

DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

Fiscal Year 2008 Funding for Global Health

Witness appearing before the
Senate Subcommittee on Labor-HHS-Education Appropriations

Dr. Roger I. Glass, Director
Fogarty International Center

May 2, 2007

Richard J. Turman, Deputy Assistant Secretary, Budget

Mr. Chairman and Members of the Committee, I am pleased to present the Fiscal Year (FY) 2008 President's Budget for the Fogarty International Center (FIC). The FY 2008 budget includes \$66,594,000, which reflects an increase of \$240,000 over the FY 2007 Continuing Resolution level of \$66,354,000 comparable for transfers proposed in the President's request.

Fogarty plays a uniquely critical role in promoting better health around the globe, an increasingly significant priority for the U.S. government. To address complex global health challenges, scientists worldwide must be able to work together, and robust research capacity must exist in locations where priority diseases are most prevalent, and be true for both communicable and non-communicable diseases. For example, the use of chemotherapy for cancer, the genes of Huntington's Disease, and hazards of methyl mercury poisoning and widespread radiation all resulted from the study of populations abroad where these conditions are highly prevalent. Fogarty rises to this challenge with its innovative research training programs that build the knowledge and skills of developing country scientists to perform health research in their countries and collaborate with U.S. scientists as full and effective partners. To advance global health research and research training domestically, Fogarty is also investing in the next generation of U.S. scientific leaders in global health research. Finally, Fogarty identifies crucial gaps in global health research and supports international research collaborations, which helps U.S. scientists maintain their competitive lead.

STRENGTHENING RESEARCH CAPACITY ABROAD

Infectious diseases continue to exact an enormous toll on millions of people in developing countries. HIV/AIDS, TB and malaria constitute a triple threat in many developing countries and collectively kill over six million people each year, according to the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund).

In the past 20 years, Fogarty programs have trained thousands of scientists in developing countries. Strong local research capacity is essential to ensuring the success of the President's Emergency Plan for AIDS Relief (PEPFAR), the Global Fund, and the President's Malaria Initiative (PMI). Fogarty's AIDS International Training and Research Program (AITRP) responds to the demand for in-country research capacity to effectively deal with the expanding HIV/AIDS epidemic. For example, Zambia, one of PEPFAR's focus countries, has received a significant amount of recent attention due to its early success in scale-up of antiretroviral therapy for its HIV/AIDS-infected population. This success is, in part, a result of the AITRP, which has allowed the University of Alabama to provide long-term degree training to 22 Zambian research scientists, all of whom have returned home and are working as researchers, educators, or program leaders in PEPFAR programs and other institutions such as the Centers for Disease Control and Prevention, UNICEF, and the World Health Organization (WHO).

Fogarty's International Clinical, Operational, and Health Services Research Training Award for AIDS and TB (ICOHRTA-AIDS/TB) is a newer effort that strengthens the ability of foreign scientists and their institutions to conduct clinical, operational, and health services research with U.S. scientists in the context of HIV/AIDS and TB. These investments help countries to identify effective interventions specific to local needs and better implement interventions and scale-up of treatment and care through the local health care system. For example, Haiti's ICOHRTA-AIDS/TB research training program is designed specifically to provide training for monitoring and evaluation for the scale-up of HIV prevention and care services supported by PEPFAR and the Global Fund. To support the implementation of the PMI, to provide sustainable scientific capacity to address the challenges of malaria control, and to rapidly move malaria research results into practice, FIC is duplicating the ICOHRTA-AIDS/TB model into a similar effort for malaria for PMI countries.

New TB technologies research is of particular importance given the emergence of extensively drug resistant TB, unresponsive to first- and second-line drugs, and which could pose a serious threat globally. Supported by a Fogarty Global Infectious

Disease research grant to the University of Cape Town in South Africa, clinical research team members are training in collaboration with The George Washington University to conduct trials of new drugs and vaccines, including TB vaccines.

New vaccines and drugs for these diseases can have a major impact on health worldwide, but the clinical research and must be conducted ethically, in a culturally sensitive manner, and in accordance with all relevant laws and regulations to enable scientists to gain the trust of the public and research participants. This can be particularly challenging when research is conducted in resource-poor and culturally diverse settings. Fogarty's International Bioethics and Career Development Award program addresses this challenge by supporting the advanced training of developing country professionals who can assume the roles and responsibilities of ethicists involved in ethical review of clinical trial design and clinical research in their countries. Many trainees have gone on to become leaders in research ethics and hold key posts in government, in-country academic research institutions or multilateral organizations such as the WHO, and are now helping to train the next generation of experts.

