

Global Health Matters

News from the John E. Fogarty International Center

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New Framework Programs Launched

The Fogarty International Center (FIC), in partnership with the National Institute of Dental and Craniofacial Research (NIDCR), both part of the National Institutes of Health, announced a new funding initiative, "Framework Programs in Global Health," to support promising approaches in global health research and training at universities in the U.S. and in low- and middle-income nations.

Specifically, the Framework programs will provide administrative support to link multiple

schools on one or more university campuses to advance global health research and training. "As we look at global health challenges, including AIDS, poor health and disease from environmental contamination, and the growing burden of obesity and mental illness, among others, we understand that new and expanded strategies are needed in addressing these problems," said Dr. Sharon Hrynkow, Acting Director of the Fogarty International Center. "This new program

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WHO Director-General Visits NIH

Dr. Jong-wook Lee, Director-General of the World Health Organization (WHO), presented "Health Challenges for Research in the 21st Century," on December 6, 2004, on the NIH campus. The talk was part of the David E. Barmes Global Health Lecture Series.

To an audience of more than 250 that included NIH scientists, members of the diplomatic corps, public health officials and other scholars, Dr. Lee discussed the historical context of global public health. His goal was to enable the audience to "think as clearly as possible about our present and future responsibilities." Dr. Lee described three types of public health breakthrough: cures, methods of prevention and vaccinations. He also talked about how applications of these methods could be used to address current global health issues.

Co-sponsored each year by FIC and the National Institute of Dental and Craniofacial Research (NIDCR), the lecture was the fourth in a series that honors the late



Dr. Sharon H. Hrynkow, FIC Acting Director, joined (from left) Dr. Elias A. Zerhouni, NIH Director, Dr. Jong-wook Lee, Director-General of the World Health Organization, and Dr. Lawrence A. Tabak, Director of the NIDCR, following the 2004 Barmes Lecture.

Dr. David E. Barmes, a long-time WHO employee, special expert for international health at NIDCR, and ardent spokesperson for global health.

The full text of Dr. Lee's speech is available at <http://www.who.int/dg/lee/speeches/2004/barmeslecture/en>. ❖



Sharon Hrynkow, Ph.D.
Acting Director, FIC

Message from the Director

More than 40 years ago, President John F. Kennedy noted, “A rising tide lifts all boats. And a partnership, by definition, serves both partners, without domination or unfair advantage.”

This vision of partnerships was shared by the late Congressman, John E. Fogarty, who valued working with others—around the world—on equal footing and for the common good. Congressman Fogarty tirelessly championed the improved health of Americans through international health research programs. Today, this vision inspires the FIC in building international partnerships for the entire NIH and in supporting research and training programs to advance U.S. global health objectives.

FIC’s flagship program, the AIDS International Training and Research Program—now in its 17th year—has built much-needed scientific and health capacity in more than 90 low- and middle-income nations. Graduates of this program have become senior leaders at foreign universities, applied successfully for NIH grants (as well as grants from other science agencies), and formed the framework for effective public policymaking in their home nations. Many are associated with the President’s Emergency Plan for AIDS Relief and the Global Fund to Combat AIDS, Malaria, and Tuberculosis—both key Administration efforts in the fight against AIDS. The partnerships built on the framework of the FIC AIDS training program underpin U.S. and global efforts to fight AIDS. And they have led to the identification of new AIDS prevention strategies and tools that have enhanced the global fight against this killer disease.

In this newsletter, the country profile about India includes examples of partnerships between FIC and medical research teams in the world’s largest democracy. In January, I visited Ahmedabad, India, to participate in the 92nd Indian Science Congress. India’s President and Prime Minister both addressed the Congress, and highlighted the importance of science as a tool of development. Critically, both urged participants to work in partnership across disciplinary lines and across borders, a theme

I underscored in the Fogarty presentation on “Global Health and Women.”

