with Cyp3a Expression” Great Lakes Drug Metabolism Discussion Group, St. Louis, MO, May 2010 [Poster]

Wainscott BJ, Oller LK, Wasserman GS “A Case of Accidental Life Threatening Sodium Azide Exposure” North American Congress of Clinical Toxicology (NACCT), Denver, CO, October 2010 [Poster]

Wasserman GS “Management of Toxins and Poisons in the Pediatric Clinical Setting, Part I and II” Pediatric Symposium, Baptist Children’s Hospital, Miami, FL, May 2010 [Oral]

Wasserman GS “A Multispecialty Approach to Pediatric Care” Pediatric Symposium, Baptist Children’s Hospital, Miami, FL, May 2010 [Oral]

Critical Care Medicine


Developmental & Behavioral Sciences

Apodaca TR “Mechanisms of Change and Active Ingredients of Motivational Interviewing” International Conference on Motivational Interviewing, Stockholm, Sweden, June 2010 [Oral]
Emergency Medical Services

Conners G, Hartman T, Fowler M, Schroeder L, Tryon T “Was the Pediatric Emergency Department or Pediatric Urgent Care Center Setting More Affected by the Fall 2009, H1n1 Influenza Outbreak?” Pediatric Emergency Medicine Leadership Conference, San Antonio, TX, April 2010 [Oral]

Dowd MD “All Terrain Vehicles and Children” Lifesaver’s Annual Conference, Philadelphia, PA, March 2010 [Oral]


Dowd MD “Pediatric Head Injury” International Pediatric Emergency Medicine, Injury and Disability Prevention Conference, Riyadh, Saudi Arabia, March 2010 [Oral]


Doyle SL, Kingsnorth J, Guzzetta CE, Pyle SA “Hurry, Hurry, Hurry, Rapid Triage to Speed up the System” ENA Leadership Conference, Chicago, IL, February 2010 [Poster]


Kennedy C, Schremmer R “Just Ask: Inter-Professional Team Training and Difficult Conversations” Pediatric Academic Societies, Vancouver, British Columbia, May 2010 [Poster]

Knapp J “Assessing the Family Centeredness of Pediatric Residents Prior to a Patient and Family Centered Care Curriculum” National Association of Pediatric Program Directors, Chicago, IL, April 2010 [Oral]


Plantz D “Controversies in Withdrawing Medically Provided Fluids and Nutrition” American Society of Bioethics and Humanities, San Diego, CA, October 2010 [ORAl]

Plantz D “Ethical Dilemmas Encountered, Clinicians’ Views of the Ethics Committee and Barriers to Ethics Consultation in a Tertiary Care Pediatric Hospital” International Conference on Ethics Consultation, Portland, OR, May 2010 [Oral]

Plantz D “Withdrawing of Medically Provided Fluid and Nutrition in a Patient with Epidermolysis Bullosa” International Conference on Clinical Ethics Consultation (ICCEC), Portland, OR, May 2010 [Poster]

Plantz D, Lantos J, Bowers D, Hardy L “Ethical Dilemmas Encountered, Clinicians’ Views of the Ethics Committee and Barriers to Ethics Consultations in Tertiary Care Pediatric Hospitals” Pediatric Academic Societies, Vancouver, British Columbia, May 2010 [Poster]


Schroeder L, Johnson T, Hamilton M “Reducing the Number of Unnecessary Urine Microscopies in the Emergency Department” Pediatric Emergency Medicine Leadership Conference, San Antonio, TX, April 2010 [Poster]

Endocrinology


Gastroenterology

Cushing CC, Connelly M, Lathom NE, Schurman JV “Initial Development and Testing of an Electronic Assessment Tool for Pediatric Pain” Society for Behavioral Medicine, Seattle, WA, April 2010 [Poster]


Schurman JV, Cushing CC, Carey CL, Laituri CA, St. Peter SD “Quality of Life Assessment between Laparoscopic Appendectomy at Presentation and Interval Appendectomy for Perforated Appendicitis with Abscess: Analysis of a Prospective, Randomized Trial” American Academy of Pediatrics, San Francisco, CA, October 2010[Oral]


General Pediatrics

Cowden JD “Spanish Continuing Care Clinic: Cultivating Physician Language Proficiency While Maintaining Quality of Care” National Conference on Quality Health Care for Culturally Diverse Populations, Baltimore, MD, October 2010 [Poster]

Cowden JD, Ebel BE, Saelens B “Race and Ethnicity in the Diagnosis of Pediatric Obesity” Pediatric Academic Societies, Vancouver, British Columbia, May 2010 [Poster]

