## DEPARTMENT OF HEALTH AND HUMAN SERVICES

## NATIONAL INSTITUTES OF HEALTH

Fiscal Year 2013 Budget Request

Witness appearing before the

Senate Subcommittee on Labor HHS Education Appropriations

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Accompanied by:

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> Harold E. Varmus, M.D. Director, National Cancer Institute

> > March 28, 2012

## Mission

Good morning, Mr. Chairman and distinguished Members of the Subcommittee. I am Francis S. Collins, M.D., Ph.D., and I am the Director of the National Institutes of Health (NIH). I have with me Anthony S. Fauci, M.D., Director of the National Institute of Allergy and Infectious Disease; Richard J. Hodes, M.D., Director of the National Institute on Aging; Thomas R. Insel, M.D., Director of the National Institute of Mental Health (NIMH), and the Acting Director of the new National Center for Advancing Translational Sciences (NCATS); Griffin P. Rodgers, M.D., Director of the National Institute of Diabetes and Digestive and Kidney Diseases; and Harold E. Varmus, M.D., Director of the National Cancer Institute.

(FY) 2013 budget request for the NIH.

seek fundamental knowledge about the nature of living systems and to apply it in ways that enhance human health, lengthen life, and reduce suffering from illness and disability. In particular, I want to thank the Subcommittee for your support during the FY 2012 appropriations process, for the ultimate appropriation of \$30.62 billion for NIH, and for the provisions that established NCATS.

As the largest supporter of biomedical research in the world, NIH has been a driving force behind decades of advances that have improved the health of people across the United States and around the world.

NIH basic research and translational advances have prompted a revolution in the diagnosis, treatment, and prevention of disease. Biomedical research funded by NIH has prevented immeasurable human suffering and has yielded economic benefits as well, thanks to U.S. citizens living longer, healthier, and more productive lives. These benefits include:

nearly 70 percent reduction in the death rate for coronary disease and stroke in the last half century;

effective interventions for HIV/AIDS prevention and treatment, such that an AIDS-free generation may be within our grasp;

nearly 30 percent decline over the last three decades in the age-standardized prevalence of chronic disability among American seniors;

40 percent decline in infant mortality over 20 years and better treatments for premature and low-weight births that result in increased infant survival, the prevention of cerebral palsy, and better developmental outcomes; and

more than 150 FDA-approved drugs and vaccines, or new uses of existing drugs.<sup>1</sup>

same overall program level as FY 2012. This proposed appropriation will enable us to spark innovation and invest in areas of extraordinary promise for medical science. We will also invest

In FY 2013, the President is also proposing to spend \$80 million from the Prevention and

Human Microbiome Project: One fascinating area of basic research is the Human Microbiome Project, an initiative supported through the NIH Common Fund. This project is giving us wonderful insights into the sweeping range of bacteria that live on and in each of us, and is expanding our knowledge about the role of these microbial communities in health and disease. Recent scientific evidence suggests that changes in the composition and activity of the human microbiome may contribute to obesity, which may provide us with new ways of

Undiagnosed Diseases Program: Another recent example emphasize

has already developed three new initiatives in partnership with industry, academia, and other government agencies.

In the first, NIH is working closely with several pharmaceutical companies to develop model agreements for a new pilot program to rescue failed drugs. Pharmaceutical companies have access to promising compounds that have been shown to be safe in humans, but that did not

their translational and drug development efforts. NCATS will provide NIH Institutes and Centers the tools, methodology, and infrastructure necessary to speed new approaches to therapeutic treatments. The new Center also will work with other NIH Institutes and Centers to convene workshops with industry, non-profits, and other government agencies to explore critical translational areas and innovative public-private sector partnerships.

With the FY 2013 budget, NIH will pursue efforts to streamline and shorten the pathway from discovery to health through several new and ongoing initiatives and programs.

## **Economic Returns and Global Competitiveness**

In our knowledge-based world economy, innovation in medical research has been able to generate growth, high-quality jobs, better health, and better quality of life for all Americans. Investment in NIH continues to bring new ways to cure disease, alleviate suffering, and prevent illness. Furthermore, it generates new economic activity and employment in the communities that receive its funds. One study estimates that every dollar of NIH support returns \$2.21 in goods and services in just one year, and that on average, every NIH grant creates seven high-quality jobs.

Investments in th

, and in workforce

future growth. NIH serves as the foundation for the entire U.S. medical innovation sector that employs 1 million U.S. citizens, generates \$84 billion in wages and salaries, and exports \$90 billion in goods and services.<sup>9</sup> United for Medical Research has just released an updated version and the Future of the extramurally

in the U.S. in 2011 directly and indirectly supported 432,092 jobs, enabling 16 states to experience job growth of 10,000 jobs or more, and propelling \$62.135 billion in new economic activity.

Thanks in large part to NIH-funded medical research, Americans are living longer, healthier, more rewarding lives. A child born today can look forward to an average life span of almost 79 years, an increase of nearly three decades over life expectancy in 1900. The economic value of these gains in average life expectancy in the United States has been estimated at \$95 trillion for the period from 1970-2000.<sup>10</sup>

increase research spending by 40% over the next seven years. Even Vladimir Putin has announced the intention to increase support for research in Russia by 65% over the next five years. China has just announced that it will increase its investment in basic research by 26 percent in 2012.<sup>12</sup> ours.