

# United States investment in global health research



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Poverty and inequity take a costly human and economic toll in our world. As demonstrated by the outpouring of response to the victims of the December 2004 tsunami, Americans are attuned to and deeply concerned about the health and well-being of people facing critical challenges. American concern is not, however, limited to disaster response. Research!America's public opinion surveys<sup>1</sup> show that large majorities of Americans favour having the United States invest considerably more dollars to improve health and quality of life worldwide as well as at home. Majorities of Americans also favour translation of research to facilitate more rapid and cost-effective health care, and they strongly support elimination of health disparities in order to speed cure, treatment and prevention of disease, disability and injury for all people. In this article we examine the question: What will it take to translate these and similarly positive American attitudes and expectations into increased support for global health?

## The challenge

Transforming positive public opinion into action is a task familiar to advocates. The history of advocacy campaigns in the United States provides ample evidence that when public interest and support are rallied to a cause, decision-makers will act. The doubling of the budget for the National Institutes of Health (1999–2003) and the passage of the Americans with Disabilities Act are recent examples.

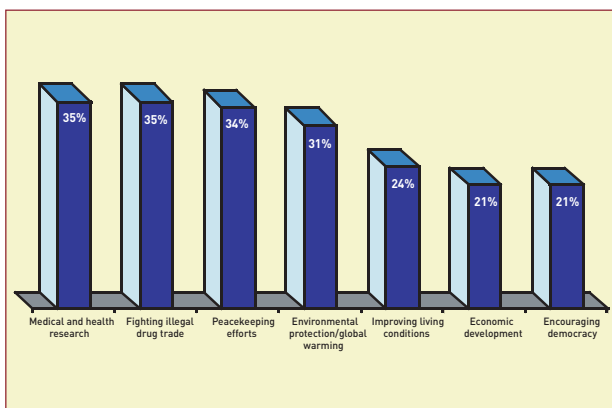


Figure 1: Health research is a top priority

Greater investment by the United States in global health and global health research would quickly become a reality were the American public to expect and demand it. Based on our public opinion research, as well as our experience in public outreach and advocacy for medical and health research, we believe that dramatically increasing United States investment in global health is an attainable goal. We caution, however, that the task of unifying and activating sufficient stakeholders to convince decision makers of the importance of increasing the United States commitment to globally oriented health research and service is a complex process requiring bold leadership, sufficient resources and sustained effort.

## What we know about current investment in global health research

More and more prominent groups and individuals are speaking out about the United States' under-investment in meeting the challenges of ill-health, poverty and inequity around the world. From Bono to Bill Gates and Angelina Jolie to Jeffrey Sachs, influential people are voicing concern and putting their organizations and resources – intellectual, financial and otherwise – to work in support of their convictions.

As US leaders are encouraged to step up to the challenge

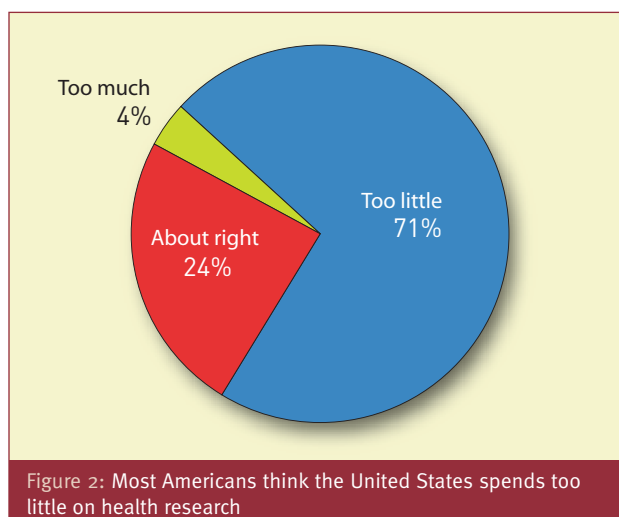


Figure 2: Most Americans think the United States spends too little on health research

| Source of Funding   | Global Health R&D |
|---|-------------------|
| Pharmaceutical Industry <sup>3,4</sup>                    | 2,929             |
| Biotechnology Industry (2001) <sup>5,6</sup>              | 2,600             |
| National Institutes of Health <sup>7</sup>                | 2,987             |
| Centers for Disease Control and Prevention <sup>8</sup>   | 24                |
| U.S. Agency for International Development <sup>9,10</sup> | 338               |
| Department of State <sup>11</sup>                         | 10                |
| Department of Defense <sup>12,13</sup>                    | 61                |
| Foundations and Independent Institutions <sup>14,15</sup> | 505               |
| <b>Total</b>  | <b>9,454</b>      |

