THE FOGARTY INTERNATIONAL CENTER'S COMPREHENSIVE STRATEGIC PLAN AND BUDGET TO REDUCE AND ULTIMATELY ELIMINATE HEALTH DISPARITIES

The Fogarty International Center Mission Statement

The mission of the John E. Fogarty International Center for Advanced Study in the Health Sciences (FIC) is to reduce global health disparities by supporting and promoting research and to prepare the current and future generation of international and U.S. scientists to meet global health needs. To achieve these broad objectives, FIC supports a range of international collaborative research projects, research training efforts and scientist-to-scientist exchanges, and works through intergovernmental and diplomatic channels to identify and strengthen collaborative efforts. FIC partners with academic groups from around the world as well as with bilateral and multilateral agencies, private groups, and other Federal agencies.

Overview of the Fogarty International Center Strategy for Addressing Health Disparities

The FIC will play a unique role in addressing health disparities that exist within and among population groups in the United States. Certain populations abroad share similarities with U.S. groups by virtue of their genetic makeup, health practices, lifestyles or other features and, for this reason, advances made through international research studies stand to benefit both U.S. and foreign populations. Such research could lead to effective and culturally relevant education or counseling strategies; development of novel diagnostics, drugs or other intervention technologies; or could contribute to identification of new avenues of research that would ultimately lead to health care interventions. FIC's programs to support collaborative research and capacity building in low- and middle-income nations are critical to advancing global health research priorities. In addition, through its training programs, FIC is developing the next generation of scientists and health professionals, including those from U.S. minority groups, to address health disparities that exist within the U.S. and within the global community. The current plan elaborates on how further strengthening FIC programs could address U.S. health disparities, and it describes several new activities toward this end.

Fogarty International Center Area of Emphasis: Research Training

Rationale and Priority

U.S. minorities are underrepresented in the biomedical research enterprise, comprising only a fraction of graduate students, post-doctoral students and faculty in the health sciences at schools of medicine and public health. To increase the number of minority individuals involved in the research enterprise FIC will strengthen its efforts to support the research training of minority students as its highest priority area of emphasis. Improving the technical capabilities of minorities emerged as one of the six common themes in the public comments to the NIH Strategic Plan to Reduce and Eliminate Health Disparities.

Objective: Increase international research training opportunities for underrepresented undergraduate, graduate and medical school students

FIC and the National Center for Minority Health and Health Disparities support Minority International Research Training (MIRT) programs at twenty-nine universities across the U.S. including four Historically Black Colleges and Universities (HBCUs) and three Hispanic Serving Institutions (HSIs). MIRT programs provide opportunities for approximately three hundred U.S. minority undergraduate and graduate students to gain research experience abroad each year. According to MIRT trainees, these experiences are formative in their careers and have a major impact on selection of career paths. Initial data on the program indicate that seventy percent of undergraduate MIRT trainees go on to graduate or health professional school. MIRT trainees report that exposure to international laboratories and other research experiences adds immensely to their understanding of health problems that extend beyond the borders of the U.S. and appreciation of science as a global enterprise.

Action Plan

1. Description of concrete steps the Fogarty International Center will undertake to achieve the objective

A. Support six additional MIRT program awards

In FY 2003 and 2004, the FIC will reissue a request for applications (RFA) for MIRT program support. In FY 2000-2001, FIC supported several small supplements for the initiation of "developmental" MIRT programs linked to existing FIC programs in order to provide the opportunity to prepare to submit competitive applications for full programs. Five supplements were given to MIRT awards at research intensive universities to form consortia with minority serving institutions. Supplements were also given to three FIC-supported International AIDS programs and one International Health Economics program to develop MIRT efforts within their respective research areas. FIC plans to give additional supplements for similar activities in FY 2002. With support for these developmental activities, it is expected that at least six new MIRT programs will successfully compete for awards in the upcoming competitions.

B. Support six additional MIRT consortia with Historically Black Colleges and Universities (HBCUs), Hispanic Serving Institutions (HSIs) and Tribal Colleges and Universities (TCUs)

FIC plans to support the formation of MIRT consortia between existing MIRT programs and smaller efforts developed in collaboration with HBCUs, HSIs or TCUs. These consortia are intended to increase opportunities available to minority students at institutions without MIRT programs, and to improve program management and capacity for minority-serving institutions to compete successfully for their own MIRT awards. Supplements will support four to five students from the consortium institutions. In our experience, consortium relationships represent opportunities for students at these minority institutions to participate in the MIRT program when full programs at their home institutions may not be sustainable, or as a pilot experience for faculty at these institutions to develop a program capable of competing in the next RFA. After the FY

2000 RFA competition, two MIRT programs agreed to form consortia with three applicants at HSIs and HBCUs that did not successfully compete for their own funding.

