



May 17, 2011

Federation of American Societies for Experimental Biology

Office of Public Affairs • 9650 Rockville Pike, Bethesda, MD 20814-3998 • www.FASEB.org/OPA

Testimony of
William T. Talman, M.D., President
Federation of American Societies for Experimental Biology

submitted to the
Senate Committee on Appropriations
Subcommittee on Labor, Health & Human Services, Education and Related Agencies
Senator Tom Harkin, Chair
Senator Richard Shelby, Ranking Member
on

FY 2012 Appropriations for the National Institutes of Health, U.S. Department of Health and Human Services

The Federation of American Societies for Experimental Biology (FASEB) urges Congress to make investment in the National Institutes of Health (NIH) an urgent national priority and respectfully requests an appropriation of \$35 billion for the agency in fiscal year 2012. This figure represents an increase that responds to the effects of inflation on the current program level and is needed to continue ongoing initiatives and prevent severe damage to the Nation's capacity for innovation in its fight against disease.

As a federation of 23 scientific societies, FASEB represents more than 100,000 life scientists and engineers, making it the largest coalition of biomedical research associations in the United States. FASEB's mission is to advance health and welfare by promoting progress and education in biological and biomedical sciences, including the research funded by NIH, through service to its member societies and collaborative advocacy. FASEB enhances the ability of scientists and engineers to improve—through their research—the health, well-being, and productivity of all people.

NIH is the driving force behind our nation's leadership in biomedical science and the dramatic improvements in our health and quality of life. Because of NIH and the research it supports, we stand on the brink of an era of enormous potential progress against the ravages of disease. NIH funds the research of more than 325,000 scientists at over 3,000 universities, medical schools, and other research institutions across the United States. Eighty percent of NIH funding is distributed through competitive grants to researchers in nearly every Congressional district and the U.S. territories. More than 130 Nobel Prize winners have received support from the agency. NIH considers many different perspectives in establishing scientific priorities and identifies and, within the limits of its budget, funds the most promising and highest quality research to address them. NIH is also training the next generation of researchers to ensure that the U.S. continues to be a global leader in advancing medical science.

Improving Health, Saving Lives

Research funded by NIH has produced an outstanding legacy. NIH-funded discovery has meant that more than one million lives per year are saved due to therapies to prevent heart attacks and stroke. That alone has increased American life expectancy by 4 years. Biomedical research discovery has also meant that since 2002 deaths from cancer have steadily declined; and in the past 30 years, survival rates for childhood cancers have increased from less than 50 percent to over 80 percent. More recent advances include:

- *Improving Treatments for Acute Myeloid Leukemia (AML):* Investigators have discovered mutations in a gene that affects the treatment prognosis for some patients with AML, an aggressive blood cancer that kills 9,000 Americans annually. The findings may help guide future treatment strategies for individuals with AML, as well as lead to more effective therapies for patients who carry the mutations.
- *Increasing Pediatric Cancer Survival Rates:* A new form of immunotherapy has significantly improved survival rates of children with neuroblastoma, a deadly nervous system cancer responsible for 12 percent of all cancer deaths in children under age 15. The new therapy has dramatically increased the percentage of children who were alive and free of disease progression after two years.
- *Reversing Aspects of Aging:* Researchers have reversed age-related degeneration in a mouse model of aging. While the findings don't prove that natural aging could be halted or reversed, they may lead to new strategies to combat certain age-related conditions.
- *Rapidly Detecting Tuberculosis (TB):* Scientists have developed an automated test that can rapidly and accurately detect TB and drug-resistant TB in patients. The finding could pave the way for earlier diagnosis and more targeted treatment of this disease. TB kills about 1.8 million people each year, and drug-resistant TB is a growing threat. The new test makes it possible to detect TB and drug resistance in a single clinic visit and perhaps begin treatment immediately.

Predictable and Sustainable Funding Will Drive Innovation and Progress

Our leadership in biomedical research has made us the envy of the rest of the world. Our dominant position in the discovery of new drugs and therapies is the result of research conducted by scientists and engineers in academia and in the biotech firms that they have started.¹ A study published in the February 9th issue of the *New England Journal of Medicine* found that 153 new drugs approved by the U.S. Food and Drug Administration during the past 40 years were discovered at least in part by public sector research institutions (universities, research hospitals, nonprofit research institutes, and federal laboratories), highlighting the increasingly important role of the public sector in the development of pharmaceuticals and other medical interventions.² At present, the NIH budget is insufficient to fund all

¹ R. Kneller, *Nature Reviews: Drug Discovery* 9 (November) 2010

² Ashley J. Stevens, D.Phil., Jonathan J. Jensen, M.B.A., Katrine Wyller, M.B.E., Patrick C. Kilgore, B.S., Sabarni Chatterjee, M.B.A., Ph.D., and Mark L. Rohrbach, Ph.D., J.D. The Role of Public-Sector Research in the Discovery of Drugs and Vaccines, *New England Journal of Medicine*, February 9, 2011.

of the promising research that needs to be done. Less than one in five research proposals can be funded. Over the past six years, the number of research project grants funded by NIH has declined in almost every year, and the agency is now funding 2,000 fewer grants than it did in 2004. Due to the extreme competition for support, NIH grant applicants have pared their funding requests to the bare minimum needed to fulfill the goal of their research.

If we fail to continue to capitalize on our investment, others will. We have built laboratories, trained young researchers, and initiated exciting new projects. Potentially revolutionary new avenues of research hold promise for earlier screening and better therapies, but these advances will not become a reality unless the NIH budget is sustained and enhanced to meet inflation's demands. Failure to continue our commitment to biomedical research will terminate important scientific investigations, stunt graduate training, and discourage young scientists who are the key to our future.

The NIH budget is currently \$34 billion (including supplemental appropriations). Exciting new initiatives at NIH are poised to accelerate our progress in the search for cures, and it would be tragic if we could not capitalize on the many opportunities before us. A modest increase over the current program level is needed to continue ongoing initiatives and prevent severe damage to our capacity for innovation. Maintaining our current level of effort requires an increase equal to the biomedical research and development price index (BRDPI), which the Bureau of Economic Analysis in the U.S. Department of Commerce estimates will be three percent in FY 2012.

A small fraction of our federal budget, research funding generates an enormous return in new technologies and improved quality of life. Boom and bust cycles are wasteful and inefficient strategies for funding science. The nation's medical research agency needs sustainable and predictable budget growth to maximize the return on this investment in the health and longevity of all Americans. To that end, **FASEB recommends an appropriation of \$35 billion for NIH in FY 2012.** Thank you for the opportunity to offer FASEB's support for NIH.

Contact Information

Name: William T. Talman, M.D., President

Tel: 301-634-7090

Email: william-talman@uiowa.edu

Address: 9650 Rockville Pike, Bethesda, MD 20814

FASEB is composed of 23 societies with more than 100,000 members, making it the largest coalition of biomedical research associations in the United States. FASEB enhances the ability of scientists and engineers to improve—through their research—the health, well-being and productivity of all people. Our mission is to advance health and welfare by promoting progress and education in biological and biomedical sciences through service to our member societies and collaborative advocacy.