US \$ in millions

Table 1: Estimated United States investment in global health research and development in 2003

of truly improving health on a global scale, it is necessary to identify the current investment level. It is difficult to obtain reliable data on what the United States is currently spending on global health. To meet this need, the Global Health Policy Research Network of the Center for Global Development has organized a working group of experts to publish a policy report in 2005 describing how to build an effective global health resource tracking system.<sup>2</sup> Although the recommendations are not yet finalized, early communications indicate that the parameters of this proposed resource tracking system will not include a plan for tracking global health research expenditures.

### Initial estimate of United States investment in global health research

With our experience in tracking aggregate United States health research expenditures, Research!America is well positioned to produce a reasonable estimate of the United States overall investment in global health research. With support from The Ellison Medical Foundation, Research!America has, for the first time, compiled data on United States' investment in global health research (Table 1).

Our estimate shows that the United States invested approximately \$9.5 billion in global health research in 2003. That amount is about one-tenth of the annual investment in all health research in the United States,<sup>16</sup> and in addition, amounts to less than one cent of each dollar spent on health costs in the United States each year.<sup>17</sup>

The estimated United States investment in global health

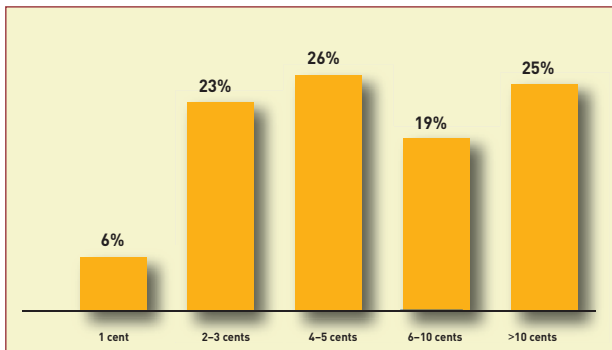


Figure 3: Americans think the United States should spend more on global health research

research includes expenditures by industry, the federal government, academia and independent institutions. Industry provides more than half (\$5.5 billion) of the total investment. Pharmaceutical and biotechnology companies internally conduct and externally fund research designed to benefit developing nations. In addition, they provide access to medicines, methods of disease prevention, training for health care professionals, and health care and research infrastructure. These are valuable contributions, but are not included in our analysis as research.

The National Institutes of Health (NIH) is responsible for much of the United States government's \$3.4 billion investment in global health research. The areas of research at the NIH applicable to global health include emerging infectious diseases, HIV/AIDS vaccine development, international HIV/AIDS research, infant mortality/low birth weight, tuberculosis and vector-borne diseases. The Department of Defense also invests a significant amount in research, with \$61 million focused on HIV/AIDS and infectious diseases such as malaria, dengue fever, meningitis and haemorrhagic fevers. The Centers for Disease Control and Prevention dedicates \$24 million of its Global Health Strategy monies to research. The Department of State and the United States Agency for International Development are more focused on diplomatic and humanitarian efforts. USAID spends \$338 million on global health research and the Department of State invests a very small percentage of its budget at \$10 million.

The role of independent institutions and foundations in global health has increased significantly in recent years, especially with the establishment of the Bill & Melinda Gates Foundation. In 2003 alone, the Gates Foundation distributed \$577 million in grants for global health. Of this total, \$322 million was invested in global health-focused research.<sup>15</sup> For the many other private investments in global health research, we relied on data gathered and reported by the Foundation Center.

