

Advances and Opportunities to Defeat the AIDS Epidemic Lie Ahead: Support HIV/AIDS Research at the NIH in FY2017

Strong, sustained NIH funding is a critical national priority that will foster better health, economic revitalization and an effective National HIV/AIDS Strategy. In every state across the country, the NIH supports research at hospitals, universities and medical schools. This research creates jobs that will be essential to future discovery. Sustained increases in NIH funding are essential to train the next generation of scientists and prepare them to make tomorrow's discoveries in HIV, Alzheimer's, heart disease, cancer, diabetes and other areas.

We are on the brink of promising new game-changing breakthroughs in the HIV field. NIH now supports a large portfolio of HIV cure research to identify where HIV hides, known as the HIV reservoir, and funds research to control and eliminate the viral reservoir. Research continues to build on the results of NIH funded HPTN 052 (named the scientific breakthrough of the year by *Science* magazine in 2011) and Strategic Timing of antiretroviral Treatment (START) trials that showed that early HIV treatment provides benefits in HIV clinical outcomes as well as dramatically reducing the risk of HIV transmission. NIH also leads the effort around the world to develop an HIV prevention toolkit that includes recent and ongoing trials of vaccines, microbicides and pre-exposure prophylaxis using antiretroviral drugs (PrEP) to accelerate achievement of an AIDS-free generation globally. New prevention options can reduce the number of Americans, now averaging 50,000 annually, who become infected with HIV each year.

The benefits of HIV research are far reaching. New investments in AIDS research fuel biomedical advances and breakthroughs that will have profound benefits far beyond the AIDS pandemic. Researchers have applied HIV research methods and findings to studying and treating other serious conditions, such as cancer, and hepatitis B and C virus. AIDS research also pays extensive dividends in many other areas of basic biomedical research, including deepening our understanding of immunology, virology, microbiology, molecular biology, and genetics. AIDS research is helping to unravel the mysteries surrounding so many other diseases because of the pace of discovery and the unique nature of HIV/AIDS research continues to make discoveries relevant to other infectious, malignant, neurologic, autoimmune, and metabolic diseases, as well as to the complex issues of aging and dementia. Drugs developed to prevent and treat AIDS-associated opportunistic infections now benefit patients undergoing cancer chemotherapy and patients receiving anti-transplant rejection therapy. AIDS research also has advanced understanding of the relationship between viruses and cancer.

NIH research is supporting long-term U.S. competitiveness. A strong and vibrant research enterprise is crucial for inspiring the next generation of scientists and researchers and maintaining the status of the U.S. as the world leader in research. Strong R&D investment is an essential foundation for innovation and biotechnology, medical device and pharmaceutical industry development, and a critical driver of economic development.

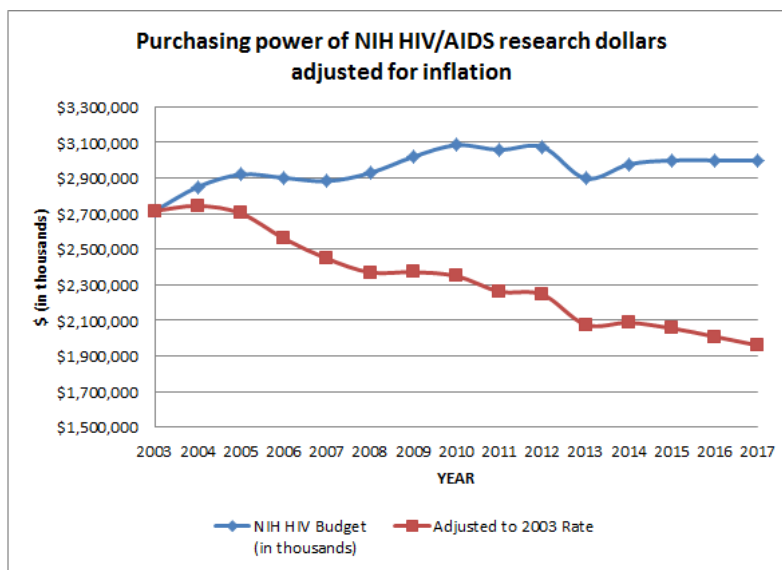
NIH HIV research is offering hope to 1.2 million Americans and the 35 million people living with HIV globally. Research investment also must follow scientific opportunity to have the greatest impact and the need to halt the spread of deadly infectious diseases, such as HIV which require lifelong medical care and treatment, must be a priority. Investment in research into infectious diseases is critical to the public health and security of our

nation and well beyond our borders. Investment in global HIV research also provides critical assistance to US programs such as PEPFAR, and support for US global health and other strategic initiatives.

Despite encouraging advances, critical challenges remain. Potential scientific advances include:

- A cure for HIV disease thereby reducing the tremendous cost of morbidity and mortality, and further HIV transmission.
- Advances in vaccine, PrEP and microbicide research that could prevent HIV infection;
- Increasingly effective and better tolerated antiretroviral medications for adults and children that save money and lives by preventing morbidity and mortality that would result in additional medical costs;
- Advances in the understanding of HIV and aging that improve the lives of those living with HIV;
- Improved HIV diagnostic and screening tools; and Behavioral and Social Science research to improve outreach to vulnerable and highly impacted populations.

Much remains to be done to turn the tide on the HIV epidemic in the U.S. and globally. As the graph below from amfAR illustrates, the real dollar investment in HIV/AIDS research (reflected in the “constant” line) has declined dramatically once adjusted for inflation threatening our ability to achieve an AIDS-free generation.



Both the House and the Senate appropriations committees have supported increases in the NIH budget for FY16. We are thankful for that increase, and would hope to see a path toward continued sustainable overall increased funding levels for the NIH in FY17 and beyond to support critical NIH programs such as HIV research, and research in other diseases, where clear benefits and results are being shown. We must robustly fund the NIH funding to accelerate medical research capacity and maintain our worldwide leadership in research leadership and innovation.

About the Research Work Group (RWG) of the Federal AIDS Policy Partnership (FAPP): We are a coalition representing more than 60 national and local HIV/AIDS research advocates, patient, clinicians and scientists from across the country. Our goal is to advance and support U.S. leadership to accelerate progress in the field of HIV/AIDS research. We can be contacted through RWG co-chairs Kevin Fisher of AVAC (kevin@avac.org) or Kimberly Miller of the HIV Medicine Association (kmiller@hivma.org).