Falcone LM, Myers AL, Sherman A, Jackson MA “Elevated Absolute Neutrophil Count May Distinguish Kawasaki Disease from Adenoviral
Infection” Pediatric Academic Society, Vancouver, British Columbia, May 2010 [Poster]

Guerrero EA, Cowden JD “El Consejo De Familias latinas/Hispans: Parents’ Spanish Voices in Hospital Equity Improvement” National Conference on Quality Health Care for Culturally Diverse Populations, Baltimore, MD, October 2010 [Oral]


Talib N, Toy S, Moore K, Quaintance J, Sharma V “Effects of Change in Call Structure on the Overall Pediatric Experience” International Association of Medical Science Educators, New Orleans, LA, July 2010 [Poster]

General Surgery

Aguayo P, Fraser JD, Gamis A, St. Peter SD, Snyder CL. “Bowel Obstruction after Treatment of Intra-Abdominal Tumors” Academic Surgical Congress, San Antonio, TX, February 2010 [Oral]


Fraser JD, Garey CL, Laituri CA, Sharp RJ, Ostlie DJ, St. Peter SD “Outcomes of Laparoscopic and Open Total Colectomy in Children” Academic Surgical Congress San Antonio, TX, February 2010 [Oral]

Fraser JD, Garey CL, Fraser JD, Aguayo P, Ostlie DJ, St. Peter SD, Snyder CL “Rectopexy: 15-Year Experience in Treatment of Rectal Prolapse in Children” Academic Surgical Congress, San Antonio, TX, February 2010 [Oral]


Garey CL, Laituri CA, Valusek PA, St. Peter SD, Snyder CL “Management of Anterior Mediastinal Masses in Children” Canadian Association of Pediatric Surgery, Saskatoon, Saskatchewan, September 2010 [Oral]

Garey CL, Laituri CA, Aguayo P, Obrien Jr. JE, Sharp RJ, St. Peter SD, Ostlie DJ “Outcomes in Children with Hypoplastic Left Heart Syndrome Undergoing Open Fundoplication” Canadian Association of Pediatric Surgery, Saskatoon, Saskatchewan, September 2010 [Oral]


Holcomb GW III “Advances in Pediatric Minimally Invasive Surgery over the Past Decade” Pediatric Endoscopic Society of India, Kolkata, India, March 2010 [Oral]


Holcomb GW III “Current Thoughts About Laparoscopic Fundoplication in Infants and Children” Ibero-American Congress, Havana, Cuba, March 2010 [Oral]

Holcomb GW III “Duodenal Atresia Repair” Senior Pediatric Surgery Fellows Endosurgery Course, Birmingham, AL, April 2010 [Oral]

Holcomb GW III “Esophageal Atresia/Tracheoesophageal Fistula” Senior Pediatric Surgery Fellows Endosurgery Course, Birmingham, AL, April 2010 [Oral]

Holcomb GW III “Evidence-Based Medicine and Level 1 Outcomes Research in Pediatric Surgery” Cincinnati Children’s Hospital, Cincinnati, OH, February 2010 [Oral]

Holcomb GW III “Evidence-Based Medicine and Level 1 Outcomes Research in Pediatric Surgery” Ibero-American Congress, Havana, Cuba, March 2010 [Oral]

Holcomb GW III “Prospective Randomized Clinical Trials in Pediatric Surgery” Keith E. Georgeson Symposium, Birmingham, AL, July 2010 [Oral]

Laituri CA, Garey CL, Ostlie DJ, Holcomb III GW, St. Peter SD “Comparison of Laparoscopic Versus Open Morgagni Hernia Repair in Children” Congress of the International Pediatric Surgery Endoscopic Group, Waikoloa, HI, June 2010 [Oral]


Laituri CA, Garey CL, Ostlie DJ, Holcomb III GW, St. Peter SD “Laparoscopic Ileocectomy in Pediatric Patients with Medically Refractive Crohn’s Disease” Congress of the International Pediatric Surgery Endoscopic Group, Waikoloa, HI, June 2010 [Oral]


Laituri CA, Valusek PA, Garey CL, Ostlie DJ, Snyder CL, St. Peter SD. “The Utility ofComputed Tomography in the Management ofPatients with Spontaneous Pneumothorax” Canadian Association of Pediatric Surgery, Saskatoon, Saskatchewan, September 2010 [Oral]