For the third successive year, we are conducting meetings with Directors or Deputies of each NIH Institute and Center, as well as those within the NIH Office of the Director. These so-called “State of the Union” meetings are important outreach efforts by FIC to engage ICs on international programs and activities and to identify and solidify our partnerships across NIH.

We continue to work with our partners in other U.S. agencies, in NIH counterparts around the world, with our grantees and trainees in universities at home and abroad, and with the DHHS Office of Global Health Affairs. Recent actions included support for the 6th Global Forum on Bioethics in Research held in Malawi in March (partners included Aga Khan University, COHRED, European Commission, European and Developing Countries Clinical Trials Partnership, INSERM, Rockefeller Foundation, South Africa Medical Research Council, UK Medical Research Council, Wellcome Trust, and World Health Organisation UK); partnership with NHLBI in support for the first round of awards under the Fogarty International Collaborative Trauma and Injury Research Training Program (ICTIRT); partnership with ORWH in celebrating the accomplishments of international women on the NIH campus as part of International Women’s Day on March 8; and partnership with eight ICs plus the Canadian Institute of Health Research in announcing FIC’s Brain Disorders program in the developing world.

Through these partnerships, FIC continues to advance the NIH mission internationally and to build scientific capacity to benefit the global community and the United States. We look forward to working with you, as partners, to meet these goals!

A handwritten signature in blue ink that reads "Sharon Hrynkow".

Medical Reporting Workshop in Panama

The news media are a primary source of health education and medical information for many people around the world. Journalists must explain complex topics, and the public trusts health-news media, in part because reports come directly from research findings.

Responding to concerns by researchers, physicians and medical journalists, Fogarty and five NIH partners, NCI, NIEHS, NIMH, OAR and NLM, convened a workshop in October 2004 for about 25 health and medical reporters and broadcasters from 17 countries in Latin America and the Caribbean (LAC), 14 of which are among the top 20 NIH-funded countries in LAC. The purpose was to provide current data on diseases that affect this region of the world and to explore strategies for covering and reporting health-related news stories.

Scientific sessions were taught by experts from the United States and the developing world who specialize in the biology and epidemiology of global health topics, including HIV/AIDS, cancer and tobacco, cancer and obesity, mental health and environmental health. Health journalism trainers, through applied exercises, emphasized fostering dialogue and understanding between journalists and scientists; following the evidence trail (including obtaining appropriate leads); review, critique and analysis of health and medical articles; science reporting accuracy; and journalism ethics and medical journal database training.

One of the lasting benefits of the program is the use of the NLM's Medline website to search for medical and public health information. More than 50

news stories were written or broadcast by the two groups of journalists using information or tools acquired in the workshops. These two workshops could serve as a model for future NIH initiatives to build capacity for comprehensive health and medical reporting in other developing regions. ❖

Live Broadcast on NIH Funding Opportunities

In partnership with St. Jude Children's Research Hospital and the Society of Research Administrators International (SRA), NIH held a live videocast/broadcast in January 2005 for international investigators interested in expanding their NIH funding. This event was a follow-up to a videotaping by St. Jude staff of an NIH Grants Administration Workshop for International Grantees held at the SRA Annual Meeting in Salt Lake City in October 2004. FIC organized and planned this one-day workshop that also involved NCI, NIAID, NIEHS and NIDA. More than 60 people participated, from 14 sites in 10 countries, including Mexico, Brazil, Canada, Jordan, China, Chile, Guatemala, and Spain.