FUTURE U.S. LEADERS IN GLOBAL HEALTH RESEARCH

There is a burgeoning interest in global health in U.S. universities across the country, and Fogarty is providing the leadership to sustain and capitalize on this energy. By investing in these junior scientists, FIC accomplishes two central objectives: attracting new research talent to global health research and advancing the career paths of exceptional junior U.S. scientists.

Fogarty's International Clinical Research Scholars Program (ICRSP) responds to the acute need for future clinical investigators who can translate basic research advances into clinical care in a global context. This next generation of clinical researchers will require hands-on experience in conducting clinical trials and clinical research in countries where the disease burdens are highest, typically in poorer countries. The ICRSP provides highly motivated U.S. graduate students in the health

sciences with the opportunity to experience one year of mentored clinical research training at distinguished research institutions in developing countries. Since its inception, the program has supported 70 U.S. scholars. This program is being expanded to provide resources and opportunities during residency or fellowships to launch physician scientists on a career path that focuses on health problems and scientific challenges abroad. Through the International Research Scientist Development Award (IRSDA), Fogarty provides research support to U.S. postdoctoral scientists in the formative stages of their careers to solidify their commitment to global health research. Each IRSDA grantee works closely with an established developing country scientist and a U.S. mentor involved in collaborative research and training at both the developed and developing country institutions. These awards forge long-term partnerships between senior developing country researchers and outstanding U.S. junior scientists, who are the potential future leaders in global health research.

INTERNATIONAL COLLABORATIVE RESEARCH

Fogarty also provides leadership by identifying critical gaps in research that must be addressed to confront current and future global health challenges. For example, according to the WHO, there are more than 450 million people with mental, neurological or behavioral problems throughout the world at any given time. Brain disorders are the leading contributor to years lived with a disability in all regions of the world, with the exception of sub-Saharan Africa. The economic and social costs of these disorders are staggering. Despite the enormous burden of disease, brain disorders have been largely absent from the global health research agenda. In response, Fogarty, in partnership with other NIH Institutes, Centers and Offices (ICs), supports a program on Brain Disorders in the Developing World: Research Across the Lifespan. This program funds collaborative research projects between developed and developing country scientists on brain disorders throughout life, relevant to low- and middle income nations. Examples of research topics supported by this program include: neurocognitive consequences of HIV/AIDS in India, cerebral malaria neurological disorders, zinc nutrition and brain development, and gene-environment

interactions in cognition. New insights generated from this program can lead to better treatment and delivery of services for mental illness both at home and abroad.

THE WAY FORWARD

Fogarty is now developing a Strategic Plan that will guide our priorities from FY 2007 through FY 2011. Several themes have emerged after consulting with a wide range of stakeholders within and outside the NIH. For example, in anticipating and addressing changing trends in the global burden of disease and evolving research needs, Fogarty will explore new ways to confront the rising burden of non-communicable disease in developing countries. In addition, given the number of preventable deaths and extent of preventable illness around the world due to a failure to implement evidence-based interventions, Fogarty plans to provide leadership in “implementation science.” Implementation science is the study of methods to promote the integration of research findings and other evidence-based practices into routine practice, which leads to better quality and effectiveness of health services and care. Fogarty will also strengthen its efforts to build sustainable health research capacity in low- and middle-income countries, and expand its investments in U.S. scientists that are committed to global health research. Fogarty has historically considered the needs of other NIH ICs in the development of its programs, and has collaborated with almost every IC over the past five years. We will continue to do this as we plan for the future.

Never before has global health been a larger priority for the U.S. government, U.S. academic research institutions or philanthropic organizations. Public and private sectors have found new and productive ways to work together, and all sectors have invested significant resources to promote better health globally. Strengthening research capacity abroad through its research training programs, Fogarty helps to maximize the benefits of these investments in the long-term. Fogarty’s investments in junior global health researchers also help to ensure that a critical mass of U.S. scientists will be able to lead the world in building a healthier future for everyone and expand the influence of American preeminence in biomedical research to the areas of greatest need.