



# Fellows Flash

The Official Newsletter of the Pediatric Clinical and Developmental Pharmacology Training Network

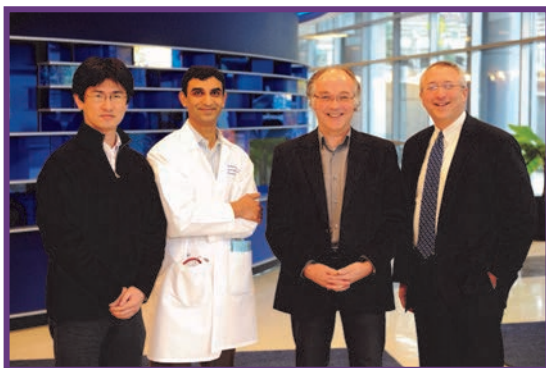
## Spotlight on: Cincinnati Children's Hospital Medical Center

Volume 1, Issue 10  
April 2014

Eunice Kennedy  
Shriver

National Institute of  
Child Health and  
Human Development

Obstetric and  
Pediatric  
Pharmacology and  
Therapeutics Branch



From left to right:

Tsuyoshi Fukuda, Ph.D.  
Senthil Sadhasivam, M.D., M.P.H.  
Sander Vinks, PharmD, Ph.D., F.C.P.  
Tracy Glauser, M.D.

The Division of Clinical Pharmacology at Cincinnati Children's Hospital Medical Center (CCHMC) has made great inroads to establishing an infrastructure to conduct state-of-the-art clinical pharmacology studies to generate new knowledge to improve pharmacotherapeutics in neonates, children and adolescents. The division is home to the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) Training Program in Pediatric Clinical and Developmental Pharmacology.

Dr. Sander Vinks is the leader of the program. Key program strengths are a diverse team and a very collaborative institutional atmosphere for multidisciplinary research and training. CCHMC is large, integrated academic medical center housing over 630 pediatric faculty of the Department of Pediatrics at the University of Cincinnati College of Medicine. CCHMC is ranked in the top 3 of pediatric departments and has an extensive research and training mission with 353 fellows in its training programs (136 in research postdoctoral fellowships and 217 clinical fellows).

The clinical pharmacology program is an integral component of the institutional research and educational program infrastructure and serves as an active knowledge hub for designing and conducting pediatric drug studies related to pharmacometrics and pharmacogenetics/genomics.

The application of novel PK/PD modeling and simulation approaches to pediatric therapeutics including clinical trial design and disease progression modeling is one of the focus areas in the Pharmacometrics program led by Drs. Tsuyoshi Fukuda and Sander Vinks. For the Division's pharmacogenetics/genomics program Drs. Tracy Glauser and Senthikumar Sadhasivam serve as important partners. Dr. Tracy Glauser is the Associate Director of the Cincinnati Children's Research Foundation and Director of the Comprehensive Epilepsy Center. As a clinical trialist, his research focus is on pharmacogenetics/genomics and optimization of anticonvulsant therapeutics in Childhood Absence Epilepsy. Since 2003, he has been the Principal Investigator of a \$30 million 31 center National Institutes of Health-funded comparative effectiveness/pharmacogenetics trial aimed at identifying the optimal antiepileptic medication for the treatment of Childhood Absence Epilepsy.

Drs. Glauser and Vinks were founding members in Cincinnati Children's Genetic Pharmacology Service (GPS), the first of its kind in a pediatric institution. Since its inception in 2004 the program's clinical service has genotyped over 12,000 patients for genetic variants in drug metabolism, providing patient specific dosing recommendations based on the patient's drug metabolizing genotype/phenotype and delineating clinically significant drug/drug interactions. The development of electronic health record linked decision support systems and dashboards that integrate evidence based medicine, a patient's specific genotype, a patient's phenotype, basic and advanced drug pharmacology and adherence is an area of ongoing research and development. The algorithms are designed to help physicians in selecting the best medication and dose for a particular patient (<http://www.cincinnatichildrens.org/service/g/genetic-pharmacology/default/>). (Continued on pg. 2).

## Reminders!

- Drs. Flockhart & Brouwer will present a LIVE lecture titled "**Finding and Becoming a Mentor: A Necessary Academic Transformation**" on Mentoring on April 30, 2014 at 12:00 p.m. ET.
- Graduating fellows, send your post-graduation plans to Khadijah Nassiry at: [knassiry@circlesolutions.com](mailto:knassiry@circlesolutions.com).
- Check out [PedPharmHub](#) for upcoming events, to update your My Site page and to view the article for the April 2014 Journal Club.

## Upcoming Events

The April 2014  
NICHD-NIGMS T32  
Programs in Pediatric  
Clinical  
Pharmacology  
Gastroenterology  
Journal Club Webinar

April 29, 2014  
12:00 Eastern Time

Contact Erin Bahring  
for more information

## Spotlight on: Cincinnati Children's Hospital Medical Center, cont.

### NEED TO CONTACT US?

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Dr. Sadhasivam, M.D., M.P.H. is a pediatric anesthesiologist whose research focus is on personalizing perioperative pain management using pharmacogenetics/genomics approaches. He leads a preoperative preemptive genotyping study as one of the projects of CCHMC's electronic **Medical Records** and **Genomics Network** (eMERGE) program. He also leads a large multicenter morphine pharmacogenetic effort to study novel genetic risk association with opioid response and adverse events.

The Cincinnati program benefits from strong clinical partnerships across the medical campus. The program currently has a portfolio of over 20 active clinical pharmacology related projects across 12 divisions and departments, including several multi-center trials under an Investigational New Drug designation. Formal arrangements with pediatric subspecialties include Anesthesiology, the Cancer and Blood Diseases Institute (CBDI), Infectious Diseases, the Heart Institute, Neonatology, Nephrology, Neurology, Pathology and Rheumatology through combined fellowship training programs, KL2, K23 and T32 mentorship, and junior faculty participating in the ongoing clinical pharmacology research program. The pediatric pharmacology training program currently has four Ph.D./ Pharm.D. postdoctoral fellows and five clinical fellows covering neonatology, infectious diseases, oncology and critical care all being primed to become the next generation of pediatric clinical pharmacology specialists with successful careers as clinical researchers and physician-scientists.

## 2013-2014 Webinar Lectures

### Sumner J. Yaffe Memorial Lectures in Pediatric Clinical Pharmacology

Anna-Karin Hamberg, M.Sc. (Pharm), Ph.D., Research Assistant in the Department of Medical Sciences, Clinical pharmacogenomics and osteoporosis and PK/PD-modelling expert at Uppsala University, Sweden, will present a live lecture titled "Pharmacometric Models for Individualization of Warfarin in Adults and Children" on **Tuesday, May 27, 2014 at 12:00 p.m. U.S. Eastern Time**. Email [pharmacourse@circlesolutions.com](mailto:pharmacourse@circlesolutions.com) for more information.

### Principles of Pediatric Clinical Pharmacology Lectures

Click [here](#) for more details. Find upcoming lectures below.

April 9, 2014	Development of appropriate pediatric formulations and drug delivery systems	Dr. George Giacoia
April 16, 2014	Why is the newborn the last therapeutic orphan?	Dr. John van den Anker
April 23, 2014	Strategies for publishing the most impactful papers or what no one ever tells you about scientific publishing	Dr. Scott Waldman
April 30, 2014	Finding and becoming a mentor: A necessary academic transformation (LIVE)	Dr. David Flockhart and Dr. Kim Brouwer