The NIH presenters who answered questions during the event were Bruce Butrum, Chief Grants Management Officer, FIC; Andy Jones, Grants Specialist, FIC; J. Fernando Arena, M.D., Ph.D., Program Director, Clinical and Genetics Epidemiology Research Branch, NCI; Dorothy Duke, Chief Grants Management Officer, NIEHS and Jeanette Gordon, Grants Management Specialist, NIAID. Individuals interested in serving as an international investigator or grants administrator can view this workshop on the web: <http://www.cure4kids.org/>. ❖



Staff Highlight

Kenneth Bridbord, M.D., who heads FIC's Division of International Training and Research (DITR), is a champion of conquering HIV/AIDS in low- and middle-income nations. He was recently named the year 2005 recipient of the Gano Dunn Award for professional achievement in engineering, industry, or finance as an alumnus of the Albert Nerken School of Engineering at the The Cooper Union school. The award is named for Dr. Dunn who was widely acclaimed for his professional accomplishments in science and in business.

Country Profile: India

This profile begins a series about countries in which Fogarty supports significant research and training programs.

Collaboration in science and technology has been an enduring feature of the United States-India relationship for more than three decades, and cooperation in the health sciences has been prominent. Fogarty and NIH partners in India link U.S. scientists and colleagues around common themes. The following FIC programs tackle critical challenges of global import and will lead to advances that will benefit the United States, India and the world community.

HIV/AIDS-Related Research Training. Co-sponsored by NIAID, NCI, NIMH and other NIH Institutes and Centers (ICs), the FIC AIDS International Training and Research Program (AITRP)

awards grants to U.S. institutions, which, in partnership with foreign institutions, identify scientists, clinicians and health workers from the cooperating countries to participate in joint research training programs. The primary goal of this program is to build multidisciplinary biomedical, behavioral and social science research capacity to prevent HIV/AIDS-related infection and to integrate prevention with therapy and care for adults and children affected by HIV/AIDS in the participating country. This program supports several training collaborations in India.

The Brown-Tufts AITRP has trained more than 20 health professionals from India in laboratory, behavioral, clinical and public health-related research areas. The primary collaboration has been with YRGCARE (the Y.R. Gaitonde Centre for AIDS Research and Education), a community-based clinical care and research organization in Chennai (Madras). Also working with the Indian Council for Medical Research-affiliated Tuberculosis Research Center and others, this AITRP is supporting critical work on the nutritional and metabolic status of injection drug users in Chennai. Research training through the Brown-Tufts AITRP has strengthened the ability of YRGCARE to conduct high-quality research, and this is reflected in the fact that YRGCARE is an HIV/AIDS Prevention and Treatment Network (HPTN) site. A former AITRP trainee, Dr. N. Kumarasamy, is the site

Principal Investigator for an HPTN multicenter study that is evaluating the use of anti-retroviral drug therapy to decrease HIV transmission from infected people to their uninfected spouses and is a leader in an NIH-funded AIDS Clinical Trials Group study evaluating several drug regimens to treat HIV infection in low-resource settings.

Albert Einstein College of Medicine's AITRP supports in-country workshops on various clinical, epidemiological and laboratory research aspects of AIDS. The program funds postdoctoral research training and a Master's in Clinical Research training program. Collaborating institutions include the All India Institute of Medical Sciences, New Delhi; the Health Institute for Mother and Child, New Delhi; the Bhavnagar Blood Bank, Gujarat; the TRC, Chennai; the Jawaharlal Nehru Centre for Advanced Scientific Research, Koramangala (Bangalore); and the National Center for Cell Science, Pune.

Currently in its fifth year, this AITRP's activities range from investigations into molecular characterization of Indian subtype C HIV and *C. neoformans* strains, development of diagnostic tools for detection of *C. neoformans* and *M. tuberculosis*, and behavioral issues surrounding stigma in adolescents. The AITRP has so far trained six visiting scientists, three postdoctoral fellows and more than a dozen graduate students working on different aspects of HIV/AIDS.

Bioethics Education and Career Development.

In partnership with NIMH, NIAID and other ICs, and with the National Aeronautics and Space Administration, FIC's bioethics training program supports researchers from the Indian Council of Medical Research on a two-year project to plan a program in bioethics and research ethics. Project objectives include uniform national bioethics curriculum for students, health professionals and researchers; a network of faculty to deliver this curriculum; and a system to improve this curriculum regularly.

