

# GLOBAL HEALTH MATTERS

Fogarty International Center (NIH/HHS)  
“Science for Global Health”

## INSIDE THIS ISSUE:

Stigma: HIV/AIDS in Five African Countries	2
Influenza: Vaccinating to Protect Vulnerable Subpopulation	3
Overweight with Concurrent Stunting in Children: Mexico	3
Major Human Infectious Diseases: Old World Origins	4
Out of Africa: Yellow Fever Virus into the Americas	5
German Federal Minister of Education/Research Visits FIC	6
Russian Alcohol Policy: Law Broadens Authority	7
Partnerships for Training and Research: Global Health Council	8
FIC Program Announcements/Requests for Applications	11

## Disease Control Priority Project: Implementing the Research Agenda

**On June 11, 2007, Dr. Roger I. Glass, Director, Fogarty International Center (FIC), welcomed a capacity crowd of global health colleagues to celebrate the one-year anniversary of the *Disease Control Priority Project (DCPP)*, at the NIH Natcher Auditorium.**

“The DCPP is a groundbreaking idea to use the common platform of cost effectiveness to improve health outcomes in developing countries, to understand what works and what doesn’t, and to identify what are the ‘best buys’ for health and health policies today,” said Dr. Glass.

Funded primarily through a grant from the Bill and Melinda Gates Foundation, DCPP is a joint program of the FIC and the National Library of Medicine (NLM), NIH; the World Bank; the World Health Organization (WHO); and the Population Reference Bureau, all represented at the event.

The purpose of the meeting, *The Disease Control Priority Project: Implementing the Research Agenda*, was to review the key messages of the DCPP and highlight its impact on health policy and programs in developing countries. DCPP’s two landmark publications: (1) the second edition of *Disease Control Priorities in Developing Countries (DCP2)*; and (2) *Global Burden of Disease and Risk Factors*, have led to major advances in the health care system of many countries—including China, India and Mexico.

These experiences were reviewed, respectively, by Dr. Depei Liu, Vice President, Bureau of International Cooperation, Chinese Academy of Engineering (last year’s host of the DCPP launch, held in Beijing, China); Dr. Prabhat Jha, Canada Research Chair of Health and Development, University of Toronto; and Dr. Julio Frenk, Senior Fellow, Bill and Melinda Gates Foundation—and former Minister of Health, Mexico (see below).

*Continued on page 10*

## Lessons from the Application of the Disease Control Priority Project to the Mexican Health Reform

“The essential vision of the *Disease Control Priority Project (DCPP)* is straightforward: to inform policy making with sound evidence derived from scientific research,” said Dr. Julio Frenk, Senior Fellow, Bill and Melinda Gates Foundation—and former Minister of Health, Mexico, in his talk: *Empowerment through Evidence: Lessons from the Application of the DCPP to the Mexican Health Reform*, presented June 11, 2007, at the *Disease Control Priority Project: Implementing the Research Agenda* meeting.

“During the past six years,” Dr. Frenk said, “I lived through the experience of conducting a large-scale reform of Mexico’s health system. This reform made intensive use of many of the analytical approaches promoted by the DCPP.”

The first edition of *Disease Control Priorities in Developing Countries (DCP1)*, published in 1993, was linked to Mexican Health Reform; it served as a key input to several policy proposals developed in Mexico during the mid-1990s.

*Continued on page 10*



Dr. Julio Frenk

## Stigma: HIV/AIDS in Five African Countries

### “HIV/AIDS stigma from five African countries”

In Southern Africa, where the burden of the AIDS is significant, AIDS stigma and discrimination continue to affect those living with HIV disease, their families and their health care providers.

Stigma has emerged as a major barrier to primary and secondary HIV/AIDS prevention and care. It interferes with voluntary testing and counseling, as well as access to care and treatments, thus increasing suffering and shortening life.

Dr. William L. Holzemer, University of California, San Francisco (UCSF), and a team of nurse researchers are conducting a five-year study on HIV/AIDS stigma in Southern Africa with the goal of increasing knowledge about stigma and ultimately reducing it. The project, *Perceived AIDS Stigma: A Multinational African Study*, is funded by the Fogarty International Center (FIC), NIH; and the Health Resources and Services Administration (HRSA).

"Twenty years after Dr. Jonathan Mann first brought the issue to world attention, AIDS-related stigma is still a huge concern for HIV-positive people. Stigma, or even just the fear of stigma, keeps people from getting tested, makes accessing care and medications more difficult and generally reduces the quality of people's lives. We hope that our collaborative efforts will help bring us all one step closer to reducing AIDS-related stigma," said Dr. Holzemer.

The collaboration includes nurse-researchers from seven universities: National University of Lesotho; Kamuzu

College of Nursing, University of Malawi; North-West University, South Africa; University of Swaziland; Muhimbili University College of Health Sciences, Tanzania; University of KwaZulu-Natal, South Africa; and University of California, San Francisco, U.S.

The study has three specific aims: (1) the research team will develop and validate two measures of perceived HIV/AIDS stigma for people living with HIV/AIDS and nurses; (2) the team will use those instruments to explore relationships among stigma, quality of life and quality of work life (for nurses); and (3) a community-level stigma-reduction intervention will be tested for its feasibility and possible scaling-up.

In March 2005, the research team spent five days at the Rockefeller Foundation's Bellagio Study and Conference Center developing the two stigma measures, based on focus group data from more than 250 nurses and people living with HIV/AIDS (PLWA) in five countries.

**“Stigma even affects people who are not HIV-positive, such as family members and health care workers...”**

**— Dr. William L. Holzemer**

Over the next 15 months, the instruments were tested with over 1,400 nurses and PLWA. The result is the HIV/AIDS Stigma Instrument—PLWA (HASI-P) and the HIV/AIDS Stigma Instrument—Nurse (HASI-N).

