

Research News

Newsletter of
The University of Kansas Medical Center
Department of Pediatrics

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2007 Departmental Grants Awarded

The Research & Scholarship Committee and the Children's Miracle Network are pleased to announce that we have decided to fund three grants for 2007. Congratulations to all recipients!

Caroline Hetu (PI) Paul Hyman (Co-PI) Jo-Ann Harris, (Co-PI)

Effect of Rooibos Tea on Infant Colic

Kingsley Okonkwo (PI)

Cerebral Microvascular Acclimatization to Chronic Systemic Hypoxia: The Role of Nitric Oxide Synthase (iNOS) Upregulation

Jakica Tancabelic (PI)

Evaluating the Presence of Vitamin D receptor, Caspase 3 and Ki67 (MIB-1) in Human Osteocarcoma

A National Conference from a Medical Student Perspective

Jason Maxfield, MS3

Digestive Diseases Week in Washington D.C. was an amazing experience. I am a third year medical student and this was the first time I have attended a scientific meeting of any size or even traveled to the east coast. The scale of everything was the first thing I noticed upon arriving. The monuments are considerably larger than they appear in pictures. If I had more time, I would have loved to see more sites. However, I was there to present my poster at this meeting, and like most things in Washington D.C., it was huge.

Digestive Diseases Week was attended by about 20,000 people from dozens of different nations all across the world. The poster exhibit hall alone was the size of about six football fields and displayed around 2000 posters each day. Since this was my first poster exhibit I'll admit I was a little intimidated. The exhibit went really well but explaining my project to the experts that walked by was nerve-wracking, and, to be honest, they probably knew more about the subject than I did. Also at the meeting were the scientific talks. The talks went all day with

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as many as twenty simultaneous talks running at any given time. Some were synopsis of an area of interest while others were presentations about an individual's research. The individual's presentation was especially interesting as I got to compare and contrast both the research and the presenter's ability to handle the Q&A session through the different stages of a person's career. For instance, a fellow's research talk went well until the questions started. His inexperience and nerves caught up with him and he just froze. In contrast, the next presenter is one of the leading experts in gastric pacing and his Q&A session seemed just like a conversation rather than a high stress ordeal.

Also at this meeting was the medical equipment and pharmaceutical exhibits. Now, as a medical student I am used to pharmaceutical representatives being around to give you a pen, a sandwich, and thirty seconds of information about their latest project. I was not expecting exhibits of this size. The exhibit hall was the same size as the poster hall and many of the booths were thirty feet tall and several thousand square feet in size. To my stomach's disappointment they were not handing out food but the pens were still handy. Other freebies included bags, laser pointers, flash drives, blankets, medical dictionaries, and many other assorted trinkets. I did manage to tag-along with some physicians to a pharmaceutical sponsored dinner that turned out to be the most pleasant time of the whole trip. The dinner was excellent and the company was great but I did feel a twinge of guilt from taking the free food but hey, Washington D.C. is expensive on a student's budget. The night before dinner was a can of soup warmed under the hot water in my hotel's bathroom so this was a welcome change. And the dinner was also educational. You can learn a lot about medicine from just listening to retired doctors talk to younger doctors and then finally me the student. This trip to Digestive Diseases Week has taught me a lot about medicine, research, and how to communicate with a wide array of different people. If another student is reading this wondering whether or not to participate in research I would say absolutely, as I have gotten far more from this project than I anticipated. It has been one of the best experiences of medical school to date.

An Email from the Dean about the GCRC Planning Grant

As a result of our ongoing effort to elevate our clinical and translational research expertise, I am excited to announce that KU Medical Center last week was awarded an NIH General Clinical Research Center (GCRC) grant of \$7.5 million.

Among other benefits, the GCRC grant allows us to add new programs and enhance existing programs, including:

- A Summer Medical Student Clinical Research program between MS1 and MS2 (funding for five students per summer)
- Clinical Research Scholars Program (CRSP) funding for three medical students between MS2 and MS3 to take a leave of absence and devote one year to clinical research under a faculty mentor. Students also will take clinical research course work that is currently available to K30 and MCR students. The grant will provide a stipend of \$20K per year plus \$5K per year for research costs. The grant will fund three students a year.
- Clinical Research Grant Program - the grant will provide \$20K pilot grants to junior faculty from all three schools. We will fund five pilot grants annually.
- New ancillary lab support that will include densitometry, electromyography, and some blood studies
- Capability to admit research patients to the University of Kansas Hospital under a "scatter bed" model
- New Research Subject Advocate services to assist investigators in Data Safety Monitoring plans
- Nutrition service
- Enhanced biostatistics/informatics

The attached press announcement about the GCRC grant was distributed to media yesterday, and some of you may have heard the news report on KCUR-FM yesterday morning. This is the link to the KCUR story from

their website:

http://www.publicbroadcasting.net/kcur/news.newsmain?action=article&ARTICLE_ID=1068659§ionID=1

In addition, I'd like to announce the establishment of the Heartland Institute for Clinical and Translational Research (HICTR). Led by Richard Barohn, MD and Lauren Aaronson, PhD, RN, FAAN, the HICTR will centralize clinical and translational research efforts and help further build the infrastructure to support clinical and translational research here at KUMC and throughout the region.