Clinical Research Training Fellowships. With co-sponsorship from the Ellison Medical Foundation, NIDA, NIAID and the National Center on Minority Health and Health Disparities, FIC has established an initiative for U.S. medical, dental and other graduate students. Students receive one-year fellowships to conduct clinical research at leading NIH-funded research centers in 18



Fogarty Program Collaborators

countries, including at two sites in India. U.S. students paired with Indian counterparts are working in Vellore on the molecular epidemiology of cryptosporidial infections in HIV-infected individuals and in Chennai on the epidemiology and treatment of HIV/AIDS.

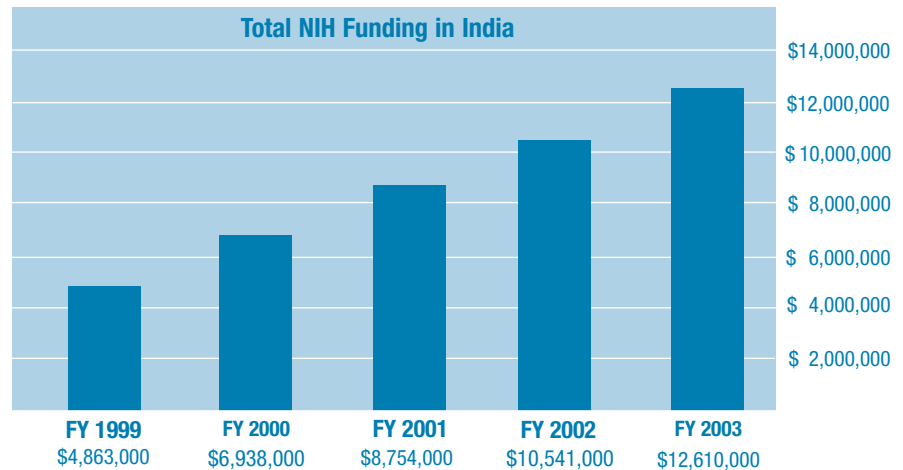
Tobacco and Health Research. FIC launched the International Tobacco and Health Research and Capacity Building Program in collaboration with NIDA, NCI and four other ICs, and with the CDC, the Canadian Institutes of Health Research (IHR) and WHO's Tobacco Free Initiative. Funded by this program, the University of Toronto is collaborating with three institutes in India to expand India's Sample Registration System—the primary system for collection of Indian mortality data—to obtain reliable estimates of mortality from tobacco use by age, gender and socioeconomic group. Under another grant, researchers at the University of Minnesota are collaborating with Indian colleagues to conduct a randomized, multicomponent community intervention trial in four cities and 56 schools.

Research on Brain Disorders. Co-supported by NINDS and eight ICs, with the Canadian IHR and Mexico's Consejo Nacional de Ciencia y Tecnología, the FIC program Brain Disorders in the Developing World: Research Across the Lifespan supports collaborations that boost research and capacity building on brain disorders. Scientists at the Morehouse School of Medicine and the Medical Research Center in Jabalpur are working to address the role of immunopathogenesis in malaria-induced neurological impairment.

The Brain Disorders program supports a research partnership between Brown University AIDS researchers and partners in Chennai to examine brain dysfunction associated with HIV/AIDS.

International Clinical, Operational and Health Services Research and Training Awards (ICOHRTA). Together with five other ICs, FIC funds U.S. and developing world institutions in their efforts to build infrastructure for integrated clinical, operational and health services research in India. Research training in psychiatric epidemiology, services research and genetics is supported between the National Institute of Mental Health and Neurosciences in Koramangala, allied Indian institutions and at Washington University in

St. Louis, Missouri. The major themes of this project are alcoholism, substance abuse and genetics, with the goal of bringing evidence-based psychiatry to India.