An article about the HASI-P is in press in the journal *AIDS Care* and the HASI-N is in review for publication. In addition, the team has developed the *Conceptual Model of HIV/AIDS Stigma*, which is currently in press in the *Journal of Advanced Research*. Two additional articles have been published—one about HIV/AIDS stigma as related to human rights and the other about urban and rural differences in HIV/AIDS stigma. Additional articles are in process.

The research team is now finalizing a cohort study that will look at the relation



#### Stigma Research Team

Lucy Makoae, Lesotho; Joanne Naidoo, South Africa; Thecla Kohi, Tanzania (Front row L-R) Minrie Greeff, South Africa; Maureen Chirwa, Malawi; Priscilla Dlamini, Swaziland; René Phetlhu, South Africa (Middle row L-R) Anita Stewart, U.S.; Leana Uys, South Africa; William Holzemer, U.S.; Kevin Durrheim, South Africa (Back row L-R)

ships between stigma, quality of life and quality of work life for nurses. In fall 2007, the team, in collaboration with local community leaders, will conduct a stigma reduction intervention in and around hospitals/clinics in all five countries. Participants will include both PLWA and nurses.

The research group include: Holzemer WL, Uys L, Makoae L, Stewart A, Phetlhu R, Dlamini PS, Greeff M, Kohi TW, Chirwa M, Cuca Y, Naidoo J. May 2007, *Journal of Advanced Nursing* 58(2), 1–11.

To learn more about Dr. Holzemer's work visit: <http://nurseweb.ucsf.edu/www/bfholz.htm>



#### Boys at play, Malawi

Photo by: Keven Durrheim, Professor of Psychology, School of Psychology, University of KwaZulu-Natal



#### Fisherman and his catch, Malawi

Photo by: Keven Durrheim, Professor of Psychology, School of Psychology, University of KwaZulu-Natal

## Influenza: Vaccinating School Children to Protect a Vulnerable Subpopulation

### “Vaccinating to protect a vulnerable subpopulation”

Every winter, millions of people contract influenza—a viral infection of the nose, throat and airways that is transmitted in airborne droplets released by coughing and sneezing.

While most people who catch flu recover within a few days, some develop serious complications such as pneumonia. In the U.S. alone, about 36,000 people—mainly infants, elderly and chronically ill individuals—die every year.

To minimize the morbidity (illness) and mortality (death) associated with seasonal (epidemic) influenza, the World Health Organization (WHO) recommends that these vulnerable people be vaccinated against influenza every autumn. Annual vaccination is necessary because flu viruses continually make small changes to the viral proteins that the immune system recognizes.

Although infants and the elderly are particularly vulnerable to influenza, schoolchildren are more likely to spread the flu virus. Also, vaccination is more effective in schoolchildren than in elderly people.

Some Japanese and U.S. data suggests vaccination of schoolchildren may be the best way to reduce influenza morbidity and

mortality. However, policymakers need to know more about the likely effects of changing the current influenza vaccination strategy. In this study, Dr. Jonathan Dushoff, Department of Ecology and Evolutionary Biology, Princeton University, and his fellow researchers have used mathematical modeling to investigate how vaccination affects the spread of diseases, such as influenza, for which a “core” group in the population spreads the disease and a distinct “vulnerable” group is sensitive to its effects.

The researchers developed a mathematical model in which members of each group mixed mainly with their own group (assortative mixing) and used it to predict how changing the proportion of a limited amount of vaccine, given to each group, might affect disease spread under different conditions.

They report that in a population in which the two groups are unlikely to mix—viral transmission was low. Switching vaccine from the vulnerable group to the core group initially increased infections in the vulnerable group because fewer individuals were directly protected. However, as more vaccine was allocated to the core group, fewer vulnerable people became infected because the size of the epidemic decreased.

*Continued on page 4*

## Overweight with Concurrent Stunting in Children: Rural Mexico



### “Overweight with concurrent stunting in very young children from rural Mexico: prevalence and associated factors”

A research team from the Community Health and Human Development, School of Public Health, University of California, documented the prevalence of overweight or obesity concurrent with stunting in rural low-income Mexican children and identified demographic and socio-economic

characteristics that could help identify families at risk of having an overweight/obese and stunted young children in this population.

The team used a cross-sectional analysis of the nutritional status of very young children, using primary data from a rural community-based survey conducted in 2003. Overweight, obesity and stunting were documented along with several maternal, household and community characteristics. The analysis was conducted in impoverished areas of rural Mexico and the subjects were pre-school children (n=7555), aged 24-72 months.

Results of the study showed the combined prevalence of overweight and obesity was equal to or greater than 20% in all children, as was the prevalence of stunting. The prevalence of concurrent overweight or obesity and stunting was approximately 5% in non-indigenous children and over 10% in indigenous children 24-60 months.

A multinomial logistic analysis revealed that the factors associated with coexisting stunting and overweight/obesity were lower socioeconomic status (SES), lower maternal age, education, intelligence (vocabulary), perceived social status, shorter maternal height and larger household size. Among only stunted children, the risk of also being overweight or obese was associated with younger maternal age (relative risk ratios (RRR): 0.98, P=0.05), lower maternal perceived social status (RRR: 0.95, P<0.01), maternal obesity (RRR: 2.93, P<0.0001) or overweight (RRR: 1.50, P=0.002).

In conclusion, these analyses highlight that concurrent overweight or obesity and stunting is an important public health issue in low-income areas of rural Mexico beginning in early childhood. Even within this impoverished population, children living in households with low relative SES are the most vulnerable.

Financial support for this research was provided by the Fogarty International Center (FIC) and the Child Health and Human Development (CHHD), NIH; the John D. and Catherine T. MacArthur Foundation *Research Network on Socioeconomic Status and Health*; and the Mexican Government.

