PATHWAYS TO GLOBAL HEALTH RESEARCH STRATEGIC PLAN 2008-2012

THE JOHN E. FOGARTY INTERNATIONAL CENTER ADVANCING SCIENCE FOR GLOBAL HEALTH





FOGARTY GOALS:

EXTEND THE NIH RESEARCH MISSION GLOBALLY

GOAL I: Mobilize the scientific community to address the shifting global burden of disease and disability.

STRATEGIC PRIORITIES

- Expand Fogarty's investment in noncommunicable diseases research and research training.
- · Continue to invest in infectious diseases research and research training.

GOAL II: Bridge the training gap in implementation research.

STRATEGIC PRIORITIES

- Support and expand the development of research training programs for implementation science research.
- Support the application of implementation research to the recommendations from the Disease Control Priorities Project.

GOAL III: Develop human capital to meet global health challenges.

STRATEGIC PRIORITIES

- Expand programs to provide early global health research experiences for U.S. health science students and junior faculty.
- Sustain research training for future generations of foreign health scientists.
- Expand research support for foreign researchers to promote pathways to independence.

GOAL IV: Foster a sustainable research environment in low- and middle-income countries.

STRATEGIC PRIORITIES

- Support the development of research hubs in low- and middle- income countries.
- Bolster the development of expertise and use of information and communication technologies (ICT) in support of research and research training programs.
- Sponsor the development of Fogarty alumni networks.

GOAL V: Build strategic alliances and partnerships in global health research and training.

STRATEGIC PRIORITIES

• Forge partnerships based on mutual interest and complementary strengths.



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THE FOGARTY INTERNATIONAL CENTER

STRATEGIC PLAN: 2008-2012

ADVANCING SCIENCE FOR GLOBAL HEALTH

Pathways to Global Health Research

The Fogarty International Center enters its fifth decade with a new strategic plan—Pathways to Global Health Research. Inspired by the desire of all humankind to live a long and healthy life, Fogarty sees opportunities for addressing and resolving major global health problems by conducting research at places where those diseases are especially problematic, because of genetic, environmental or other causes. Such a strategy in our increasingly connected world stands to benefit people everywhere, whether they live in developed or low- and middle-income countries (LMICs). This strategy is embodied in Fogarty's vision.

Crucial to this ideal of "taking science where the problems are" is having the people and resources in place around the globe to do the work. This

Vision

The Fogarty International Center's vision is a world in which the frontiers of health research extend across the globe and advances in science are implemented to reduce the burden of disease, promote health, and extend longevity for all people.

Mission

The Fogarty International Center is dedicated to advancing the mission of the National Institutes of Health by supporting and facilitating global health research conducted by U.S. and international investigators, building partnerships between health research institutions in the U.S. and abroad, and training the next generation of scientists to address global health needs.

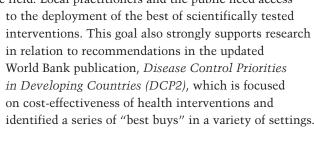
new strategic plan proposes ways to build upon decades of Fogarty research and research training programs focused in LMICs that have resulted in the growth of a worldwide community of global health scientists who have made remarkable advances and discoveries and become leaders in the research enterprise. It describes strategies to address global health disparities through the development of new tools to apply evidence-based knowledge. Ultimately what is learned abroad from these research and training activities will come home to help all Americans as well.

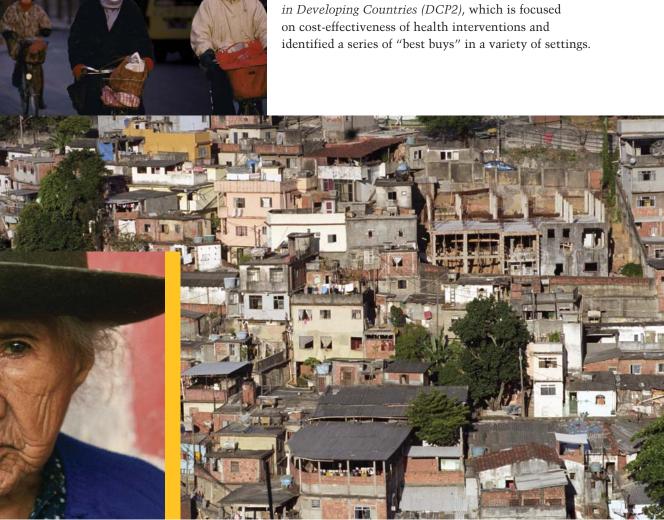


Changing patterns of disease. Today, thanks to public health measures and biomedical advances worldwide, life expectancy and prosperity are generally increasing across the developing world with the exception of sub-Saharan Africa, which continues to be heavily impacted by AIDS, malaria, tuberculosis and childhood diarrheal and respiratory diseases.

But along with getting older, people become vulnerable to noncommunicable chronic diseases including cancer, diabetes, heart disease and the risk factors that cause them. Social and economic changes such as migration to cities, adoption of more sedentary lifestyles and rich diets, and smoking and addictions add further risk factors to a healthy life. The result is that the biomedical and behavioral research agendas of LMICs and developed countries are merging. Fogarty's new strategic plan takes these epidemiologic facts to heart in a set of five goals and strategic priorities, beginning with the need to focus on chronic, noncommunicable diseases, while remaining committed to the still unfinished agenda of infectious diseases.