We regard our analysis of investment in global health research as a good first approximation; however, additional

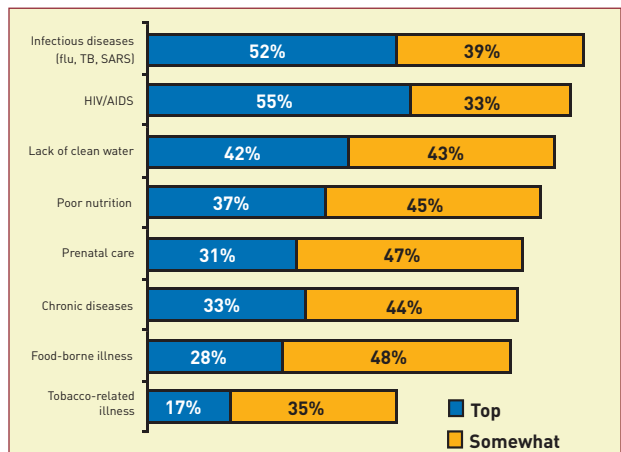
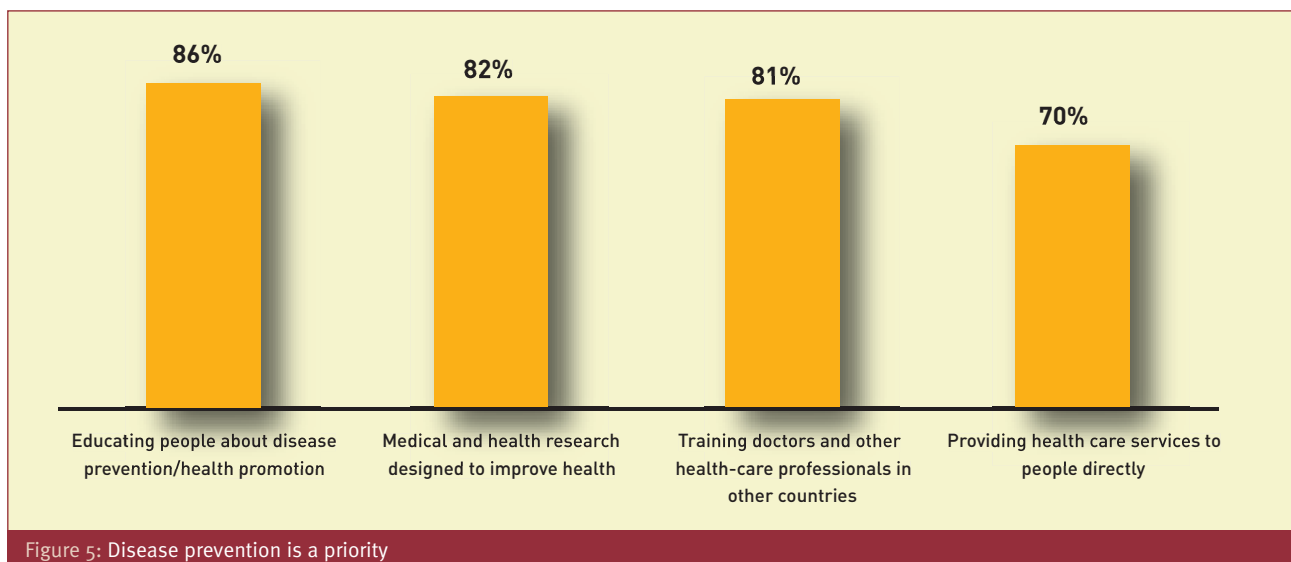


Figure 4: Priorities in global health



work is required to permit regular, systematic data collection and reporting on total United States investment in global health, including global health research. This is an undertaking that we urge stakeholders in global health to support. Without reliable data on the current state of investment in global health, decision-makers will not easily be persuaded to substantially increase the investment.

### What we know about United States public attitudes on investment in global health

As an additional aspect of our Ellison-supported work, Research!America commissioned a national public opinion

**“In this and like communities, public sentiment is everything. With public sentiment, nothing can fail; without it nothing can succeed.”**

PRESIDENT ABRAHAM LINCOLN

poll designed to assess attitudes toward global health and global health research. Conducted by Harris Interactive between 30 March and 16 April 2004, this poll is similar in methodology to polls commissioned by elected officials and the media, and thus familiar to those two important target audiences.<sup>18</sup> Public opinion polling is much less familiar to researchers and health professionals because neither is steeped in political processes. An effective advocacy campaign will include a component designed to familiarize stakeholders with the value of public opinion.