The authors of the study are: Fernald LC, Neufeld LM. *Eur J Clin Nutr* 2007 May;61(5):623-32. Epub 2006 Nov.

## Major Infectious Diseases: Old World Origins

### “Origins of major human infectious diseases”

Many of the major human infectious diseases, including some now confined to humans and absent from animals, are ‘new’ ones that arose only after the origins of agriculture.

Dr. Nathan D. Wolfe, Department of Epidemiology, School of Public Health, University of California, Los Angeles, and his team ask: “Where did they come from?” and “Why are they overwhelmingly of Old World (Africa, Asia and Europe) origins?”

Answers to these questions differ for tropical and temperate diseases, for instance, and in the relative importance of domestic animals and wild primates, as sources of disease.

The research team identifies five intermediate stages through which a pathogen exclusively infecting animals may become transformed into a pathogen exclusively infecting humans. They propose an initiative to resolve disputed origins of major diseases and a global early warning system to monitor pathogens infecting individuals exposed to wild animals.

They suggest there is a typical progression which human pathogens follow over long time periods: Stage 1 means the pathogen is never naturally found in humans (i.e. this excludes laboratory exposures), whereas Stage 2 pathogens are found in humans but do not transmit from human-to-human. Stage 3 pathogens sometimes transmit human-human, but only for a few cycles, Stage 4 pathogens routinely transmit between humans but retain animal-human transmission routes and still are animal pathogens and Stage 5 pathogens which are pathogenic only in humans.

There are evolutionary stories in this model—such as a group of viruses called simian foamy viruses which can be inferred to have speciated via the speciation of their host. Each virus species is specific to a single primate (none infects humans).

The review team, in one hypothesis, explains why during the European exploration and conquest of the Americas most diseases traveled from Old World to New World and few traveled in the opposite direction.

Of the 25 diseases explored, only one (Chagas) is clearly of New World origin with two others (tuberculosis and syphilis) still controversial and four others untraceable to

date (rotavirus, rubella, tetanus and typhus); the remaining 18 are all of Old World origin. The authors suggest two explanations: (1) many of the diseases originated in domestic livestock—the Old World domesticated more species and tended to live in much closer proximity to their livestock; and (2) many more tropical diseases originated in the Old World because Old World primates are genetically more similar to humans than New World primates.

The study also discusses pathogen emergence and evolution. Rubella virus has no known animal relative, but is thought to have emerged in humans as little as 11,000 years ago. Humans and chimps have distinctive *Plasmodium* species, but it is unknown whether these arose because of or after the human-chimp split. Whether tuberculosis and mumps have gone animal->human or human->animal remain open questions.

This work was supported by an NIH Director’s Pioneer Award and the Fogarty International Center (FIC) IRSDA Award; W.W. Smith Foundation award; and National Geographic Society award.

The study authors are: Wolfe ND, Dunavan CP and Diamond J. *Nature* 447, 279-283 (17 May 2007).

## Influenza: Vaccinating School Children to Protect a Vulnerable Subpopulation

*Continued from page 3*

When viral transmission was high, vaccination of the vulnerable group was always best. However, when viral transmission was moderate, shifting vaccine from the vulnerable group first increased and then decreased infections in this group before increasing them again. This last change occurred when vaccination in the vulnerable group was so low that viral transmission was sufficient to maintain the epidemic within this group.

The researchers’ findings depend on the assumptions included in the model—many of which were based on limited information. The model considers a population that contains two groups, an unlikely situation in real life.

Nevertheless, these findings indicate that in a population in which one group of people is mainly responsible for the spread of a disease and another is most vulnerable to its

effects, the best vaccination strategy is sensitive to how the groups mix and how well the disease spreads in each group.

Small changes in these poorly understood parameters can change the optimal vaccination strategy—from one that vaccinates vulnerable individuals—to one that mainly vaccinates the people who spread the disease. Importantly, a beneficial change in strategy can become deleterious if taken too far, so policy makers need to approach potentially promising changes in vaccination policy cautiously.

Finally, for influenza the model supports the idea that using some vaccine stocks in schoolchildren might decrease morbidity and mortality among elderly people but suggests that—even if this turns out to be correct—if all the vaccine were given to schoolchildren, more elderly people might die. Thus, the most prudent policy would be to supplement,

rather than replace, vaccination of the elderly with vaccination of children.

The study was a collaborative effort by the Department of Ecology and Evolutionary Biology, Princeton University; the Fogarty International Center (FIC) and the National Institute of Allergy and Infectious Diseases (NIAID), NIH; the Department of Biology, University of Pennsylvania; and the Department of Clinical Epidemiology and Biostatistics and the Department of Mathematics and Statistics, McMaster University, Canada.

The study authors are: Dushoff J, Plotkin JB, Viboud C, Simonsen L, Miller M, Loeb M and Earn DJD. *PLoS Med.* 2007 May; 4(5): e174.

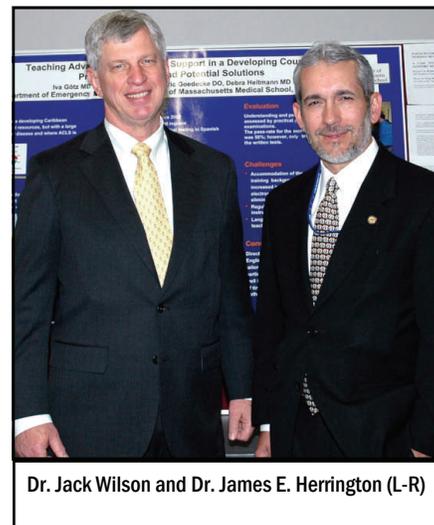
## Dr. James E. Herrington Speaks at UMASS Global Health Symposium

On May 4, 2007, Dr. James E. Herrington, Director, Division of International Relations (DIR), Fogarty International Center (FIC), presented at a plenary session of the *Global Health Symposium 2007*, sponsored by the University of Massachusetts Medical School, Office of Community Programs, a division of Commonwealth Medicine, facilitated by the President's Office.

