



# THRASHER RESEARCH FUND

VOLUME 1

## NEW RESEARCHER AWARDS: FUNDED PROJECTS

Congratulations to our first New Researcher Award grantees.

**JULY 2006**

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**Anneke C. Hesseling, M.D., MSc**, “The effect of neonatal BCG vaccination on immune responses to HIV and other childhood vaccines: a randomized clinical trial,” Desmond Tutu TB centre, Stellenbosch University and London School of Hygiene and Tropical Medicine

**Arlene Dent, M.D., Ph.D.**, “Ultrasound Detection of Abnormal Uteroplacental Blood Flow as an Early Marker of Placental Malaria,” Case Western Reserve University

**Aaron Chen, M.D.**, “Comparison of cephalexin versus clindamycin in the empiric treatment of community-acquired methicillin-resistant *Staphylococcus aureus* (CA-MRSA) cutaneous infections,” Johns Hopkins University

**Katarzyna Kordas, Ph.D.**, “Pilot study to determine the efficacy of iron supplementation in preventing the elevation of blood lead concentrations in young children,” Cornell University

**Michael H. Land, M.D.**, “Probiotics ameliorate atopic dermatitis by induction of T regulatory cells,” UCLA Medical Center

**Mathieu Lemaire, M.D., MSc**, “Impact of oral iron supplementation with Sprinkles on infectious morbidity when moderate to severe pediatric malnutrition is highly prevalent – a non-inferiority safety trial,” Hospital for Sick Children, Toronto

**Masud Alam, M.B.B.S.**, “New treatment regimen to control soil transmitted helminthic infections (STHI) among the urban poor preschool children in Bangladesh,” ICDDR,B

## MESSAGE FROM THE PRESIDENT

Welcome to our inaugural edition of the Thrasher Research Fund newsletter. This newsletter has been designed to keep you informed about the Thrasher Research Fund as well as updates on past and currently funded projects.

Perhaps this newsletter can serve as a resource when applying for future grants. Each issue will highlight recently funded projects, information on the members of our committees, updates on our New Researcher Awards, and a calendar of upcoming events. Inquiries about this newsletter or any of our services can be addressed to one of the research managers; further information is available on our website at [www.thrasherresearch.org](http://www.thrasherresearch.org).

– A. Dean Byrd, Ph.D., MBA, MPH  
*President*

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*To help one child is to bless  
one child...to find practical  
solutions to children's  
problems is to bless the  
world.*

*~ E.W. "Al" Thrasher*

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## RESEARCH FORUM

The Fund was pleased to host Dr. Sherwin J. Isenberg of the Harbor-UCLA Research & Education Institute/Jules Stein Eye Institute as the speaker at a recent Thrasher Research Fund Forum. In his presentation, Dr. Isenberg explained that in the developing world, untreated eye infections result in blindness in hundreds of thousands of children each year. Few such infections are treated because of lack or excessive cost of appropriate ophthalmic antibiotics. With support from the Thrasher Research Fund, Dr. Isenberg has shown that povidone-iodine, an inexpensive, readily available antimicrobial, is as effective as Neosporin ophthalmic solution against bacterial eye infections, and is concluding a study which is likely to show that povidone-iodine is also effective in treating bacterial corneal ulcers. Because a 10 ml bottle of povidone-iodine costs only about 10 cents, compared to \$4 for 10 ml of Neosporin, povidone-iodine may represent a low-cost, effective treatment that can prevent blindness in children in the developing world.

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*Children are one third of  
our population and all of  
our future.*

*~Select Panel for the  
Promotion of Child Health*

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Dr. Isenberg's publications on work funded by the Thrasher Research Fund include:

Isenberg SJ, et al, "A controlled trial of povidone-iodine to treat infectious conjunctivitis in children." Am J Ophthalmol. 2002 Nov;134(5):681-8.

Isenberg SJ, et al, "A controlled trial of povidone-iodine as prophylaxis against ophthalmia neonatorum." N Engl J Med. 1995 Mar 2;332(9):562-6

## RECENTLY FUNDED PROJECTS

The following projects were awarded funding in June 2006.

"Novel strategies for the prevention and treatment of chronic lung disease in premature newborns," Stephen H. Abman, M.D., University of Colorado at Denver and Health Sciences Center.

"Randomized field intervention of *H. pylori* eradication to reduce iron deficiency among children in El Paso, Texas," Victor M. Cardenas, M.D., MPH, Ph.D., University of Texas School of Public Health, El Paso Regional Center.