Combating Brain Drain—NIH Alumni

Associations and GRIPs. Fogarty and NIEHS have worked together to set up an alumni association of FIC/NIH trainees. The goals are to provide a supportive peer network for scientists who return to India after training in the United States, and to foster exchange of expertise and ideas. The U.S. Education Foundation in India will work with FIC grantee Dr. Kenneth Mayer of Brown University to launch a Web site, identify alumni and initiate activities.

Efforts Across NIH.

- *School of Public Health:* FIC, CDC and DHHS partners are working with the American Society of Public Health and its Indian counterpart to establish the first Indian School of Public Health.
- *Vision Research:* The NEI is working to expand collaboration in vision research in India. Efforts are under way to develop a letter of intent aimed at strengthening research to prevent visual disability and blindness.
- *Visiting Program:* Visiting fellows and scientists make up a significant component of the total foreign scientists in the intramural laboratories of NIH, and their numbers have been steadily increasing. The number of Visiting Fellows from India increased from 156 in the year 2000 to 242 in 2003, and the number of Visiting Scientists increased from 14 to 27 during the same period.

For more information on NIH's programs in India, send an e-mail to ficinfo@nih.gov. ❖

Japanese Learn Grants Process NIH-Style

Fogarty convened the first NIH Japanese Program Officers Training Program from November 29 to December 10, 2004. Initiated as a result of talks between NIH Director Elias A. Zerhouni and Japanese Chief Cabinet Secretary Hiroyuki Hosoda, the program demonstrated the NIH grants process from application receipt through final funding.



Japanese delegation proudly displays certificates upon completion of course at NIH.

More than 35 NIH staff participated in the training program, including key personnel from NHLBI, NINDS, CSR, OER, FIC, and DHHS. Six trainees from four different Japanese organizations participated. One trainee each came from the Ministry of Health, Labor, and Welfare; the Ministry of Agriculture, Forestry and Fisheries; and the New Energy and Industrial Technology Development Organization. Three trainees came from the Japanese Science and Technology Agency.

The Japanese trainees intend to propose changes to their peer review and awarding process. Ideas mentioned by the trainees included allowing funds to be carried over year to year, providing no cost extensions, separating duties in the peer review and awards processes, recruiting more career program officers for greater institutional knowledge, standardizing the program officer's role across ministries and replicating the method NIH ICs use to allocate funds across diverse programs and scientific areas. ❖

Mohan Receives Award from Medical Council of India

The Medical Council of India has awarded the prestigious Dr. B.C. Roy National Award to Dr. Vishwanathan Mohan for his original research contributions in diabetes. The B.C. Roy Award is the highest award for a medical doctor in India.



Dr. Vishwanathan Mohan

Dr. Mohan is a Fogarty foreign principal investigator under the International Clinical, Operational, and Health Services Research and Training Award (ICOHRTA). He collaborates with the University of Alabama, Birmingham, to train researchers in India on cardiovascular disease and diabetes.

Congratulations to Dr. Mohan! ❖

Upcoming Events

- **May 16–25** World Health Assembly (WHA58), Geneva, Switzerland.
- **May 17** Career Fair for Visiting Fellows, NIH campus, Bethesda, Maryland.
- **May 24** Fogarty International Center Advisory Board Meeting, NIH campus, Bethesda, Maryland.
- **May 31–June 1** Leadership Program for Women Health Scientists, NIH campus, Bethesda, Maryland.
- **May 31–June 2** Global Health Council Conference, Washington, DC.
- **June 2–3** Global Health Research Initiative Program for New Foreign Investigators (GRIP) Awardees Program, NIH campus, Bethesda, Maryland.
- **July 6** FIC Ellison Awardees Orientation, NIH campus, Bethesda, Maryland.

Science for Global Health

The following are examples of recent FIC grantee advances. We applaud our grantees!