The two-day (May 3-4) symposium offered an opportunity for academic exchanges, discussions and strategic planning, among the university faculty members and international health experts, to explore important issues in global health. Those issues will focus the university's involvement in global health education, service and research with particular attention given to working with in-country partners in the developing world.

Dr. Herrington's involvement included participating in group discussions with UMASS faculty to help them gain a better understanding of global health programs of NIH and the FIC, as well as a review of initiatives throughout the University of Massachusetts system, leading to the development of strategies to promote the creation and operation of UMASS Global Health Offices.

Dr. Jack Wilson, President, UMSS said, "This gathering of prominent academic researchers and educators allows us to showcase some of our current initiatives in the area of improving health in locations around the world. It also will assist us in developing an infrastructure for a more integrated and expanded approach to our global health activities."



Dr. Jack Wilson and Dr. James E. Herrington (L-R)

## Out of Africa: Yellow Fever Virus



**"Out of Africa: A molecular perspective on the introduction of yellow fever virus into the Americas"**

Throughout the 18th and 19th centuries, yellow fever was one of the most dreaded of diseases in New and Old World port cities.

Yellow fever is a viral infection transmitted by mosquitoes that cause fever, jaundice, kidney failure and bleeding. Yellow fever is caused by a virus that is spread by the bite of mosquitoes. This disease is common in South and sub-Saharan Africa.

Large-scale epidemics of yellow fever helped shape colonial expansion in both the Americas and in Africa; the medical and scientific developments associated with control of the virus have been a favored topic of historians for many years.

The most commonly cited hypothesis of the origin of yellow fever virus (YFV) in the Americas is that the virus was introduced from Africa, along with *aedes aegypti* mosquitoes, in the bilges of sailing vessels during the slave trade.

Although the hypothesis of a slave trade introduction is often repeated, it has not been subject to rigorous examination using gene sequence data and modern phylogenetic techniques for estimating divergence times.

The research team assembled a comprehensive data set of gene sequences for YFV, which they used to infer the time-scale and evolutionary history of YFV. These data show that the spread of YFV to the Americas corresponds closely with the routes and timing of the slave trade. Overall, this study demonstrates how molecular epidemiological studies can provide new insight into debates on the origin and spread of infectious disease.

Yellow fever virus (YFV) remains the cause of severe morbidity and mortality in South America and Africa. To determine the evolutionary history of this important reemerging pathogen, the research team performed a phylogenetic analysis of the largest YFV data set compiled to date, representing the *prM/E* gene region from 133 viral isolates sampled from 22 countries over a period of 76 years.

They estimated that the currently circulating strains of YFV arose in Africa within the last 1,500 years and emerged in the Americas

following the slave trade approximately 300–400 years ago.

These viruses then spread westwards across the continent and persist there to this day in the jungles of South America. They therefore illustrate how gene sequence data can be used to test hypotheses of viral dispersal and demographics and document the role of human migration in the spread of infectious disease.

This work grew out of collaborative interactions fostered by the Fogarty International Center (FIC), NIH; the Banff International Research Station; and the Fields Institute for Research in Mathematical Science. Acknowledgements also for support from the Burroughs Wellcome Fund; the Canadian Institutes of Health Research; and the Natural Sciences and Engineering Research Council of Canada.

The authors include: Bryant JE, Holmes EC and Barrett ADT. *PLoS Pathog.* 2007 May; 3 (5): e75.

**Anyone can get yellow fever, but the elderly have a higher risk of infection. If a person is bitten by an infected mosquito, symptoms usually develop 3 to 6 days later.**

## German Federal Minister of Education and Research Visits FIC

**Dr. Elias A. Zerhouni, Director, National Institute of Health (NIH), met with Dr. Annette Schavan, German Federal Minister of Education and Research and Professor Matthias Kleiner, President of the German Research Foundation (DFG), on June 8, 2007, at the Fogarty International Center (FIC).**

The meeting, coordinated by Dr. James E. Herrington, Director, Division of International Research (DIR), FIC, focused on research priority setting and translational research issues. Dr. Zerhouni discussed how the NIH roadmap initiative was being used to transform and translate research from “bench to bedside.”

Dr. Zerhouni provided a review of NIH funding versus private sector research funding, underscoring that much of what the NIH does is to support basic research. The Germans appreciated the explanation that Dr. Zerhouni provided on NIH translational research activities; they asked if this area could be one for further cooperation between the NIH and German researchers. As such, the Germans may contact NIH in the future to undertake such collaboration.

The delegation also met with Dr. Richard M. Suzman, Associate Director, Behavioral and Social Research Program, the National Institute on Aging (NIA), who provided highlights on the NIA's inter-



Professor Matthias Kleiner, Dr. Annette Schavan, Dr. Elias A. Zerhouni, and Dr. James E. Herrington (L-R)

national social and behavioral research portfolio—and Dr. Joseph Harford, Director, Office of International Affairs, Office of the Director, National Cancer Institute (NCI), who highlighted the future focus of the NCI research priorities.

## Dr. Joel Breman Speaks at the Wellcome Trust Centre for the History of Medicine on Smallpox Eradication



Dr. Joel Breman

**Dr. Joel Breman, Senior Scientific Advisor, Division of International Epidemiology and Population Studies (DIEPS), Fogarty International Center (FIC), presented at the Wellcome Trust Centre for the History of Medicine, University of London, lecture series *Histories of the Global Eradication of Smallpox*, April 25, 2007.**

His presentation was entitled, *A Miracle Happened There: The West and Central African Smallpox Eradication Program and its Impact*.