St. Peter SD “Development of a Center for Prospective Clinical Trials” American Pediatric Surgical Association, Orlando, FL, May 2010 [Oral]


St. Peter SD “Minimally Invasive Approaches to Long Gap Esophageal Atresia” American College of Surgeons, Washington, DC, October 2010 [Oral]

St. Peter SD “Update on Prospective Clinical Trials in Pediatric Surgery” Texas Children’s Hospital, Houston, TX, November 2010 [Oral]


Windsperger AP, Gatti JM, Graham SM, Horwitz G, Murphy P “Effacement as a Predictor of Success: A Prospective Clinical Trial Correlating the Appearance of Refluxing Ureteral Orifices after Injection with Long Term Resolution” World Congress of Pediatric Urology, San Francisco, CA, May 2010 [Oral]


Genetics

Grabowski G, Pastores G, Mardach R, Eng C, Smith L, et al “Patients with Gaucher Disease Type 1 Switching from Imiglucerase to Velaglucerase Alfa in Clinical Trial and Real-World Settings” American College of Medical Genetics, Albuquerque, NM, March 2010 [Poster]


Smith L “Newborn Screening: What’s New and What Do We Do with the Results?” District VI Perinatal Pediatrics, Chicago, IL, September 2010 [Oral]


Graduate Medical Education

Hamm M, Harte L, Mann KJ “Quality Improvement Project to Decrease Pages During Resident Conferences” Association of Pediatric Program Directors, Chicago, IL, April 2010 [Poster]

Mann KJ, Chadwick SA, Miller DJ, Petersen SC “Assessing Centeredness of Pediatric Residents Prior to the Implementation of a Family Centered Care Curriculum” Association of Pediatric Program Directors, Chicago, IL, April 2010 [Poster]

Schremmer RD, Knapp JF “Give ‘Em Healthcare Harry: It Started with the Man from Independence” Pediatric Academic Societies, Vancouver, BC, May 2010 [Poster]

Hematology/Oncology


Burns DS, Stegenga K, Robb S, Haase J “Researching in High-Definition: Integrating Qualitative and Quantitative Data to Gain a Deeper Understanding of a Music Video Intervention” Music Therapy and Supportive Cancer Care Conference, Windsor, Ontario, March 2010 [Oral]


Guest E, Shilatifard A “MLL Rearrangements in Acute Myeloid Leukemia: A Pilot Project to Expand and Study Mll-Enl in Nod Scid Gamma Mice” Children’s Oncology Group, Dallas, TX, October 2010 [Poster]

Guest EM, Daniel JF, Andrews WS, Wicklund BM “Successful Liver Transplantation to Correct Severe Factor V Deficiency in a Child with Multiple Intracranial Hemorrhages” American Society of Pediatric Hematology and Oncology, Montreal, Quebec, Canada, April 2010 [Poster]


Stegenga K “Helping Kids with Sickle Cell Disease Find Their Voice through Photography: Opportunities and Challenges” Association of Pediatric Hematology/Oncology Nurses, Minneapolis, MN, October 2010 [Oral]

Stegenga K “It’s Exciting to Spend Time with People from the Hospital but Not at the Hospital and Other Lessons Learned from Adolescents with Cancer” Oncology Nursing Society Congress, San Diego, CA, May 2010 [Poster]

Stegenga K “A Weekend Retreat for Adolescents with Cancer: What Those Who Go Gain and Why Doesn’t Everyone Go?” Association of Pediatric Hematology/Oncology Nurses, Minneapolis, MN, October 2010 [Oral]


**Infectious Diseases**


Day CD, Weddle GM, Selvarangan R, Jackson MA “Spectrum of Novel H1n1 Illness in Infants 3 Months Old and Younger at a Children’s Hospital” St. Jude/PIDS Pediatric Infectious Diseases Research Conference, Memphis, TN, February 2010 [Poster]

Day JC, Selvarangan R, Myers A “Characteristics of Respiratory Viral Illness in Hospitalized Children Diagnosed by xTAG RVP PCR” Infectious Diseases Society of America, Vancouver, British Columbia, October 2010 [Poster]


Goldman JL, Myers AL, Jackson MA, Selvarangan R, Harrison CJ “Invasive Staphylococcus Aureus Infection in the MRSA Era: Susceptibility to Vancomycin and Therapeutic Implications” Infectious Diseases Society of America, Vancouver, British Columbia, Canada, October 2010 [Poster]


