

Advances and Opportunities to Defeat the AIDS Epidemic Lie Ahead: Support HIV/AIDS Research at the NIH in FY2016

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 funding are also essential to train the next generation of scientists and prepare them to make tomorrow's discoveries in HIV 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. The "Mississippi Baby," who lived with undetectable viral load for more than two years off therapy, is providing NIH with a strong rationale for moving forward with a trial of very early treatment for infants. Studies continue to build on the results of NIH funded HPTN 052 (named the scientific breakthrough of the year by *Science* magazine) which 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 vaccines, microbicides and pre-exposure prophylaxis using antiretroviral drugs (PrEP) to accelerate achievement of an AIDS-free generation.

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.

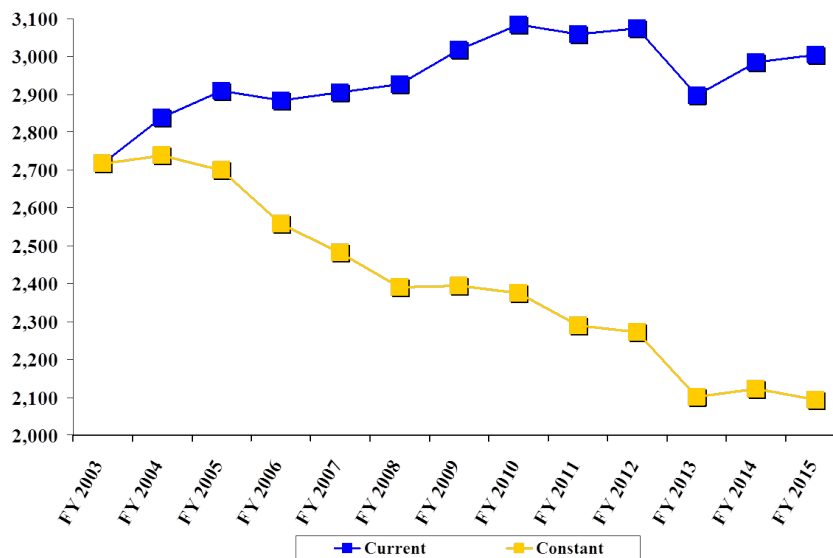
NIH research is supporting long-term U.S. competitiveness. A strong and vibrant research enterprise is crucial for inspiring the next generation of scientists and researchers and maintaining the status of the U.S. as a world leader in research. Strong R&D investment is an essential foundation for innovation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

NIH research is offering hope to people with chronic and life-threatening conditions, including people with HIV/AIDS. Potentially revolutionary new avenues of research hold the promise for more effective prevention and treatment of HIV/AIDS and other diseases. Despite encouraging advances, critical challenges remain.

Potential scientific advances include:

- 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 and prescription costs;
- Advances in the understanding of HIV and aging that improve the lives of those living with HIV;
- Improved HIV diagnostic and screening tools;
- Behavioral and social science research to improve outreach to vulnerable and highly impacted populations;
- Advances in vaccine, PrEP and microbicide research that could prevent HIV infection, and;
- A cure for HIV disease thereby reducing the tremendous cost of morbidity and mortality.

Much remains to be done to turn the tide on the HIV epidemic in the U.S. and globally. As the graph below from the Office of AIDS Research 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.



The most recent Trans-NIH AIDS Research By-Pass Budget Estimate for FY2013 prepared by the NIH Office of AIDS Research estimates that HIV research would need to reach \$3.6 billion to address the key HIV research issues. The \$590 million gap between this recommended funding level, and current FY 15 HIV research funding, cannot be addressed under the Budget Control Act without cuts to other programs. Congress should work to repeal or amend the Budget Control Act to permit increases to programs such as HIV research where clear benefits and results are being shown.

Congress should ensure the nation does not delay vital HIV/AIDS research progress. We must increase HIV/AIDS research funding to sustain medical research capacity and maintain our worldwide leadership in HIV/AIDS 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).