Drug-resistant Tuberculosis

A 1996 pilot program in Orizaba, Mexico, provided an opportunity to evaluate the impact of directly observed treatment short-course (DOTS) on tuberculosis. DOTS is a comprehensive strategy endorsed by the World Health Organization for the control of tuberculosis. In this region of Mexico, 21 percent of new tuberculosis cases were resistant to at least one anti-tuberculosis drug, and 3 percent were multi-drug resistant (MDR) over a five-year period. The data demonstrated that DOTS could rapidly reduce transmission and incidence of both drug-susceptible and drug-resistant tuberculosis.

The case rates of MDR tuberculosis were also reduced. But the fatality rate was highest (12 percent) for patients infected with these strains. The implication is that in a developing country with a moderate rate of drug-resistant tuberculosis, DOTS can rapidly reduce the transmission of both susceptible and resistant organisms. However, additional measures, such as drug susceptibility testing and standardized or individualized therapy, are needed to improve clinical outcomes. ❖

Does DOTS Work in Populations with Drug Resistant Tuberculosis? **Kathy DeRiemer**, Ma. de Lourdes García García, et al. *The Lancet* (April 2, 2005)

The Impact of Schistosomiasis

Schistosomiasis, a disease caused by parasitic worms, remains one of the world's most prevalent infections, yet controversy persists over the magnitude of its impact on the global burden of disease. To develop an evidence-based reassessment of schistosomiasis-related disability, researchers performed a systematic review of the available data on disability-associated outcomes in all forms of schistosomiasis. The data indicate, collectively, that schistosomiasis is significantly associated with anemia, chronic pain, diarrhea, exercise intolerance and under nutrition. These findings lead to total disability estimates four to 30 times greater than previous estimates of disability-adjusted life years (DALYs), or years of productive life lost due to disability. In place of a 0.5 percent disability weight assigned to schistosomiasis by WHO estimates, an estimated two to 15 percent chance of disability appears evident in the average person with schistosomiasis. ❖

Re-gauging the cost of chronic helminthic infection: Meta-analysis of disability-related outcomes in endemic schistosomiasis. **Charles H. King**, Katherine Dickman, Daniel J. Tisch, *The Lancet* (April 30, 2005)

New Framework Programs

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will allow our traditional partners, the schools of public health, dentistry and medicine, to forge new ties with schools of business, engineering, law, communications, and others, all of which have much to offer as we tackle global health challenges," she added.

A second goal was explained by Dr. Flora Katz, the Framework Program Director. "We expect that this program will also energize the next generation of global health scientists. As we look at pipeline issues worldwide, we recognize the need to prepare now to ensure that our workforce is in place to address future challenges." The Framework programs will

also support global health curriculum development at the undergraduate and graduate levels. Other activities that could be supported included leadership and grants management training, opportunities for students to gain research experience with the diversity of groups involved in global health, and opportunities to explore community involvement in research programs, among others.

Applicant institutions may be from the United States and/or from eligible low- and middle-income countries. The first awards are expected in September 2005. FIC plans to commit about \$1 million to fund up to 10 new awards in the first year of the initiative. More information is available at <http://www.fic.nih.gov/programs/framework.html>. ❖

Errata

In the November 2004 issue of *Global Health Matters*, there were two errors on page 9 in an item about Fogarty Ellison fellows in Chennai, India. The fellows are studying the impact of antiretroviral therapy on the natural history of HIV disease, and Dr. Suniti Solomon's name was misspelled. We apologize for the errors.

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Surgeon General Richard Carmona Addresses FIC Board

Vice Admiral Richard H. Carmona, M.D., M.P.H., F.A.C.S., United States Surgeon General, Commander, USPHS Commissioned Corps, U.S. Department of Health and Human Services, addressed the 59th Fogarty International Center Advisory Board Meeting on February 8, 2005 at the Lawton Chiles International House on the campus of the National Institutes of Health in Bethesda, Maryland. Among issues discussed were his planned call to action on global health and needs in training to address trauma and injury. ❖



Vice Admiral Richard H. Carmona

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