Herigon J, Newland J, Hersh AL “The Impact of 2009 H1n1 Influenza on Antiviral Prescribing for Hospitalized Children” Infectious Diseases Society of America, Vancouver, British Columbia, October 2010 [Poster]

Klatte M, Collins MA, Angst DB “Role of Crp in the Detection of Infectious Complications of Complicated Appendicitis Infectious Diseases Society of America” Vancouver, British Columbia, October 2010 [Poster]


Myers AL, Jackson MA “Comparison of Id Consults over Time in a Children’s Hospital” Infectious Diseases Society of America, Vancouver, British Columbia, October 2010 [Poster]

Newland J “Streptococcus Pneumoniae-Associated Hemolytic Uremic Syndrome among Children in North America” Infectious Diseases Society of America, Vancouver, British Columbia, October 2010 [Poster]


Stach L, Herigon J, Newland J “Physicians’ Attitudes toward an Antimicrobial Stewardship Program at a Children’s Hospital” Infectious Diseases Society of America, Vancouver, British Columbia, October 2010 [Poster]


Swanson DS, Jackson MA, Harrison CJ “Temporal Trends in Pediatric Invasive Pneumococcal Disease” Infectious Diseases Society of America, Vancouver, British Columbia, October 2010 [Poster]


Weddle G, Selvarangan R, Jackson MA “Vancomycin Resistant Enterococcus (Vre) Screening In a Pediatric Hospital” Infectious Diseases Society of America, Vancouver, British Columbia, October 2010 [Poster]

Wei J, Newland J “Microbiology of Pediatric Cervical Lymphadenitis Requiring Surgical Intervention” American Society of Pediatric Otolaryngology, Encinitas, CA, October 2010 [Poster]
Medical Information Technology


Medical Research


Keams GL “Case: Use of Old Data and Modern Scientific Methods to Provide More Rational Dosing and Fdc Formulation of TB Medicines for Children” World Congress of Basic & Clinical Pharmacology, Copenhagen, Denmark, July 2010 [Oral]


Keams GL “Pediatric Clinical Pharmacology: The Lifeline for Rescuing the Therapeutic Orphan” Gregory E. Peck Symposium, West Lafayette, IN, October 2010 [Oral]

Keams GL “Rescuing the Therapeutic Orphan: The Potential of Pediatric Pharmacology Realized” Food and Drug Administration Abram’s Lecture, Rockville MD, April 2010 [Oral]

Neonatology


Kilbride H, Castor C, Gelatt M, Teson K, Sabath R “Improved Pulmonary Function and Exercise Capacity for Extremely Low Birth Weight Children Born in the 1990s Compared to Those from the 1980s” Western Society for Pediatric Research, Carmel, CA, January 2010 [Oral]


Manimtim WM, Gratny LL, Lachica, CI, Sears-Gabel S, Beckerman RC, Wei JL “Clinical and Diagnostic Parameters for Decannulation of Infants with Tracheotomy and Prolonged Mechanical Ventilation” Society for Ear, Nose, & Throat Advances in Children, Cincinnati, Ohio, December 2010 [Poster]


Okah FA, Cai J, Liu Y, Hoff GL “Effect of Seasons on Gestational Weight Gain” Society of Behavioral Medicine, Seattle, WA, April 2010 [Poster]


Petrikin JE "Ontogeny of Toll-Like Receptors TLR2 and TLR4 in Human Fetal Lung" Pediatric Academic Societies, Vancouver, British Columbia, May 2010 [Poster]

Reed DJ, Kilani RA, Sherman AK "Glidescope Video Laryngoscope: An Evaluation of Learning Curve and Ease of Use" Midwest Society for Pediatric Research, Iowa City, IA, October 2010 [Poster]


Voos KC, Yohay AL, Ross G, Ward MJ, Osorio N, Perlman JM, “Implementing Family Centered Rounds (FCR) in a Neonatal Intensive Care Unit (NICU): A Case Study from an Urban Academic Medical Center" Midwest Society for Pediatric Research, Iowa City, IA, October 2010 [Poster]

Weiner J, Sharma J, Kilbride H, Lantos J “Removal from Life-Sustaining Support Is the Primary Mode of Death in the NICU” The Midwest Society for Pediatric Research (MWSPR), Iowa City, IA, October 2010 [Poster]

Nephrology


Alon US “Assessment of Glomerular Filtration Rate” NephoKids, Brazilian Society of Pediatric Nephrology, Sao Paulo, Brazil, March 2010 [Oral]