Americans can identify the leading causes of death for both rich nations (heart disease, cancer) and for poor and developing nations (malnutrition, infectious diseases): 71% say they are at least somewhat familiar with the health problems facing the world today. A very high proportion (90%) is concerned about the world's health problems. When asked to prioritize how the United States government spends money around the world, Americans think medical

and health research is as high a priority as fighting the illegal drug trade and peacekeeping efforts (Figure 1).

A majority of Americans (71%) believe that the United States is spending too little on research designed to improve health around the world and think significantly more of each government dollar should be invested (Figures 2, 3). Americans think that research on infectious diseases and HIV/AIDS, along with disease prevention, health promotion and training health care professionals, should be a leading investment priority (Figures 4, 5).

For more than 10 years, Research!America has tracked consistently strong public support for the United States to maintain its leadership role in medical and health research (Figure 6). Furthermore, Americans say they are willing to pay for more research! Of Americans, 67% say they would be willing to pay \$1 more each week in taxes if they were certain that it would be spent on additional medical research (Figure 7). Americans also consistently support research to understand and eliminate health problems that disproportionately affect people with lower incomes and minorities (Figure 8). It is clear that Americans are not only interested in their own improved health, but also in better health for all people.

This initial measure of American opinion on global health will only be strengthened when tracked over time. Keeping a finger on the pulse of public opinion in an ongoing fashion is essential to developing and delivering effective messages about the value of increased investment in global health and global health research.

### Moving from positive grassroots attitudes to increased investment: a case history

A brief case history is instructive. Ten years ago, a group convened to launch an ambitious drive to double the budget of the NIH over five years. The scientific case for such an increase had been well established<sup>19</sup> and public opinion had been demonstrated to be strongly supportive,<sup>20</sup> but there

were significant barriers to achieving the goal. At the time, the United States economy was struggling; there was a budget deficit, caused in part by Operation Desert Shield/Desert Storm;<sup>21</sup> President Clinton was not a vocal champion of the NIH; and Congressional champions, while outspoken, amounted to only a handful. Many members of Congress, and virtually all of the American public, were unfamiliar with the NIH.<sup>22</sup> Meanwhile, interested stakeholder groups were oriented to requesting very modest increases for research and, as the overall budget scenario became gloomier, apt to work against one another by pitting one kind of research against others.

Over time, sitting and former members of Congress convinced stakeholders to deliver on the promise of better health. Research!America played a leadership role in the resulting, multi-year campaign to double the NIH budget. Years of work, including extensive public opinion polling nationally and in states of key members of Congress, development of key messages, ongoing analysis of investment in medical and health research, informed, aggressive in-person lobbying at the local and national level, earned and paid media attention and the all-out commitment of thousands of members of voluntary health organizations, led to the first of what became five years of successive 15% increases to the NIH budget, moving it from \$13.6 billion in 1999 to \$27.2 billion in 2003.

### Building a new alliance for global health

Drawing on the lessons of the NIH budget doubling experience, as well as those of other advocacy campaigns, we suggest that stakeholders in global health and global health research come together to set an informed and ambitious goal agree upon unified messages and empower and equip large numbers of messengers to deliver those messages systematically. A commitment to regular public opinion polling is essential to delivering successful messages to decision-makers. Simultaneously, additional work should be undertaken to refine the investment estimate and to develop compelling economic and human interest messages concerning the value of this investment. Global health can and should be aligned closely to other public interests, for example, strong interest in eliminating health disparities, providing broader access to health care and overcoming

**“The United States is arguably the world’s best, in terms of understanding health, the public health infrastructure and the research that drives innovation; but to date we have not fulfilled our ability to put our know how and our compassion to work to improve the lives of people everywhere. Better health is something we must summon the will and the way to export globally.”**

THE HONORABLE JOHN EDWARD PORTER, MEMBER OF CONGRESS  
1980–2001, CHAIR OF RESEARCH!AMERICA BOARD OF DIRECTORS

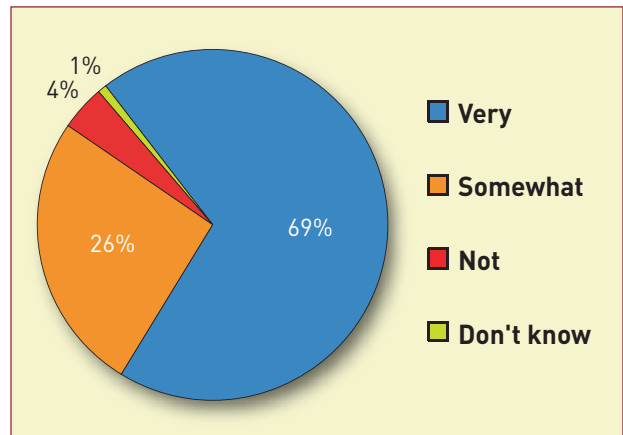


Figure 6: The United States should be a global leader in medical and health research