"A new diagnostic standard for the assessment of swallowing disorders in children," Geoffrey P. Davidson, M.D., Women's & Children's Hospital North Adelaide, Australia.

"Improving sedation of children undergoing procedures in the Emergency Department: Evaluation of different dosages and routes of administration of the sedative Midazolam," Eileen J. Klein, M.D., MPH, Children's Hospital and Regional Medical Center, Seattle.

"Photorefractive Keratectomy (PRK) for ametropia in children: A prospective study," Evelyn A. Paysse, M.D., Texas Children's Hospital.

"Bone mineral content and bone metabolism in adolescents on antipsychotic therapy," Sriram Ramaswamy, M.D., Creighton University.

"The effect of Captopril on experimental meconium aspiration," Dharmapuri Vidyasagar, M.D., University of Illinois at Chicago.



## PUBLICATIONS FROM AWARDED PROJECTS

**Samore MH, et al. “Mechanisms by which antibiotics promote dissemination of resistant pneumococci in human populations.” Am J Epidemiol. 2006 Jan 15;163(2):160-70. Epub 2005 Nov 30.**

**ABSTRACT:** Mechanisms by which antimicrobials contribute to dissemination of pneumococcal resistance are incompletely characterized. A serial cross-sectional study of nasopharyngeal pneumococcal carriage in healthy, home-living children  $\leq 6$  years of age was conducted in four rural communities – two in Utah (1998-2003) and two in Idaho (2002-2003). Prevalence odds ratios for carriage of resistant pneumococci (OR(res)) and of susceptible pneumococci (OR(sus)) were estimated. Dynamic transmission models were developed to facilitate a mechanistic interpretation of OR(res) and OR(sus) and to compare the population impact of distinct antimicrobial classes. A total of 5,667 cultures were obtained; 25% of the cultures were positive, and 29% of isolates exhibited reduced susceptibility to penicillin. The adjusted OR(res) for recent individual and sibling cephalosporin use was 2.2 (95% confidence interval: 1.4, 3.4) and 1.8 (95% confidence interval: 1.0, 3.3), respectively. Neither individual nor sibling penicillin use was associated with increased OR(res). Rather, recent use of penicillins was associated with decreased carriage of susceptible pneumococci (OR(sus) = 0.2, 95% confidence interval: 0.1, 0.3). In simulations, both types of effects promoted dissemination of resistant pneumococci at the population level. Findings show that oral cephalosporins enhance the risk of acquiring resistant pneumococci. Penicillin accelerates the clearance of susceptible strains. The effect of penicillin in increasing resistance is shared equally by treated and untreated members of the population.



## CLINICAL TRIAL REGISTRATION

Many medical journals are now requiring clinical trials to be registered prior to starting enrollment, as a condition of publication in these journals. The Advisory Committee has recommended that the Fund send all current grantees an e-mail calling attention to the need for clinical trials to be registered, and to require newly funded projects which involve clinical trials to be registered before any disbursement is made. The Executive Committee accepted the recommendations made by the Advisory Committee and approved a policy requiring that all clinical trials be registered prior to disbursement.

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*“We should look for innovative medical research projects to fund. It is only when we do something different that we can expect to achieve above average success. As an inventor, I have found that it is impossible to determine in advance where the best innovative ideas will come from, or how they will originate.”*

*~ E.W. “Al” Thrasher*

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See our website for more resources and information about the Thrasher Research Fund: [www.ThrasherResearch.org](http://www.ThrasherResearch.org)

## ADVISORY COMMITTEE HIGHLIGHT

### **Tina Hartert, M.D., MPH, Vanderbilt University**

Dr. Hartert has graciously accepted an appointment to serve on the Advisory Committee of the Thrasher Research Fund. She received her M.D. from Vanderbilt University School of Medicine and completed her residency at Johns Hopkins University School of Medicine. Her current research interests include respiratory illnesses and asthma. We look forward to her contributions to the Fund.



## CALENDAR

New Researcher Award Concept Submission Deadlines  
for 2006:

February 21<sup>st</sup>  
June 16<sup>th</sup>  
October 21<sup>st</sup>

Future Research Forum:

Researcher: Phillip R. Fischer, M.D.  
Title: "Rickets: Sunshine, Milk, and Genes"  
Date: September 27, 2006

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