C. Support four MIRT development supplements to FIC international research training programs

FIC supports a range of capacity building programs to build U.S.-developing country partnerships, working primarily through U.S. institutions. FIC plans to supplement current FIC institutional research training awards to develop MIRT opportunities for four to five U.S. minority students at collaborating developing country institutions. Two current MIRT Directors are also PIs for other FIC programs: Dr. Barbara Timmermann for an International Collaborative Biodiversity Group program at the University of Arizona, and Dr. Evangelos Petropoulos for an International Training and Research in Environmental and Occupational Health program at Michigan State University. In FY 2000, the International Training and Research in Emerging Infectious Disease program award to the University of Maryland received its third annual supplement to support a MIRT program in collaboration with the University of Mali. Last year the AIDS International Training and Research Program at Yale University received a grant to begin MIRT activities for four to five minority students. It is expected that these "developmental" MIRT programs will grow into fully competitive MIRT programs for the next RFA competition in FY 2003.

D. Support five minority graduate students annually to conduct thesis research studies for one year in a developing country

The FIC primarily provides research awards in specific global health areas in response to RFAs and does not participate in the NIH-wide supplement program for minority student support. FIC now plans to offer one-year supplements for minority graduate students to conduct thesis research at collaborative developing country sites associated with FIC supported and U.S. based research training programs.

E. Support 15 exceptional MIRT trainees annually to present their results at international scientific conferences

Since FY 1999, FIC has supported exceptional trainees from multiple MIRT programs to present their research results at three high-profile international scientific conferences involving several FIC-supported U.S. and developing country scientists. MIRT trainees from all programs are asked to submit abstracts of their results for review and potential selection. These opportunities allow the most successful MIRT trainees to interact with the leading international scientists in their field of research. For example, Dr. Pauline Jolly (University of Alabama-Birmingham) and fourteen MIRT trainees from six programs were supported to attend the International AIDS Conference in Durban, South Africa. MIRT trainees were selected to display eleven posters and an oral presentation during a scientific session that inspired extraordinary interest and two subsequent postdoctoral position offers. 15 trainees will be supported (approximately 5% of the annual total of MIRT trainees) to attend international conferences in their field of research.

F. Support for international bioethics curriculum development and/or research training within all MIRT programs

A working group of the MIRT program directors met at the FIC in September 2000 to discuss the need for international bioethics training within the MIRT programs. Each year the MIRT programs send trainees, primarily undergraduates, to over 50 countries throughout the world (two-thirds go to developing countries) for mentored research training. Trainees participate in approximately 50 projects requiring human subject assurances (42 in developing countries). All MIRT trainees are required to receive thorough training in the responsible conduct of research. However, the MIRT program directors recognize that few of the courses in responsible conduct of research offered at their institutions focus on the international aspects of research ethics and little of the international bioethics curriculum materials and other resources available are suitable for undergraduate use. MIRT program directors struggle to provide the most appropriate ethical preparation for their trainees' research experience in developing countries.

Furthermore, the directors recognize that there is a link between conducting the research necessary to address the health disparities between minority and majority populations both in the U.S. and in developing countries that reflects culturally relevant bioethics perspectives on that research. Members of the working group were enthusiastic about supporting MIRT trainees within their programs for mentored research training in bioethics at their foreign sites which could be invaluable for their future careers in biomedical or behavioral research, or draw them into a bioethics career path. It was also thought that their research would feed back to the research training efforts within other MIRT training programs and lead to trainee presentations at relevant international conferences and publications in leading journals.

Performance Measures

FIC will measure the performance of its minority research training efforts by monitoring the short-term (number of trainees, graduation rate, conference presentations, scientific publications, entry into graduate or health professional schools, fellowships) experiences of the programs supported. In FY 2000, FIC implemented a web based MIRT trainee tracking system and required entry of new trainee data as part of the annual progress reporting process. MIRT Directors have access to all the data and have the ability to search and create reports on their trainees' data. FIC is able to analyze the data on all MIRT participants entered into a common database.

Outcome Measures

The MIRT trainee tracking system permits the Directors to update trainee entries regarding long-term (advanced degrees, research support obtained, research conducted in areas of U.S. or global health disparities) successes in the careers of the trainees supported. The system permits FIC to track the success of each annual cohort of trainees over time which is particularly important since training impact may take as long as ten years to become apparent. For example, the tracking system data show that 70% of the 1994 MIRT trainees have entered advanced degree programs but it does not contain sufficient data to evaluate advanced degree receipt.

FIC Health Disparities Budget (Dollars in Millions)

	FY 2002			FY 2003		
Institute / Center	Research	Infrastructure	Outreach	Research	Infrastructure	Outreach
FIC	\$0.00	\$1.20	\$0.00	\$0.00	\$1.20	\$0.00