Alon US “Evaluation of the Child with Suspected Renal Tubular Acidosis” NephoKids, Brazilian Society of Pediatric Nephrology, Sao Paulo, Brazil, March 2010 [Oral]

Alon US “Genetics of the Calcium Sensing Receptor and More” XXXVII Pediatric Nephrology Seminar, Miami, FL, March 2010 [Oral]


Alon US “Pediatric Urology – When to Use Prophylactic Antibiotics” NephoKids, Brazilian Society of Pediatric Nephrology, Sao Paulo, Brazil, March 2010 [Oral]


Borzych D, Bilgíné Y, Warady BA, Schaefer F, et al “Global Outcomes of Anemia Management in Dialyzed Children: Results from the Ippn Registry” Congress of the International Pediatric Nephrology Association (IPNA), New York, NY, September 2010 [Poster]


Chadha V “X-Linked Nephrogenic Di in Female Siblings Due to Skewed X-Chromosome Inactivation” Congress of the International Pediatric Nephrology Association (IPNA), New York, NY, September 2010 [Poster]


Dibas B, Warady BA “Vitamin D Status of Children with Stage 5d Chronic Kidney Disease (CKD)” Annual Dialysis Conference, Seattle, WA, March 2010 [Poster]


Srivastava T, Dai H, Haney CJ, Alon US. “Low Serum 25-Hydroxy Vitamin D (25(Oh)-D) Level Is Associated with Acute Phase Reaction (Apr) Following Intravenous Bisphosphonate (IVBP)” Annual Meeting of the Midwest Society for Pediatric Research, Iowa City, IA, October 2010 [Oral]

Srivastava T, Sharma R, Cudmore PA, Sharma M, McCarthy ET “Fluid Flow Shear Stress (FFSS) in Podocytes Is Mediated by Akt/GSK-3 B/B-Catenin Signaling Pathway” International Pediatric Nephrology Association Meeting, New York, NY, August 2010 [Poster]

Srivastava T, Sharma R, Cudmore PA, Kats A, Sharma M, McCarthy ET. “Prostanoid Receptor Ep2 Is Induced by Fluid Flow Shear Stress (FFSS) in Podocytes” International Pediatric Nephrology Association Meeting, New York, NY, August 2010 [Poster]


Thomas R, Sanna-Cherchi S, Weng PL, Warady B, Furth LS, Kaskel FJ, Gharavi AG “Genetics of Renal Hypoplasia in the Chronic Kidney Disease in Children Cohort Study (CKID)” Congress of the International Pediatric Nephrology Association (IPNA), New York, NY, September 2010 [Poster]

Warady BA “Chronic Kidney Disease in Children and Adolescents: Early Lessons from the NIH-CKID Study” National University Hospital, Pasir Panjang, Singapore, September 2010 [Oral]


Warady BA “Improving Pd for Children Worldwide. The Impact of the International Pediatric Peritoneal Dialysis Network” National University Hospital, Pasir Panjang, Singapore, September 2010 [Oral]


Warady BA “Key Concepts of Anemia Management National University Hospital” Pasir Panjang, Singapore, September 2010 [Oral]


Warady BA “Non-Adherence in Children and Adolescents with Chronic Kidney Disease” Congress of the International Pediatric Nephrology Association (IPNA), New York, NY, September 2010 [Oral Presentation]

Warady BA “Non-Adherence in Children and Adolescents with Chronic Kidney Disease” National University Hospital, Pasir Panjang, Singapore, September 2010 [Oral Presentation]

Warady BA “Understanding Growth in Kidney Disease” National University Hospital, Pasir Panjang, Singapore, September 2010 [Oral]

Orthopaedic Surgery

Canty GS “2 Minute Drill – Denial and the Dangers of Ultrasound” American Medical Society for Sports Medicine, Cancun, Mexico, April 2010 [Oral]

Canty GS “Acute Illness in the Athlete” University of Colorado Health Sciences Center, Aurora, CO, January 2010 [Oral]


Canty GS “Fractures with a Physi!” Rose Family Medicine, Denver, CO, May 2010 [Oral]

Canty GS “Meniscal Injury of the Ankle” American Medical Society for Sports Medicine, Cancun, Mexico, April 2010 [Poster]

Canty GS “Mononucleosis in the Athlete” Rose Family Medicine, Denver, CO, February 2010 [Oral]


Canty GS “Sports Cardiology” University of Colorado Health Sciences Center, Aurora, CO, April 2010 [Oral]

de Roode C “Pediatric Hand Surgery in the Developing World: Our Experience in Nicaragua” PHSG, Cincinnati, OH, 2010 [Oral]