Dr. Breman worked for almost 13 years on smallpox. He lived in Guinea from 1967 to 1969 as a medical epidemiologist, also covering Senegal. He was responsible for smallpox and other disease surveillance in eight West African francophone countries belonging to the Organisation de Coordination et de Coopération pour la lutte contre les Grandes Endémies, the OCCGE, a regional public health and research organization, based in Burkina Faso, from 1972 to 1976. He was at the Smallpox Eradication Unit, the World Health Organization (WHO), Geneva, completing and confirming eradication, from 1977 to 1980.

In the years at the end of the global program, he was responsible for poxvirus research, focusing mainly on human monkeypox and certification of global eradication. During all these postings overseas, he was a United States Centers for Disease Control and Prevention, then the National Communicable Disease Center (CDC) staff member.

His talk focused on his experiences in Guinea to reflect what happened elsewhere in the program, while granting the great diversity of history, cultures, politics and disease ecology in the areas where pox-fighters worked. Dr. Breman said, “I know I am representing over 50 CDC West and Central African pox-fighters and more than a thousand African and expatriate health workers, and all their families—to whom I dedicate this talk...”

Dr. Breman asked, “What is a miracle? One definition is ‘an event in the natural world, but out of its established order, possible only by the intervention of a divine power.’ Certainly, eliminating a disease in less than 5 years that had been firmly established in West Africa for over a millennium was miraculous.”

“The ‘divine power’ was the fortuitous convergence of modern science and technology; the political will of newly emancipated African countries committed to a better life for their people, including smallpox eradication; devoted African health workers; a United States Presidential decision to support WHO and the African program through the U.S. Agency for International Development; and a group of young, naive, brash, irreverent, idealistic, and adventurous medical and operational staff from the CDC,” said Dr. Breman.

## Highlights of FIC 66th Annual Advisory Board Meeting

**Dr. Roger I. Glass, Director, Fogarty International Center (FIC), welcomed the FIC Advisory Board, ad-hoc members and FIC staff, to the Stone House, May 21-22, 2007.**

Highlights of the program included a talk by Dr. Nelson K. Sewankambo, Dean, Makerere University Medical School, Kampala, Uganda, *Building Sustainable Research Capacity at Makerere University* (see page 9); and panel discussions. The panel discussion topics and participants follow:

*Training and Capacity Building—Are we doing enough?*

**Panel:** Dr. Robert Black, Professor and Chair, John Hopkins Bloomberg School of Public Health; Dr. Peter Hotez, Profes-

sor and Chair, Department of Microbiology and Tropical Medicine, The George Washington University and Sabin Vaccine Institute; and Dr. Arthur Reingold, Professor and Chair, Division of Epidemiology, Center for Infectious Disease Preparedness, UC Berkeley School of Public Health.

*Non-Communicable and Communicable Diseases—Achieving a Delicate Balance.*

**Panel:** Dr. Karen Antman, Provost and Dean, Boston University School of Medicine; Dr. Elizabeth Barrett-Connor, Professor and Division Chief, Division of Epidemiology, Department of Family and Preventive Medicine, University of California, San Diego; and Dr. Arthur Kleinman, Esther and Sidney Rabb, Professor and Chair,

Department of Anthropology, Harvard University.

*Implementation Research.*

**Panel:** Dr. Patricia Danzon, Ceilia Moh Professor, Health Care Systems Department, The Wharton School, University of Pennsylvania; Dr. Douglas Heimbarger, Professor, Division of Clinical Nutrition and Dietetics, Departments of Nutrition Sciences and Medicine, University of Alabama at Birmingham; and Dr. Jim Yong Kim, Associate Clinical Professor of Social Medicine, Head, Department of Social Medicine, Brigham and Women's Hospital, Harvard School of Public Health.

Group discussions include on: *Moving the Agenda Forward* and *Constituency Building*.



Dr. Jim Yong Kim (forefront) and Dr. Robert Black (foreground)

## Russian Alcohol Policy: Law Broadens Authority of Federal Government

**“Russian alcohol policy in the making”**

Control of alcohol consumption is a multifaceted issue, complicated by the legal status of alcohol and the danger of its excessive consumption. Most governments have a variety of policies directed at controlling consumer behavior, administering taxation of alcoholic beverages and monitoring their quality.

Globally, alcohol control policies have undergone a number of substantial changes since the beginning of the 20th century, ranging from complete prohibition in the early 1900s (i.e. U.S. and Sweden), to an absolute lack of control following the collapse of the Soviet Union in 1991 (i.e. Russia and other former Soviet States). The latter group of countries, specifically Russia, is the focus of this paper.

Government officials in two regions of the Russian Federation declared a state of emergency in October 2006, when over 700

people were poisoned and 33 died after consuming tainted alcohol. These poisonings are a serious reminder of the 40,000 alcohol-related deaths in Russia each year. Mortality from alcohol poisonings has been a steady problem in Russia.



Russia is the largest consumer of alcohol in the world—with an annual per capita consumption of about 18 liters of pure alcohol. For over two decades, the Russian government did not implement alcohol policies in Russia—but many officials recognized, and voiced their concern, over the dangerous alcoholization of the Russian society.

As a result, during the past two years a number of laws have

been passed attempting to affect the extent of alcohol consumption in Russia.

On January 1, 2006, a new law for controlling production of ethyl alcohol and ethyl containing products was enacted. This policy was intended to decrease the number of alcohol-related poisonings, through a comprehensive overhaul of the monitoring and enforcement system involved in the production and quality control of alcoholic beverages.