Implementation Science. To assure that the results of research do not languish in the lab, but reach the public for whom they are intended, Fogarty has formulated a goal to support research training in the field of "implementation science." This research training will help scientists to create generalizable knowledge that can be applied broadly to address central questions about health-care scale-up and determine the strategies that will work in the field. Local practitioners and the public need access





Research capacity and training. Two strategic goals are designed to maintain and augment activities where Fogarty programs have had a strong impact. One relates to building and sustaining the research environment in LMICs so that scientists will have the support necessary to conduct their research. Key strategic priorities here are to establish linkages or hubs where resources and knowledge can be shared across sites, and to exploit more advanced information and communication technology platforms.

The other area where Fogarty's impact has been significant is in capacity building, developing the pipeline of U.S. and foreign research talent. Fogarty will provide increased opportunities for early career U.S. health science professionals, both predoctoral and postdoctoral students, fellows, and new faculty, to work at research sites abroad to help launch careers in global health research. Fogarty will also continue its research training partnerships between U.S. and foreign institutions and enhance opportunities of foreign scientists to further their careers when they return home.



Promoting partnerships. Fogarty's final goal is to capitalize on the rising tide of private and public funding devoted to advancing global health and help provide vision and leadership for the future. Fogarty will work to maintain and forge new partnerships to support the Plan's agenda, in particular with its NIH partners, as well as seeking common cause with other U.S. government agencies and the many new private sector donors in global health.



Front cover (from left to right):

- Children living in resource-poor countries, such as these in Nepal, are particularly vulnerable to health issues. Stock Connection RM Rights Managed Photograph
- Fogarty's training programs are designed to build local research capacity in low-and middle-income countries. Here an Ethiopian scientist works in a laboratory in Addis Ababa.

 Copyright: WHO/P. Virot
- Mosquitoes transmit a number of infectious diseases. Stockbyte
- Royalty Free Photograph
 Smoking contributes to the growing epidemic of chronic, noncommunicable diseases throughout the world, a focus of Fogarty's new strategic plan. This Lebanese smoker is at increased risk of cancer and heart disease. Curt Carnemark/The World Bank
- Many infectious diseases are caused by viruses, such as this one rendered in 3d. Copyright: Alexander Kozachok

Inside (from left to right):

- Fogarty's AITRP program has funded research and training to combat the devastating impact of HIV/AIDS, particularly in the developing world. In the slums of Nairobi, Kenya, a young man orphaned by AIDS nurses his dying grandmother, who cared for him after his parents died. (c) 2007 Felix Masi, Courtesy of
- As the life expectancy rises for the world's population, chronic diseases are becoming more prevalent. Research is needed to discover the most effective and economical treatments for the elderly, such as this Peruvian woman. Copyright: Scott Wallace/ The World Bank
- Fogarty's International Training and Research Program in Environmental and Occupational Health (ITREOH) was established to train researchers in the developing world to investigate occupational and environmental problems, such as exposures to toxic chemicals and pollutants. China's air pollution is a health concern for these women who commute by bicycle. Copyright: Curt Carnemark/The World Bank
- Lack of clean water and unsanitary living conditions pose health challenges in many parts of the world including this shantytown in Rio De Janeiro, Brazil. iStockphoto/ Copyright: Joseph Luoman

- 10. To combat the emerging obesity and diabetes epidemic, people in the developing world—such as this shopper in Bolivia—will need to improve their diets and exercise more. Copyright: The World Bank
- Researchers are working to identify cost-effective methods for diagnosing heart disease and other chronic ailments in the developing world. Here a public health worker checks a street vendor's blood pressure in Salvador, Brazil. *Copyright: Alejandro* Lipszyc/The World Bank

Fogarty Goals panel:

12. Chris Plowe, principal investigator on a Fogarty Global Infectious
Disease Research Training grant and his Malian colleague Abdoulaye Djimde conduct malaria research. Photo courtesy of Chris Plowe

Back cover (from left to right):

- Back cover (from left to right):

 13. Fogarty's Ecology of Infectious Diseases program supports research to examine how environmental events—such as habitat destruction, biological invasions and pollution—alter the risks of emerging diseases in humans and animals. Recent studies suggest a correlation between rice farms, such as this one in Vietnam, and the spread of bird flu by infected ducks drawn to the paddies. iStockphoto/Copyright: Ashley Whitworth
- 14. Fogarty Scholar Paul Drain checks blood pressure at a rural clinic in Tanzania as part of his year-long global health research project. *Photo courtesy of Paul Drain*
- Fogarty's International Cooperative Biodiversity Groups program supports efforts to examine the medicinal potential of the earth's plants, animals and microorganisms—such as the algae shown
- here. © *Dennis Kunkel Microscopy*16. High concentrations of arsenic in drinking water pose a health risk in India and other countries. *Copyright: Curt Carnemark* /The World Bank



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