Please join me congratulating Dr. Barohn, Dr. Aaronson, and all of the other faculty and staff dedicated to advancing clinical and translational research at KUMC and throughout the region. I am very proud of this significant accomplishment and want to thank all of you for your hard work.

Barbara Atkinson, MD
Executive Vice Chancellor
Executive Dean, University of Kansas School of Medicine

Current Pediatric Grants/Contracts Fiscal Year 2007

Barnard, M (PI) "Writing Interventions for Teens whose Parents Have Cancer" 07/01/04-8/31/07
Turning Points – Total direct costs: \$5,000

Davis, A.M. (PI) 4/15/05-04/14/10
"Enhancing Nutrition and Activity of Rural Children"
NIH/NIDDK - Total direct costs: \$566,721

Davis, A.M., (Co-Investigator) 12/31/06-12/31/09
"Effectiveness of a Treatment of Pediatric Obesity"
DHHS - Total costs: \$737,466

Davis, K. (PI)
"Connected Kansas Kids: Connecting Schools and Students with Special Health Needs"
Kan-Ed - Total direct costs: \$100,000.
** see website at www.connectedkansaskids.com

Ellerbeck, Kathryn (PI) 12/31/07
"Sex Differences in Autism: Potential Role of Oxytocin Signaling"
Cure Autism Now Foundation - Total direct cost: \$27,612

Hetu, C (PI), Hyman, P (Co-PI), Harris, (Co-PI) 7/1/07-6/30/08
"Effect of Rooibos Tea on Infant Colic"
Children's Miracle Network - \$9,300

Johnson, C. (PI) 7/1/06-6/30/08
"Pediatric Consultation, PKU, Seizure, Rheumatology/Cardiology Outreach"
KDHE - Total direct costs: \$125,362

Johnson, Chet (PI) 7/01/07 – 6/30/08
"Leadership Education in Neurodevelopmental and Related Disabilities"

HRSA - Total direct costs: \$ 523,571

Johnson, Chet (Co-Investigator) 7/01/07 – 6/30/08
“Administration on Developmental Disabilities”
Department of Health and Human Services - Total direct costs: \$116,914

Johnson, Chet (PI) 7/01/07 – 6/30/08
“Services for Children with Special Health Care Needs – Clinic Support”
KDHE - Total direct costs: \$147,247

Johnson, Chet (PI) 7/01/07 – 6/30/08
“Services for Children with Special Health Care Needs – Outreach Services”
KDHE - -Total direct costs: \$142,502

Lowry, J. (PI) 9/1/2005-8/31/07
“Poison Control Stabilization and Enhance”
Poison Control Center – Total direct costs: \$161,566

Lowry, J. (PI) 8/31/06-8/31/07
“Mid America Poison Control Center – Support of Center”
KDHE - Total direct costs: \$134,000

Lindsley, C. (PI) 7/29/03-12/31/08
“Juvenile RH North Short Long Island Jewish Health”
Total direct costs: \$390

Nelson, E. (PI) 2006-2008
“Teaching Tool for Cultural Competence, Aetna Foundation Regional Community Health”
TeleKidcare - Total direct costs: \$40,000

Okonkwo, K. (PI) 7/1/07-6/30/08
“Cerebral Microvascular Acclimitazation to Chronic Systemic Hypoxia: The Role of Nitric Oxide Synthase (iNOS) Upregulation”
Children’s Miracle Network - \$5,350

Peacock, G & Nelson, E. (Co-Investigators) 7/1/06-6/30/08
Implementing the American Academy of Pediatrics Attention-Deficity/Hyperactivity Disorder Diagnostic Guidelines in a School-based Telemedicine Clinic.
Children’s Miracle Network-\$9,980

Rapoff, M. (PI), 8/1/06-7/31/07
"Headstrong Intervention for Recurrent Pediatric Headache"
R01, National Institute of Neurological Disorders and Stroke-Total costs: \$563,090

Rapoff, M (PI) & Wasson, MC (Co-PI) 7/1/06-6/30/08
“A mimimal contact cognitive-behavioral intervention for pediatric functional gastrointestinal disorders: A pilot study of Gutstrong.”
Children’s Miracle Network - \$9,963