The law broadens the authority of federal government bodies that control the manufacture and sale of alcoholic products. Such federal bodies are responsible for the introduction of a unified state information system that registers production and sales volumes of alcoholic beverages in order to ensure state control over the production and distribution process. Local governments have the authority to set the procedures for licensing the retail sale of alcoholic products, to issue such licenses and to monitor entities’

compliance with license stipulations.

In this paper, Dr. Marya Levintova, International Program Officer, Russia, Eurasia and Arctic Affairs, Division of International Relations (DIR), Fogarty International Center (FIC), NIH, examined implementation barriers to the new law by studying legislation on the control, production and the turnover of ethyl alcohol and ethyl alcohol containing products and reviewing news reports, research and historical documents.

Dr. Levintova notes that there are barriers that may continue to present setbacks toward realization of this legislation, however the law represents an opportunity to ameliorate the deteriorating health status and reverse the impending mortality crisis in Russia.

The study author is Levintova M. *Alcohol and Alcoholism Advance Access* published on May 30, 2007. doi:10.1093/alcac/m040.

## Dr. Roger I. Glass on Partnerships for Training and Research at The Global Health Council Conference



Dr. Roger I. Glass

***Partnerships: Working Together for Global Health, The Global Health Council's 34th Annual International Conference, was held May 29—June 1, 2007, in Washington, D.C.***

The conference was dedicated to exploring health partnerships—how they are built, what they have to offer and what they can deliver to those living in poverty and disease.

Participants included more than 2,000 colleagues from nearly 60 countries, who met to address today's most pressing global health

issues. They discussed how to use collective experiences, resources and expertise to change the fundamentals of global health through partnerships.

Dr. Roger I. Glass, Director, Fogarty International Center (FIC), was a panelist at the event. In his talk: *The Fogarty Experience with Partnerships for Training and Research*, Dr. Glass shared success stories of FIC's 20-plus years of research and training experience in low- and middle-income countries, based upon successful global health partnerships.

Dr. Glass discussed FIC's early programs to train foreign scientists and how, once they returned home, their FIC supported research enabled them to become independent investigators. He remarked that friendships, which are formed early in a researcher's career, lead to career-long collaborations. "In the competitive world of health re-

search, those scientists who have been most successful have maintained contact with their mentors, or scientific peers, through active collaboration, productive research and good human chemistry," said Dr. Glass.

"We have monitored the building of centers of excellence at several sites around the world through the grant and training mechanisms funded by our institution," said Dr. Glass, "a number of centers of research excellence in the developing world can trace their early involvement in research directly to FIC programs that supported the training of their research staffs."

"Further," said Dr. Glass, "these centers have benefited from long term 'twinning' relationships with academic medical and public health institutions in the U.S. that have helped attract a broader base of funding. FIC investments have borne fruit in terms of discoveries, education and measurable improvements in health care that go far beyond the relatively modest early investments in training and research."

"A new program of framework grants to U.S. institutions—and the training of emerging U.S. investigators and future leaders—is helping to extend these collaborations into non-medical disciplines that are essential to build research capacity to improve health in low- and middle-income nations," said Dr. Glass. He concluded his talk by providing examples of FIC-supported emerging, growing and maturing centers of research.

FIC's Dr. Flora Katz, Program Officer, Division of International Training and Research (DITR), Dr. Ken Bridbord, Director, DITR, and Dr. Karen Hofman, Director, Division of Advanced Studies and Policy Analysis (DASPA), co-authored Dr. Glass's presentation. To learn more about the conference visit: <http://www.globalhealth.org/conference/>

## Timothy J. Tosten: Appointed to Executive Officer, FIC

**Dr. Roger I. Glass, Director, Fogarty International Center (FIC), on behalf of the FIC staff, welcomes Mr. Timothy J. Tosten to the position of Executive Officer, FIC.**

As Executive Officer, Mr. Tosten will oversee the administrative operations of the FIC including financial management, information technology, general administration, ethics and procurement. In addition, he will manage the Lawton Chiles International House (the Stone House), as well as the international services the FIC provides to the NIH, which include the notice for foreign travel (NFT) system and the official government passport process.

Mr. Tosten comes to the FIC from the National Institute of Mental Health (NIMH), where he was the Associate Director for Administration, Division of Intramural Research Programs. There, he managed the budget, contracts, procurement, information technology and facilities. He also served as the co-chair of the NIH Intramural Administrative Officers Group.

In 1993, Mr. Tosten began his NIH career as a Presidential Management Intern—dedicated to the Office of Research Services (ORS). He spent 12 years at the ORS, where he worked in varying positions and areas. These included management of the child care programs, food services contracts, the NIH travel contract and the initiation of the first-ever NIH-wide sign language interpreting services contract. Mr. Tosten also oversaw the construction of the East Child Care Center, the Building 35 cafeteria, the renovation of the Building 10/B1 cafeteria and the expansion of the child care center on Executive Boulevard.

Mr. Tosten is a member of the NIH Administrative Training Committee, where he is Chair of the newly formed Administrative Fellows Program. He has a B.S. degree in Political Science from the University of Maryland–Baltimore County and a Masters of Public Administration from the University of Baltimore.

## Dean, Makerere University Medical School, Uganda Speaks at FIC

**Dr. Nelson K. Sewankambo, Dean, Makerere University Medical School, Kampala, Uganda, gave a talk, *Building Sustainable Research Capacity at Makerere University*, on May 21, 2007, at the Fogarty International Center (FIC), Advisory Board Meeting.**

The Infectious Diseases Institute (IDI), at Makerere University, opened in October 2004; training activities began in 2002 in temporary facilities. The IDI, which is housed in a new, state-of-the-art facility at the School of Medicine on the Makerere campus treats HIV/AIDS patients, trains physicians, conducts research and develops models of HIV/AIDS care that have a broad application for all of Africa and the rest of the world.

