



Protect NIH From the Sequester

Protect NIH from a 5.1% or \$1.6 billion cut in March 2013 to preserve jobs, promote economic growth, maintain U.S. leadership in medical research and improve health

Funding for the National Institutes of Health (NIH) will be cut by about \$1.6 billion or roughly 5.1% in March as a result of automatic across-the-board cuts (or sequestrations) required by the Budget Control Act of 2011. These reductions would be in addition to any made in the regular funding process for FY 2013.

Federal investment in medical research through the NIH has decreased in both inflation-adjusted (constant) dollars and as a share of GDP nearly every year since 2003. In 2010, the NIH funded fewer grants than in the last nine years, and the average grant success rate (21%) was the second lowest since 2000.¹ A cut of \$1.6 billion would reduce the NIH budget to 2007 funding levels and would mean that 2,300 grants that NIH plans to fund would not be awarded. Success rates would sink to historic low single digit levels.²

The impact on jobs and economic activity is equally staggering: a \$1.6 billion sequester could result in the loss of 20,500 jobs across the United States and a \$3.0 billion decline in economic activity. The threat of these cuts — and the lack of consistency and predictability in the level of medical research funding — introduces tremendous uncertainty into the medical research enterprise encouraging private investigators with promising research proposals to pursue opportunities abroad.



Impact of an NIH Sequester

Current Funding Levels	\$30.8 billion
2013 across-the-board cut (5.1%)	-\$1.6 billion
Potential 2013 Level	\$29.2 billion
Reductions in NIH Grants	-2,300
Potential U.S. Job Loss	-20,500
Reduced Economic Activity	-\$3.0 billion

Public investment in medical research generates high rates of public and private return, proving to be among the most effective ways of stimulating broader economic growth. It is critical that Congress distinguish between spending that is an investment — and spending that is consumption — and support sustained, predictable funding for the NIH.

NIH cuts will cost jobs and slow economic growth

- In 2011 NIH funding supported more than 432,000 jobs and generated more than \$62 billion in economic activity.³ A typical NIH grant supports about seven mainly high-tech full-time or part-time jobs.⁴ A sequester would result in 20,500 fewer jobs and a \$3.0 billion decline in economic activity.
- A \$1.6 billion cut will have economic ramifications throughout our nation. More than 80% of NIH funds are awarded to universities, research institutions and small businesses in the U.S., and its territories.⁵ (NIH supports research in every state and in 90% of congressional districts.⁶)
- Every \$1 in NIH funding resulted in an extra \$2.11 in economic activity in the U.S. in 2007.⁷ In addition, \$1 of NIH support for research leads to an increase of about 32 cents in private medical research.⁸
- NIH-supported institutions include reservoirs of talented people attracting companies that want to position their businesses within these “knowledge hubs.”⁶ They also serve as resources for suppliers’ equipment and material.

NIH cuts threaten U.S. leadership in medical research

- NIH-supported research preserves the U.S. role as the world leader in pharmaceuticals and biotechnology—but that status has been threatened by successive years of flat funding and global competition from a growing number of countries.
- Research funding as a percent of GDP has declined in the United States as other countries pick up the slack—even though they face similar economic challenges. China, Germany, India, Singapore, Sweden and the United Kingdom recognize that medical research represents a high wage, high-growth industry and have expanded financial support and pursued other policies that enhance medical research innovation.⁹
- China is boosting its research efforts by 26%, while India is increasing its research budget by double digits and Russia has planned a 65% increase.² The United Kingdom’s Strategy for UK Life Sciences set a goal that “The UK will become the global hub for life sciences in the future.”⁹
- China has identified biotechnology as one of seven key strategic industries and has pledged to invest \$308.5 billion over the next five years. If current trends continue, the U.S. investment in life science research over the next half-decade is likely to be barely half that of China’s in current dollars and roughly one-quarter as a share of GDP. China already has more gene sequencing capacity than the entire United States and about one-third of total global capacity.⁹

NIH cuts will delay important cures⁶

- Research cuts will delay cures in some of the most prevalent and costly diseases, such as heart disease, cancer, stroke, diabetes and Alzheimer’s. Research can help reduce both social and economic toll these diseases take on our population.
- Over the past 40 years, 153 new FDA-approved drugs, vaccines, and new indications for current drugs were discovered by NIH-supported research.
- The U.S. has gained about one year of longevity every six years since 1990 due in large part to NIH funded research. The economic value of gains in U.S. average life expectancy has been estimated to be roughly \$95 trillion from 1970 to 2000.

¹ Scudellari, M. “NIH Funding Rates Drop.” Weblog entry. *The Scientist, Magazine of the Life Sciences*. Entry posted April 15, 2010. Available online at: <http://www.the-scientist.com/blog/display/57295/#ixzz1fZjoVwaD>. Accessed May 23, 2012.

² Dr. Francis Collins. “Testimony to House Subcommittee on Labor – HHS – Education Appropriations FY13 NIH proposal for National Center for Translational Science. Question and Answer period.” (Date: March 20, 2012). Full testimony available at: <http://appropriations.house.gov/UploadedFiles/HHRG-112-AP07-WState-FCollin-20120320.pdf>. Accessed May 23, 2012.

³ Ehrlich, E. “NIH’s Role In Sustaining The U.S. Economy: A 2011 Update Authored by Dr. Everett Ehrlich.” United for Medical Research. Available online at: <http://www.unitedformedicalresearch.com/wp-content/uploads/2012/03/NIHs-Role-in-Sustaining-the-US-Economy-2011.pdf>. Accessed May 23, 2012.

⁴ McGarvey, W.E., P. Morris, et al. (2008). How Many Scientists Do the NIH Support? Improving Estimate of the Workforce. NIH Analysis Report 20081219, 1-23 <http://report.nih.gov/FileLink.aspx?rid=530>. Accessed May 23, 2012.

⁵ U.S. Department of Health & Human Services, National Institutes of Health. “NIH....Turning Discovery into Health.” January 2011. NIH Pub. No. 11-7634. Available online at http://www.nih.gov/about/discovery/viewbook_2011.pdf. Accessed May 23, 2012.

⁶ “Toward Advances in Health and a Vigorous and Sustainable U.S. Economy,” (updated 8/2/2011) inserted in folder “NIH....Turning Discovery into Health.” January 2011. NIH Pub. No. 11-7634.

⁷ Families USA’s Global Health Initiative.. In Your Own Backyard: How NIH Funding Helps Your State’s Economy. 2008: Washington, D.C. Available at: <http://www.familiesusa.org/issues/global.health/publications/in-your-own-backyard.html>. Accessed May 23, 2012.

⁸ Blume-Kohout ME, Kumar KB, Sood N. Federal Life Sciences Funding and University R&D. *National Bureau of Economic Research Working Paper 15146*: July 2009.

⁹ Atkinson RD, Ezell SJ, Val Giddings L, Stewart LA, Andes SM. Leadership in Decline: Assessing U.S. International Competitiveness in Biomedical Research. Information Technology and Innovation Foundations and United for Medical Research: May 2012. Available online at: <http://www2.itif.org/2012-leadership-in-decline.pdf>. Accessed May 23, 2012.