Price N “Early Onset Scoliosis” Pediatric Orthopaedic Practitioners Society, Waikoloa, HI May 2010 [Oral]


Schwend RM “Child Abuse Cases Studies: Combined Symposium with Section on Child Abuse and Neglect” AAP NCE Orthopaedic Section H Program, San Francisco, CA, October 2010 [Oral]

Schwend RM “Developing a Spinal Deformity Program for Children in Ecuador”, Penn State University Medical Center, Hershey, PA November 2010 [Oral]

Schwend RM “Pediclar Thoracic Spine Anatomy and Instrumentation” Penn State University Medical Center, Hershey, PA, November 2010 [Oral]


Stewart JD, Schwend RM, Rivard DC “Pediatric Rib Anatomy Changes with Growth” The Pediatric Orthopedic Society of North America, Waikoloa, HI, May 2010 [E-Poster Presentation]

Stewart JD, Schwend RM, Rivard DC “Pediatric Rib Anatomy Changes with Growth” American Academy of Pediatrics, San Francisco, CA, October 2010 [Oral]


**Otolaryngology**


Baker K, Sykes K, Wei, JL “Tracheostomy Dependency and Airway Anomalies in Arthrogryposis Multiplex Congenita (AMC)” American Society for Pediatric Otolaryngology, Las Vegas, NV, April 2010 [Poster]


Kraft S, Sykes K, Nicklaus R, Wei JL “Practice Patterns of Endoscopic Evaluations in Infants after Tracheostomy” American Society of Pediatric Otolaryngology, Las Vegas, NV, April 2010 [Poster]


*Wealthy RA “Instructional Course” Preparing for Otolaryngology RRC Accreditation and Site Visit, 2010 Annual Meeting of the AAO-HNS, Boston, MA, September 2010 [Oral]*


*Wealthy RA “Strategies for Resident Remediation” 2010 Annual Meeting of the AAO-HNS, Boston, MA, September 2010 [Oral]*

*Wealthy RA, Gerald B “The Use of Simulation to Educate Otolaryngologists” Healy Society Presentation, Boston, MA, September 2010 [Oral]*

**Pain Management**


Connelly M “The Effect of Pain and Analgesic Expectancies on Postoperative Pain in Children: Are All Expectancies Created Equal?” 13th World Congress on Pain, Montreal, Ontario, August 2010 [Poster]

Connelly M “Managing Pediatric Chronic Pain in the School Environment” National Association of School Nurses, Chicago, IL, June 2010 [Poster]


Wallace DP, Harbeck-Weber C, Bruce BK, Harrison TE “Improvements in Depression and Pain Self-Efficacy Predict Success in Pediatric Pain Rehabilitation” Society for Behavioral Medicine, Seattle, WA, April 2010 [Poster]


Pathology and Laboratory Medicine

Ahmed A “Role of Pathology and Immunohistochemistry in the New Era of Molecular Therapy” International Conference on Drug Discovery and Therapy, Dubai, UAE, February 2010 [Oral]

Ahmed A, Whiting J, Pawel B “Expression of Mtor, Akt, Nf-Kappa B and Braf in Ewing’s Sarcoma Family Tumors” Children’s Oncology Group, Dallas, TX, September 2010 [Poster]


Frazee CC, Fleming SW, Garg U, Dudley M, Lingamfelter DC and Sabharwal K “Huffing: Two Deaths Involving 1, 1-Difluoroethane” Society of Forensic Toxicology Meeting, Cleveland, VA, October 2010 [Poster]


Selvaraju S, Selvarangan R “Rhinovirus Type C Associated Lower Respiratory Tract Infection in Pediatric Patients” Pan-American Society for Clinical Virology, Daytona Beach, FL, April 2010 [Poster]


Selvaraju S, Selvarangan R “Verification of Enterovirus and Human Parechovirus Realtime RT-PCR Assays for Testing of Cerebrospinal Fluid” Association for Molecular Pathology, San Jose, CA, November 2010 [Poster]

Selvarangan R “Human Parechovirus-Central Nervous System Infection in Young Children from Midwestern USA” Infectious Diseases Society of America (IDSA), Vancouver, British Columbia, Canada October 2010 [Oral]


Selvarangan R “Meningitis and Encephalitis” American Society for Microbiology, San Diego, CA, May 2010 [Oral]

Selvarangan R “Select Topics in Pediatric Clinical Microbiology” American Society for Microbiology, San Diego, CA, May 2010 [Oral Presentation]