“Makerere University Medical School is one of the leading research and educational institutions in Africa,” Dr. Sewankambo said. “The establishment of the IDI is a significant milestone for the university. This project represents the first infrastructure investment at the medical school in 35 years.”

The IDI serves as both an HIV/AIDS clinic that serves thousands of patients every month and as a regional HIV clinical training center for physicians and nurses. Its founders, the Ugandan and North American physicians of the Academic Alliance for AIDS Care and

Prevention in Africa (Academic Alliance), believe the IDI serves as a model for the treatment and prevention of AIDS in a resource-limited environment.

The creation of the IDI was in response to a shortage of adequately trained HIV/AIDS medical staff—and the growing need for improved treatment of people living with AIDS in Uganda and throughout East Africa. The center offers services five days a week and is able to treat 300 patients a day.

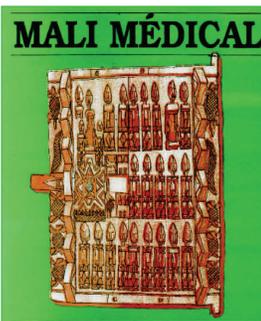
Physicians, nurses and other health care professionals, from 13 countries in Africa, have received training at the IDI in the care and treatment of HIV/AIDS through a partnership of local and international HIV/AIDS specialists.

IDI trains over 200 doctors and other healthcare professionals each year. The IDI will have a significant impact on the AIDS pandemic in Africa for many years to come.



Dr. Nelson K. Sewankambo

## Mali Médical Gets Published Research Out to Global Audience



**“Mali Médical goes global”**

Since 2005, Environmental Health Perspectives (EHP) and other members of the African Medical Journal Editors Partnership Program (AMJEPP)

have worked with counterpart African journals to increase the latter journals' capacity and reach.

Now Mali Médical, the African partner journal for *Environmental Health Perspectives* and the *American Journal of Public Health*, is getting its published research out to a worldwide audience by becoming the second of the African AMJEPP journals to be accepted for indexing in MEDLINE—the essential database for far-reaching distribution of biomedical information. *African Health Sciences*, the Ugandan partner journal for *British Medical Journal* (BMJ), was indexed prior to the formation of the AMJEPP.

Due to the sustainability and capacity challenges typically faced by developing nations, the African journal partners have been hampered in their efforts to disseminate essential research information internally, as well as internationally.

The AMJEPP, funded by the Fogarty International Center (FIC), the National Library of Medicine (NLM) and the National Institute of Environmental Health Sciences (NIEHS), NIH, pairs these journals with established journals in the U.S. and the U.K. that can offer guidance, training and expertise (see *Global Collaboration Gives Greater Voice to African Journals*, EHP 113:A452–A454 [2005]).

Mr. Thomas J. Goehl, EHP's former editor-in-chief and one of the architects of the AMJEPP, sees MEDLINE acceptance as a highly promising opportunity for Mali Médical to move beyond the foundation it has established in local African countries and increase its presence internationally in biomedical research.

“The editors and editorial board of Mali Médical have worked very diligently in developing the journal into one that has become a focus

for the medical community in many franco-phone countries in Africa,” Goehl says. “With the inclusion of the journal in MEDLINE, the rest of the world will now have much easier access to the first-rate articles being published by Mali Médical.”

Ms. Hui Hu, EHP's international editor, agrees that making Mali Médical searchable on MEDLINE will allow it to be much more visible to the international audience. “This is a milestone step to the international community for Mali Médical,” she says.

Adding to this increased visibility is Mali Médical's recent inclusion in the International Standard Serial Number (ISSN) Register, the world's most comprehensive and authoritative registration source for the identification of serial publications. This will allow the journal to be cited, abstracted, and indexed more accurately.

The author of this paper is: Tillett, T. *Environ Health Perspect.* 2007 May.

## Disease Control Priority Project: Implementing the Research Agenda

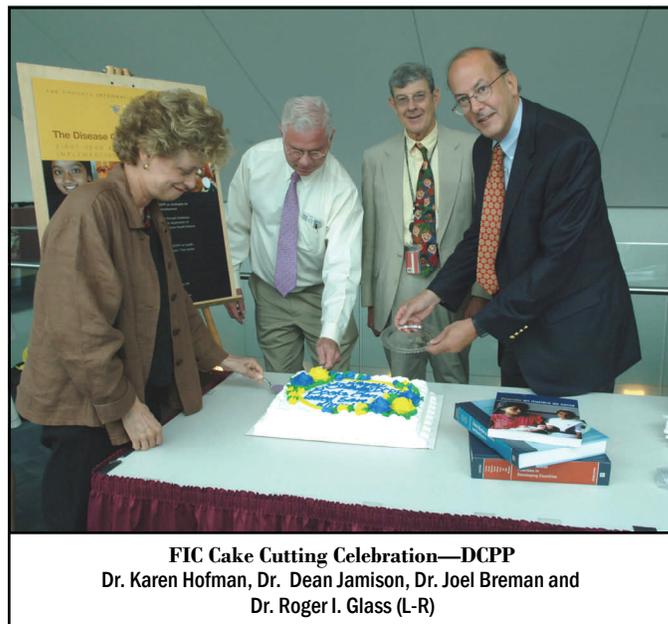
*Continued from page 1*

Dr. Dean Jamison, DCP Editor and Consultant, Division of Advanced Studies and Policy Analysis (DASPA), FIC, authored and “pulled” the DCP team together; Dr. Joel Breman, DCP Editor and Senior Scientific Advisor, Division of International Epidemiology and Population Studies (DIEPS), FIC, has also been instrumental to the success of the DCP.

The meeting concluded with group discussions on moving the DCP research agenda forward on non-communicable, chronic diseases and on how to best inform policymaking in developing countries, based upon evidence-based analysis.