Raghuveer, T. (PI) 9/1/02-
“Do Dietary components influence the severity of oxygen-induced vascular pathology in newborn rat retina”
KUMC School of Medicine Bridging Grant - \$10,000

Reese, R. Matthew (PI) 11/01/06 – 10/31/07
“Kansas Institute for Positive Behavioral Support”
University of Kansas Center for Research. Total direct costs: \$8,430

Scheinman, Jon (PI) 9/1/06-8/31/08
“Effect of Pyridoxamine in Oxalate excretion in Stone Diseases and Hyperoxaluria”
NIH - Medical City Dallas Hospital. Total direct costs: \$286,130

Scotten, M. (Co-Investigator) 7/1/05-6/30/08
“Cystic Fibrosis”
Cystic Fibrosis Foundation – Total direct costs: \$49,070

Shaw, P (PI) 9/1/05-8/31/07
“An Oral Health Program for Kansas”
United Methodist Health Ministry Fund – Total direct costs: \$27,968

Staker, M. (PI) 7/07 – 6/08
“Project EAGLE Early Head Start”
Including “Early Head Start Oral Health Initiative”
DHHS/ACF/Head Start Bureau - \$1,748,620
Kansas Department of SRS - \$830,825

Staker, M. (PI) 7/07 – 6/08
“Project HOPE”
KDHE - \$98,034

Staker, M. (PI) 6/07 – 5/08
“Healthy Start”
Maternal Child Health Coalition - \$175,000

Staker, M. (PI) 3/04 – 2/09
“Centralized Intake and Referral System
DHHS/HRSA/MCHB/Healthy Tomorrows - \$250,000

Staker, M. (Co-PI) & Carta, J. (Co-PI) 9/04 – 8/07
“Early Reading First”
Department of Education – \$2.8 Million

Staker, M. (PI) 9/07 – 9/08
“Early Childhood Professional Development Program”
Mid-America Regional Council/Department of Education – \$120,000

Staker, M. (PI) 7/07 - 6/08
“Healthy Families”
Unified Government of Wyandotte County/Kansas City, KS - \$141,522

Staker, M. (PI) 6/06 - 8/07
“Integrating Effective Evidence-Based Approaches for Working with Young Children and Their Families”
Sub-contract from the KU Life Span Institute/Beach Center - \$10,556

Staker, M. (PI) 9/06 - 6/07
“Crossroads to Early Language and Literacy”
Sub-contract from USD 500 - \$13,546

Staker, M. (PI) 1/07 - 12/07
“Early Childhood Comprehensive Planning”
Kansas Children’s Cabinet - \$10,000

Staker, M. (PI) 2007-2011
“SPARC Family Literacy Leadership Team Training”
Sponsored by the National Head Start Family Literacy Center – travel reimbursement

Tancabelic, J (PI) 7/1/07-6/30/08
“Evaluating the Presence of Vitamin D receptor, Caspase 3 and Ki67 (MIB-1) in Human Osteocarcoma”
Children’s Miracle Network - \$5000.

Current Pediatric Clinical Trials

Casey, J. (PI), Delrosario, G. (Co-PI)
“The Genetics and Neurendocrinology of Short Stature International Study”
Eli Lilly and Company –

Casey, J. (PI)
“Growth Hormone Study”
Genentech Inc.

Casey, J. (PI)
“Kabi International Growth Study”
Pharmacia Upjohn

Casey, J. (PI)
“Natural History Study Development of Type I Diabetes”
NIH-TrialNet

Harris, J (PI)
“Phase 3 Vaccine Study”
Glaxo Smith Kline

Harris, J (PI)
“Open Randomized, Multicentr Study of the Safety, tolerabiliy tand immunogenicity of VAQTA given concomitantly with PedvaxHIB and Infanrix n Health Children 15 months of age”
Merck

Hyman, Paul (PI)

Safety Efficacy and Pharmacokinetics of lab, prostone in Pediatric patients with constipation”
Sucampo Pharm Inc.

Lowry, Jennifer (PI)

“Surveillance of the RADARS 7 by Poison Control Centers”
Denver Health and Hospital Authority

Olson, N (PI)

“Allergy Immunology Rheumatology”
Pharmacia Corp

Scheinman, Jon (PI)

“Focal Glomerulosclerosis Trial”
St. Joseph Hospital Medical Center

Trueworthy, Robert (PI)

“Children’s Oncology Group”
National Childhood Cancer Foundation Total

Most Recent Pediatric Publications

Al-Chaer, ED, **Hyman, PE**. (2007). Chapter 14: Visceral pain in infancy. In: KJS Anand, BJ Stevens, and PJ McGrath (eds) *Pain in Neonates and Infants*, 3rd edition, 201-208.

