

2006 U.S. Investment in Global Health Research



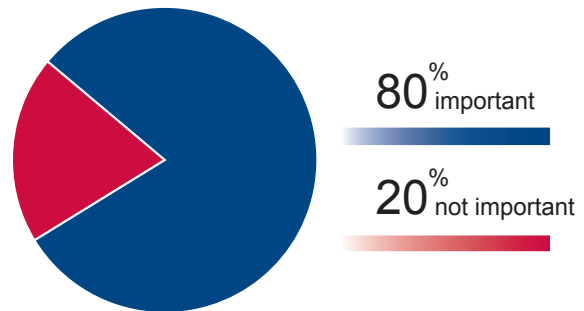
As the world’s communities draw closer and borders become increasingly porous, global health has become a priority for many public and private investors. The United States, in its role as the world’s leading investor in science and research, is uniquely positioned to also lead in research that can improve health globally.

Research!America with initial support from the Ellison Medical Foundation, published the first known estimate of the U.S. investment in global health research in 2005. Based on 2003 data, the report captured private and public investment in research focused on diseases and conditions that disproportionately affect poor populations in low- and middle-income countries.

With current support from the Bill & Melinda Gates Foundation, Research!America continues to track investment in global health research, and in this report we analyze the 2006 U.S. investment in global health research. We estimate that the U.S. spent approximately \$9.3 billion on global health research in 2006. This represents 8% of the total investment (\$116 billion) made by private and public entities in health research overall.

Americans Think It Is Important to Improve Health Globally

How important do you think it is that we in the U.S. work to improve health globally?



SOURCE: Attitudes: Global Health Research
Charlton Research Company for Research!America, 2006

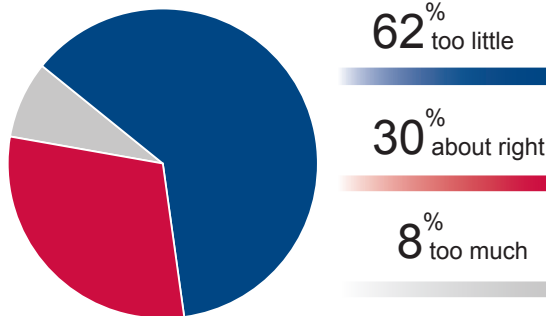
We estimate that in 2006 the U.S. invested \$9.3 billion in research to improve global health. This amount is 8% of the \$116 billion spent on all health research in the U.S. in 2006.

Source of Funding	Global health R&D (\$ in millions)
Pharmaceutical and Biotechnology Industries ^{2, 3}	3,478
National Institutes of Health ^{4, 5}	4,981
Centers for Disease Control and Prevention ⁶	32
U.S. Agency for International Development ⁷	152
Department of Defense ^{8, 9}	64
Department of State ¹⁰	39
Foundations (2005) ^{11, 12}	592
Total	9,338

Compiled by: Emily Connelly and Christine Hunt, Research!America (9/2007)

Most Americans Think the U.S. Spends Too Little on Health Research

Currently, the U.S. government spends much less than one penny of every dollar on research to improve health around the world. Would you say this amount is...



SOURCE: Attitudes: Global Health Research
Charlton Research Company for Research!America, 2006

most intractable but imminently preventable health problems. The American people are certainly ready for such leadership. According to recent polling, eight in ten Americans think it is important for the U.S. to work to improve health globally. Intuitively, Americans know what Research!America's board chair, former Congressman John Edward Porter, says is true, that "investing in global health research is the smart thing to do for America and the right thing to do for the world."

In response to the need for more voices to speak out on the value of global health research, Research!America established the Paul G. Rogers Society for Global Health Research, named for the former Congressman and Research!America chair emeritus. The Society is comprised of scientific leaders representing a broad spectrum of research fields and public health. The Society is modeled on the style and successes of Rogers' vast experience and skill at communicating the importance of making research, including global health research, a higher national priority.

With initial funding from the Bill & Melinda Gates Foundation, the Society's Ambassadors are engaging policy makers, thought leaders, media and the public on the value and importance of investing in global health research.

As Americans so aptly recognize, the U.S. is currently spending too little on research to improve health around the world.

Included in our estimate is research on infectious diseases such as HIV/AIDS, which has taken a major toll in the United States and prompted much research, and parasitic diseases like lymphatic filariasis, which are virtually unknown in the U.S. We also attempt to capture the full spectrum of research, including prevention research and assessment of which health interventions are most effective in the field. Challenges exist however since reporting varies among sectors and it can be difficult to isolate funds dedicated to global health research from overall health research investments.

Understanding the U.S. investment in global health research is important in determining whether the U.S. is indeed taking on the challenge of developing solutions for the world's

'Investing in global health research is the smart thing to do for America and the right thing to do for the world.'

**—The Honorable John Edward Porter
Research!America chair**

Method and Rationale

The **Pharmaceutical Research and Manufacturers of America** (PhRMA) reports a biopharmaceutical industry-wide research and development (R&D) figure of \$55.2 billion in 2006. The analysis was performed by Burrill & Company and includes PhRMA member companies and non-PhRMA member biotechnology firms. To determine what percentage of industry R&D is for global health research, we examined products in clinical trials. The PhRMA New Medicines in Development database listed a total of 6,598 clinical trials for more than 600 diseases and conditions as of April 25, 2007. We identified 417 of these trials as global health research. Therefore, we estimate that 6.3% of clinical trials are for global health research. We then applied this percentage to the total industry R&D spending figure to estimate that the global health research investment by industry is \$3.5 billion.