Selvarangan R, Puckett K, Selvaraju S, Sharp J, Harrison C “Human Parechovirus-Central Nervous System Infection in Young Children from Midwestern USA” Infectious Diseases Society of America (IDSA), Vancouver, British Columbia, Canada, October 2010 [Poster]

**Patient Care Services and Health Outcomes**

Arigano J “Non-Accidental Trauma” Pediatric Nurse Practitioners Society, Boston, MA, May 2010 [Oral]


Boos G, Moore C, Kemper C “Without a Tracer...Your Hospital May Be Missing a Discover” National Association for Healthcare Quality (NAHQ), Nashville, TN, September 2010 [Oral]

Boos G, Moore C, Kemper C “Without a Tracer...Your Hospital May Fail to See Risks Lurking within the System” National Initiative for Children’s Healthcare Quality (NICHQ), Atlanta, GA, March, 2010 [Oral]

Burns DS, Stegenga K, Robb S, Haase J “Researching in High-Definition: Integrating Qualitative and Quantitative Data to Gain a Deeper Understanding of a Music Video Intervention” Music Therapy and Supportive Cancer Care, Windsor, Ontario, March 2010 [Oral]

Cartwright C “Mock Herniation: A Tool to Improve Competency in Ventriculostomy Placement” International Society for Pediatric Neurosurgery, Los Angeles, CA, October 2010 [Oral]


Cartwright C “Risky Business: Dangerous Games Children Play” Arnold Palmer Children’s Hospital, Orlando, FL, January 2010 [Oral]

Chojnacki K “Constipation: Hitting a Brick Wall CMH Gastroenterology” First Annual Symposium, Kansas City, MO, April 2010 [Oral]

Cox K “Administrative Leadership for Antimicrobial Stewardship Programs” 2010 Antimicrobial Stewardship Program, Kansas City, MO, June 2010 [Oral]

Cox K “Exploring Issues in Safe, High Quality, Evidence Based Care and Pediatric Nursing Education” 2010 Pediatric Nursing Invitational Forum, Institute of Pediatric Nursing, Gaithersburg, MD, November 2010 [Oral]

Cox K “Magnet: A Path to Excellence in Care Delivery” Victorian Order of Nurses Canada 2010 Leadership Forum, Ottawa, Canada, October 2010 [Oral]


Haney B “Ensuring Accurate Esophageal Temperature in Infants Being Cooled” Vermont Oxford NIC/Q, Austin, TX, April 2010 [Poster]


Mahoney K, Schartz K, Buford T “Role of the Pnp in Medical Home Development” National Association Pediatric Nurse Practitioners 31st Annual Conference on Pediatric Health Care, Chicago, IL, April 2010 [Poster]


Riesco MA, Hubble R “Matters of the Heart: Palliative Care for a Child with a Complex Heart Defect” Children’s Hospice International Conference, Washington, DC, October 2010 [Oral]

Roberts C “Assessing the Occupational Fit for a Nursing Career among Beginning College Students” 10th Annual Nurse Educator Institution, Branson, MO April 2010 [Poster]

Roberts C “Nurse’s Perceptions of Unaccompanied Hospitalized Children” 26th Annual Pediatric Nursing Conference, Philadelphia, PA, July 2010 [Poster]


Tucker D “Cardiopulmonary Interactions” Pediatric Cardiac Intensive Care Society 8th International Conference, Miami Beach, FL, December 2010 [Oral]

Tucker D “Chylous Effusion in the Post Operative Patient” Pediatric Critical Care Nursing Contemporary Forum, San Diego, CA, October 2010 [Oral]

Tucker D “Creating a Nurse Practitioner Service in the Cardiac Intensive Care” Pediatric Cardiac Intensive Care Society, 8th International Conference, Miami Beach, FL, December 2010 [Oral]

Tucker D “Downs Syndrome” Pediatric Critical Care Nursing Contemporary Forum, San Diego, CA, October 2010 [Oral]

Wade K, Heydinger E, Varvel T, Blackburn K Hampl S “Use of Health Information Technology to Facilitate Quality Improvement for Preschool Obesity Assessment and Management” AAP Annual Conference, San Francisco, CA, October 2010 [Poster]

Wheeler J “Creating Reliable Medication Systems” Missouri Hospital Association 88th Annual Convention and Trade Show, Osage Beach, MO November 2010 [Poster]