Jadhav P, **Parimi PS**, Kalhan SC. (2007). Parenteral amino acid and metabolic acidosis in premature infants. *Journal of Parenteral and Enteral Nutrition*. 31(4), 278-283.

Okonkwo, KC, Reich, K, Alabi, AI, Umeike, N, Nachman, SA. (2007). An Evaluation of Awareness: Attitudes and Beliefs of Pregnant Nigerian Women toward Voluntary Counseling and Testing for HIV. *AIDS Patient Care and STDs*. Vol. 21, No. 4 : 252 -260.

Oluola, O, Kong, L, Fein, M, Weisman, LE. (2007). Lysostaphin in Treatment of Neonatal Staphylococcus aureus Infection. *Antimicrobial agents and Chemotherapy*, 51(6), 2198-2200.

Page-Goertz, S. (2007). Hyperbilirubinemia and Hypoglycemia. In: *Core Curriculum for Lactation Consultants*. Boston: Jones & Bartlett.

Resident Research

Jon Scheinman, M.D

KU Peds residency is now a veritable hot-bed of research, from basic science to behavioral analysis.

Kingsley Okonkwo. Resident, Pediatrics.

Research Project: Cerebral Microvascular Acclimatization to hypoxia

He will explore NOS involvement in cerebral adaptation to hypoxia, in rats and controls, working in the laboratories of Physiology.

Caroline Hetu. Resident, Pediatrics.

Research Project: Rooibos Tea for Infant colic

A controlled trial of Rooibos Tea, in 40 infants with colic. Will work with Drs Hyman and Harris, and use behavioral and population analysis.

Jennifer Raymond. Resident, Pediatrics.

Has won a coveted K-30 award for study of pediatric obesity. Her current research interest is in developing a successful intervention for the prevention and treatment of pediatric obesity. She has designed a screening tool to be used in general primary care clinics and local health departments. She hopes is to assist physicians in identifying risk factors before the child experiences weight problems or identify changes that may made to help correct weight problems.

Odds & Ends

- **Dr. Mukta Sharma**, a new physician joining our Hematology/Oncology division successfully defended her MPH on 6/29/07 and received Honors for her work! Congratulations Dr. Sharma!
- Congratulations to **Dr. Prabhu Parimi** on his new publication listed above on parenteral amino acids. We look forward to him joining our department very soon!
- The Department will have two K30 fellows next year! **Dr. Jennifer Raymond** (a resident in our department) and **Dr. Tsehawork Fenikile** (a new fellow in Developmental/Behavioral) have both been accepted in to the program. The K30 is a grant funded program supporting research endeavors of junior individuals by paying for classwork, books, and other necessities. Congratulations Drs. Raymond and Fenikile!
- **Dr. Mukta Sharma** also shared the following news with Dr. Chet Johnson, our chair: "I'm delighted to share the news of my acceptance for the SIPID research program at UT Dallas in July. I wanted to extend my gratitude for writing a strong Letter of Recommendation and supporting me for this wonderful Basic Science research training opportunity in Red Cell Disorders/ Sickle Cell."
- **Martha Staker** wanted to share the following announcement: "Project EAGLE got a perfect score from the site visit we had in early March. We were notified last week that we have been designated a Center of Excellence. As you can imagine all of our staff worked very hard to accomplish this. Only two sites received this designation in Region VII this year (There are hundreds of programs in KS, MO, NE, and IA)." Congratulations Martha and everyone at Project EAGLE!
- Congratulations to **Kelsie Cropp**, a mentee of Dr. Ellerbeck's, on her acceptance into the Clinical Research Scholars Program. Way to go!
- Congratulations to **Dr. Paul Hyman** on winning the April 2007 International Foundation for Functional Gastrointestinal Disorders Research Award for Senior Investigator. He was one of six recipients nationally. He traveled to Milwaukee, Wisconsin in early April where he was honored with this exciting achievement.
- Congratulations to **Dr. Paul Hyman** who has received a Clinical Trial from Sucampo Pharmaceuticals Inc. The study is titled "A Multi-Center, Open labeled Study of the Safety, Efficacy and Pharmacokinetics of Lubiprostone in Pediatric Patients with Constipation." This announcement was made by **Linda Schuck**, grants manager for our department, who will be emailing the entire department whenever anyone receives a grant or clinical trial.
- Congratulations to Dr. Jon Scheinman who had a wonderful article published in the Kansas City Star on the Opinion page in the As I See It column on Friday June 1, 2007!