In 2006, the **National Institutes of Health** invested \$2.0 billion in HIV/AIDS research on microbicides, vaccines, therapeutics, and etiology and pathogenesis. Other research areas included in the estimate are emerging infectious diseases, infant mortality/low birthweight, vector-borne diseases, tuberculosis and HPV and/or cervical cancer vaccines. The research areas included in the estimate were based on consultation with the NIH Budget Office.

According to the **Centers for Disease Control and Prevention's** Financial Management Office, the agency spent \$481 million on global health in 2006, of which \$32 million was for research.

The **U.S. Agency for International Development** published a report to Congress on Health Related Research & Development Activities at USAID in May 2006. The Global Health Bureau provided updated information on the final obligation of funds for health-related research in FY 2006, which was \$152 million.

The **U.S. Army** invested \$50 million in global health-related R&D projects in 2006, including malaria, dengue fever, diarrhea, leishmaniasis, and other diseases that soldiers might encounter while serving abroad. The **Defense Health Program** spent an additional \$14 million for research on infectious disease, epidemic outbreak surveillance and global HIV/AIDS prevention.

In 2006, the **Department of State** contributed \$96 million to the World Health Organization (WHO) and \$57 million to the Pan American Health Organization (PAHO). Both WHO and PAHO spend about 5% of their annual expenditures on research. Applying the same percentage to U.S.-contributed funds, \$7.7 million of these funds are spent on research. The Department of State also houses the Global HIV/AIDS Initiative account (GHAI), which provides much of the new funding for the President's Emergency Plan for AIDS Relief (PEPFAR). Through GHAI, the U.S. contributed \$30 million to UNAIDS, which spends 2.5% of its budget on research and development. Therefore, approximately \$0.7 million of the U.S. contribution to UNAIDS was for research. Although most PEPFAR funding is for prevention, care and treatment programs, \$31 million was spent on Strategic Information activities that monitor program performance, track progress toward goals and evaluate the efficacy of interventions. The total 2006 Department of State investment in global health research was \$39.4 million.

Using data from publicly available documents, we estimate that the **Bill & Melinda Gates Foundation's** investment in research was \$527 million in 2005. By looking at the stated purpose of the grants disbursed by the Foundation that year, we identified 53 as global health research. **The Foundation Center** estimates that international giving by all U.S. foundations, including the Gates Foundation was \$3.8 billion in 2005, which is the most recent data available. To prevent double-counting Gates Foundation funds we excluded their data from the following calculations. Based on a sample of grants of \$10,000 or more awarded by the 1,172 largest foundations in 2004, 12% of international giving was for health. Applying this percentage to international giving by other foundations in 2005 (\$2.6 billion) we estimate that \$312 million was awarded for health. Given that 20.7% of all health giving by U.S. foundations in 2005 was for medical research, we estimate that other foundations contributed \$65 million to global health research.



Research!America is the nation's largest not-for-profit public education and advocacy alliance working to make research to improve health a higher national priority. Founded in 1989, Research!America is supported by our 500+ member organizations, who represent the voices of more than 125 million Americans. Our public opinion polls, advocacy programs and publications reach the public and decision makers to help advance medical and health research.



The Paul G. Rogers Society for Global Health Research, named for the former Florida Congressman and renowned champion for research to improve health, aims to increase awareness of—and to make the case for greater U.S. investment in—research to fight diseases that disproportionately affect the world's poorest nations.

¹Research!America. 2006 U.S. Investment in Health Research.

²PhRMA New Medicines in Development database. Accessed April 25, 2007.

³PhRMA Industry Profile 2007.

www.phrma.org/files/Profile%202007.pdf.

⁴NIH Office of Aids Research FY 2008 Congressional Budget Justification.

www.oar.nih.gov/public/pubs/fy2008/OAR08CJ.pdf.

⁵NIH Estimates of Funding for Various Diseases, Conditions, Research Areas.

www.nih.gov/news/fundingresearchareas.htm.

⁶CDC Financial Management Office.

⁷USAID Global Health Bureau.

⁸Army RDTE Budgets FY 2007, Volumes I and II, Budget Activities 2, 3, 4, and 5.

www.asafm.army.mil/budget/fybm/archived/2000s/fybm-chart.asp.

⁹Defense Health Program FY2008/2009 Budget Estimates, Volume 2, Section 3-B.

www.defenselink.mil/comptroller/defbudget/fy2008/budget_justification/index.html.

¹⁰U.S. Department of State. International Affairs Function 150 Summary and Highlights, FY 2008 Budget Request.

www.state.gov/documents/organization/80151.pdf.

¹¹Bill & Melinda Gates Foundation 2005 Form 990-PF.

www.gatesfoundation.org/nr/downloads/financialreports/2005_Attachments_A-L.pdf.

¹²The Foundation Center. International Grantmaking Update. October 2006. foundationcenter.org.

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