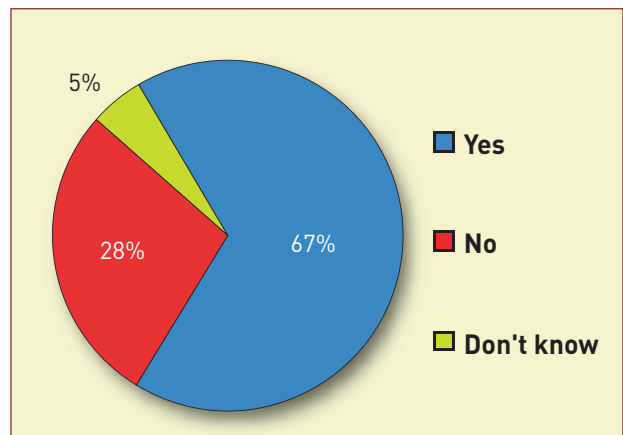


Figure 7: Americans willing to pay more taxes for medical

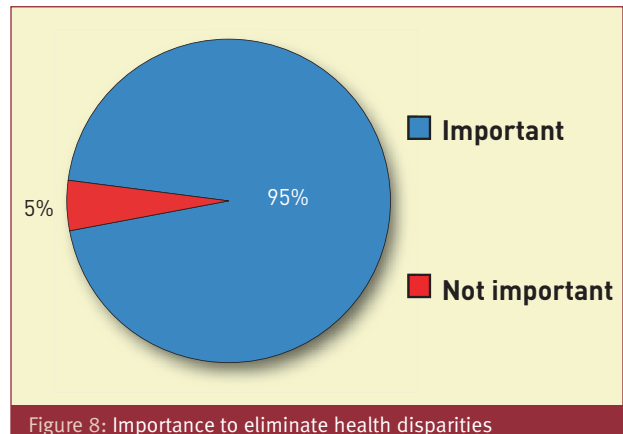


Figure 8: Importance to eliminate health disparities

poverty. Self-interest, national interest and global interest can be aligned. Like people everywhere, the American public values health and wants research to succeed.

The costly toll of poverty and ill-health across the globe is undeniable. Excellent illustrations exist that demonstrate the value of lives saved and economies assisted by shoring up research capacity, the public health infrastructure and health care delivery around the world. In the 1960s and 1970s, the World Health Organization led a global effort to deliver the smallpox vaccine worldwide. This campaign

resulted in the eradication of smallpox in 1977, a disease that infected an estimated 50 million people each year just 25 years earlier. Thailand's '100% Condom Program,' which promoted condom use among sex workers and other high-risk groups, is another global health success story. Thanks to the programme, Thailand had 80% fewer new cases of HIV in 2001 than in 1991 and has prevented nearly 200,000 new cases.<sup>23</sup>

In developing a case for greater United States investment in research to improve health globally, a well-organized alliance of stakeholders must boldly commit to making these success stories come alive for Americans and their leaders.

Our experience tells us that accurate investment data can be developed, compelling messages framed, effective leaders engaged, cohesive alliances forged and positive public opinion translated into decision-maker response. It is time for the community of stakeholders to commit to audacious advocacy for global health – from grassroots to global. □

#### Acknowledgements

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investment estimate and the attitudinal research to measure American support for more research to enhance health globally.

**Mary Woolley** has served since 1990 as President and CEO of Research!America, the nation's largest not-for-profit alliance for medical and health research advocacy. She is an elected member of the Institute of Medicine of the National Academy of Sciences and a fellow of the American Association for the Advancement of Science. She serves on the Board of Overseers of the Harvard School of Public Health and on the IBM Life Sciences Council, among other volunteer activities. She has a 25-year editorial and publication history on science advocacy, policy and public opinion. Ms Woolley was educated at San Francisco State University and Stanford University.

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