

**ADVANCES IN PERSONALIZED MEDICINE TAKE CENTER STAGE  
AT FIRST-OF-ITS-KIND INTERNATIONAL CONFERENCE**

*Scientists and Clinicians Revolutionizing Medicine by Using Genomic Insights  
to Improve Treatment of Pediatric Patients*

**Kansas City, MO – April 28, 2010** – Many of the world's leading experts in pediatric pharmacogenomics and personalized medicine are gathering today at a first-of-its-kind conference in Kansas City to change the way childhood diseases and illnesses are treated. The goal of the conference, hosted by Children's Mercy Hospitals and Clinics, is to apply genomic tools to medical problems to tailor treatment to the unique make-up of pediatric patients and improve outcomes.

"Personalized medicine uses recent advancements in genomics and molecular data to help us give the right medication to the right patient, in the right dosage, at the right time," said conference organizer Stephen Spielberg, MD, PhD, Director of the Children's Mercy Center for Personalized Medicine and Therapeutic Innovation; Marion Merrell Dow Chair in Pediatric Pharmacogenomics; and Professor of Pediatrics, University of Missouri-Kansas City School of Medicine. "Currently, many types of medications work for only about half of the people who take them, so personalized medicine has the potential to revolutionize the way we treat illness."

At the April 28-30 conference, experts from academia, government and the private sector in the US, Canada and Japan will exchange knowledge centering on clinical applications, bioethics and development of pediatric personalized medicine programs. The conference will begin on Wednesday evening, April 28 at 6 p.m., with a keynote speech delivered by Gregory Downing, DO, PhD, Office of the Secretary, US Department of Health and Human Services.

Among the clinical applications to be discussed are 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

- more -

## **CHILDREN'S MERCY TO HOST PEDIATRIC PERSONALIZED MEDICINE CONFERENCE**

- Identifying a non-invasive marker for inflammation related to asthma, enabling physicians to accurately predict if patients will respond to steroid treatment, and if not, to guide them toward more useful therapies
- Using genetic biomarkers to predict which newborns are at risk for developing hyperbilirubinemia, the single most common reason for newborn re-hospitalizations, accounting for up to 85 percent of readmissions during the first two weeks of life

The conference also will facilitate exchanges that help navigate 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 that we will focus on at the conference,” said conference organizer J. Steven Leeder, PharmD, PhD, 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. “The importance of this area is also recognized by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), which has approved a grant to provide partial support for the meeting.”

A list of speakers and session topics can be found at <http://www.regonline.com/builder/site/Default.aspx?eventid=787610> .

### **New Personalized Medicine and Therapeutic Innovation Programs**

Children’s Mercy Hospitals and Clinics is a national leader in pediatric personalized medicine, and this spring is launching two new programs – the outpatient Personalized Medicine and Therapeutic Innovation Clinic and an inpatient adverse drug reaction program to improve medication safety. Both will deliver state-of-the-art drug therapy to patients, fueled by translating discoveries into impactful treatment decisions. The clinics will receive referrals for patients that present diagnostic and therapeutic challenges – those patients who are not responding to current therapy, as well as those who have had an unexpected, adverse reaction to a medication. Using a variety of approaches including genomic technologies and collaboration between clinical pharmacologists and pediatric subspecialists, the personalized medicine clinic at Children’s Mercy will provide a more targeted choice of therapies for treatment of the pediatric population.

### **About Children’s Mercy Hospitals and Clinics**

Children’s Mercy Hospitals and Clinics, located in Kansas City, Mo., is one of the nation’s top pediatric medical centers. The 314-bed hospital provides care for children from birth through the age of 18, and has been recognized by the American Nurses Credentialing Center with Magnet designation for excellence in nursing services, and ranked by *U.S. News & World Report* as one of “America’s Best Children’s Hospitals.” Its faculty of 600 pediatricians and researchers across more than [40 subspecialties](#) are actively involved in clinical care, pediatric research, and educating the next generation of pediatric subspecialists. For more information about Children’s Mercy and its research, visit [childrensmercy.org](http://childrensmercy.org). For breaking news and videos, follow us on [Twitter](#), [YouTube](#) and [Facebook](#).

###