**Pediatric Hospital Medicine**


**Physical Medicine and Rehabilitation**


**Plastic Surgery**

Nierzwicki, BL, Singhal, VK, Daifallah, T “Two-Flap Palatoplasty: 10-Year Single Surgeons Experience” XX EACMFS Congress (European Association for Cranio-Maxillo-Facial Surgery), Burges, Belgium, September 2010 [Oral]

Nierzwicki BL, Singhal VK, Auch C “Refractory Temporomandibular Joint Ankylosis in 5-Year-Old Patient” XX EACMFS Congress (European Association for Cranio-Maxillo-Facial Surgery), Burges, Belgium, September 2010 [Poster]

Singhal VK “Craniosynostosis ‘Cranioossinostose’” Federal University of Sao Paulo, Sao Paulo, Brazil, May 2010 [Oral]

Singhal VK “Getting a Good Vermillion in Bilateral Cleft Lip Repair” Brazilian Association of Cranio-Maxillo-Facial Surgery (ABCCMF), Brazilian Association of Cranio-Maxillo-Facial Surgery (ABCCMF), Natal-Rio Grande do Norte, Brazil, June 2010 [Oral]

Singhal VK “Indications and Techniques of Reconstruction in Hemifacial Microsomia, Part I” V Congresso IMIP de Saude Integral, Recife, Brazil, November 2010 [Oral]

Singhal VK “Indications and Techniques of Reconstruction in Hemifacial Microsomia, Part II” V Congresso IMIP de Saude Integral, Recife, Brazil, November 2010 [Oral]


Singhal VK “Pediatric Craniofacial Surgery-Understanding Craniosynostosis and How to Maximize the Benefits of Surgery in Children” V Congresso IMIP de Saude Integral, Recife, Brazil, November 2010 [Oral]

Singhal VK “Primary and Secondary Cleft Lip Revision and Rhinoplasty” Utah Facial Surgery Meeting, Park City, Utah, February 2010 [Oral]

Singhal VK “Rare Craniofacial Clefts and Surgical Protocol” V Congresso IMIP de Saude Integral, Recife, Brazil, November 2010 [Oral]

Singhal VK “Sequence in Craniofacial Reconstruction in Syndromic Infants” Utah Facial Surgery Meeting, Park City, Utah, February 2010 [Oral]

Singhal VK “Sequence of Cranio-Fronto-Orbital Reconstruction in Syndromic Pansynostosis Assisted with Distraction Osteogenesis and Tissue Expansion” XX EACMFS Congress (European Association for Cranio-Maxillo-Facial Surgery), Burges, Belgium, September 2010 [Oral]

Singhal VK “Serical Head Circumference and Neurodevelopmental Screening after Surgical Correction for Single-and-Multiple-Suture Craniosynostosis” XX European Association for Cranio-Maxillo-Facial Surgery (EACMFS) Congress, Burges, Belgium, September 2010 [Oral]

Singhal VK, Carlisle MP “10-Year Experience Related to Surgical Management of Velopharyngeal Insufficiency and Outcomes of Sphincter Pharyngoplasty” American Cleft Palate-Craniofacial Association, Fort Worth, TX, March 2010 [Oral]

Singhal VK, Carlisle M, Mehta S “Sequence of Cranio-Fronto-Orbital Reconstruction in Syndromic Pansynostosis Assisted with Distraction Osteogenesis and Tissue Expansion” American Cleft Palate-Craniofacial Association, Fort Worth, TX, March 2010 [Poster]

Singhal VK, Carlisle MP, Nierzwicki B “Serial Head Circumference and Neurodevelopmental Screening after Surgical Correction for Single and Multiple Suture Craniosynostosis” American Cleft Palate-Craniofacial Association, Fort Worth, TX, March 2010 [Oral]

Quality Improvement


Radiology


Betalassie N, Rivard DC “Pediatric Gastrointestinal Stromal Tumors” American Roentgen Ray Society, San Diego, CA, May 2010 [Poster]


Patel AK, Morgan TG, Saldana DA, Patel S, Lowe LH “Pediatric Spine Anomalies: Classification, Pitfalls and Malformations” American Coalition of Physicians, Osage Beach, MO, September 2010 [Poster]


**Research Integrity**

Ballard R “The Gist on Gina” Society of Research Administrators International Conference, Chicago, IL, November 2010 [Oral]


**Weight Management**


Wilt HG, Drake W, Hampl S, Blackburn KS “Increased Left Atrial Dimension in Adolescent Obesity Not Solely Due to Left Ventricular Hypertrophy” American Heart Association, Denver, CO, November 2010 [Poster]