“This first anniversary meeting was a great opportunity for FIC to enable the NIH community to learn about ‘best buys’ in public health from key DCP editors and authors. It was especially gratifying to hear how this work has already impacted major organizations and policymakers,” said Dr. Karen Hofman, Director, DASPA, FIC.

To learn more about DCP, or to download a free copy of the volumes, visit: <http://www.dcp2.org/main>



**FIC Cake Cutting Celebration—DCPP**  
Dr. Karen Hofman, Dr. Dean Jamison, Dr. Joel Breman and Dr. Roger I. Glass (L-R)

# DCPP!

**Dr. Karen Hofman, Director, DASPA, FIC, is leading FIC efforts, together with NLM, to promote African journal partnerships. It is one of the myriad ways that FIC is promoting opportunities to enhance the global culture of science.**

## Lessons from the Application of the Disease Control Priority Project to the Mexican Health Reform

*Continued from page 1*

“Speaking of this reform,” Dr. Frenk said, “the main message I would like to leave with you is that evidence-based policy is no longer a buzz word but a real possibility. In our contradictory and often contentious world we require, more than ever before, the power of science to illuminate the arduous process of purposeful social change.”

“Because of its innovative methodology, its comprehensive scope and its interdisciplinary approach, the first edition of Disease Control Priorities in Developing Countries (DCP1) was both a feat of ingenuity and a feast of new insights. The second edition (DCP2) has accomplished what seemed impossible—to surpass its predecessor,” Dr. Frenk stated.

“Since DCP1 the global health arena has changed. There are new actors, new

debates, new challenges and novel horizons,” said Dr. Frenk. “There is also a new consensus, especially around the key role played by health, in development and the central role of knowledge in the improvement of health.”

“The first part of the consensus is based on the increasing evidence that health is not only the result of economic growth—but also one of its major determinants,” he continued, “the second part of the consensus is that scientific knowledge represents the driving force for health progress.

According to Dr. Frenk, research is a value in of itself—an essential part of human culture. At the same time, knowledge has an instrumental value as a means to improve health. This, he explained, is achieved through three mechanisms.

First, knowledge gets translated into new and better technologies, such as drugs,

vaccines, and diagnostic methods. This is the best-known mechanism through which it improves health.

Second, knowledge is also internalized by individuals, who use it to structure their every day behavior in key domains like personal hygiene, feeding habits, sexuality and child-rearing practices. In this way, knowledge can empower people to modify their lifestyles in order to promote their own health. Knowledge becomes translated into evidence that provides a scientific foundation for decision-making both in the delivery of health services and in the formulation of public policies.

Finally, the third issue is the ‘know-do gap.’ The challenge here is to allow the power of ideas to guide the ideas of power, that is, the ideas of those who have the power to design, approve and implement health.

## FIC Upcoming Program Announcements and Requests for Applications

Program	Contact	Receipt Date	Eligibility
Brain Disorders in the Developing World (BRAIN)	Kathleen Michels, PhD michelsk@mail.nih.gov	AIDS-related: August 23, 2007	U.S. and foreign institutions; at least 2 investigators (1 from institution in high-income country and 1 from institution in low- to middle-income country) must collaborate on application as PI & Co-Investigator; PI may be from low- to middle-income country or from U.S. or other high-income country institution.
Trauma and Injury (TRAUMA)	Aron Primak, MD primacka@mail.nih.gov	August 25, 2007	U.S. institutions; PIs must be project director on NIH, CDC or Dept. of Transportation Trauma Centers "parent" research or training grant with at least 18 months of active research support remaining at time of application; only one application per U.S. institution will be accepted.
Global Infectious Disease Research Training Program (GID)	Barbara Sina, PhD sinab@mail.nih.gov	September 13, 2008	U.S. and low- to middle-income institutions with demonstrated history of research collaboration.
Framework Programs for Global Health (FRAMEWORK)	Flora Katz, PhD katzf@mail.nih.gov	September 20, 2007	U.S. and low- to middle-income country institutions with key personnel on minimum number of currently-funded NIH grants in global health; applications must represent multi-disciplinary coalition & include representatives from at least 3 distinct schools or departments.
Fogarty International Research Collaboration Award—Basic Biomedical (FIRCA—BB)	Kathleen Michels, PhD michelsk@mail.nih.gov	September 21 2007	PI of U.S. based NIH-sponsored research project grant that will be active for at least 1- year beyond submission date of application, in collaboration with partner institutions in low- to middle-income countries.
GRIP Basic Biomedical and GRIP Behavioral and Social Science (GRIP)	Aron Primak, MD primacka@mail.nih.gov	September 21, 2007	Low- to middle- income scientists currently or recently supported through FIC D43 int'l training programs, through NIH Visiting Program for Foreign Scientists, or as NIDA INVEST or Humphrey Fellowships.

**FIC program research grants or research training grants are listed at: <http://www.fic.nih.gov/funding>**

## FIC Upcoming Meetings

Meeting	Date	Location	Summary
<i>Science Behind Polio Eradication</i>	September 19-20, 2007 (2 full-days)	Natcher Auditorium (Building 45) Balcony B and C	Consideration of the polio vaccines, particularly the components, production, strategies and optimal deployment of live oral and inactivated vaccines will be the major theme of the symposium. Hosted by the FIC and National Institute of Allergy and Infectious Diseases (NIAID).
<i>CSE Global Theme Issue</i>	October 22, 2007 (1 full-day)	Masur Auditorium (Building 10)	In conjunction with the release of the <i>Council of Science Editor's Global Theme Issue on Poverty and Human Development</i> of 150 journals from around the world. Four/five selected papers will be presented at the meeting.

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## GLOBAL HEALTH MATTERS

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**DCPP Meeting!  
Cover & Page 10**

