

Testimony of
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On

FY 2010 Appropriations for the National Institutes of Health

Submitted to the
House Committee on Appropriations
Subcommittee on Labor, Health & Human Services, Education and Related Agencies

Representative Dave Obey, Chair
Representative Todd Tiahrt, Ranking Member

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On behalf of the Federation of American Societies for Experimental Biology (FASEB), I **respectfully request a funding increase of at least seven percent above the FY 2009 baseline level for the National Institutes of Health (NIH) in FY 2010.** This funding level is an important step toward President Obama's campaign pledge to double funding for basic research over ten years and is necessary to maintain both the existing and future scientific infrastructure. We are in a very crucial time for science in the United States. After years of stagnant funding for research, Congress has recently made significant new investments in NIH. The scientists and researchers represented by FASEB are sincerely grateful to Congress for your faith in the research community and your generosity in providing the resources that are essential for progress in science.

As a Federation of 22 professional scientific societies, FASEB represents nearly 90,000 life scientists, making us the largest coalition of biomedical research associations in the nation. 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 biomedical and life scientists to improve—through their research—the health, well-being and productivity of all people.

We especially thank and commend Congress for including the extraordinary investment in medical research at NIH that was included as part of in the *American Recovery and Reinvestment Act* (ARRA) [P.L. 111-5] as well as the \$938 million increase in NIH funding in the Omnibus Appropriations Act for FY 2009 [P.L. 111-8]. In particular, we are deeply grateful to the Chairman and this Subcommittee for your long-standing leadership in support of NIH. These are difficult times for our nation and for people all around the globe, but the affirmation of science is the key to a better future is a strategic step forward.

The recent history of the NIH budget has hindered scientific discovery and limited the capacity of a key engine for today's innovation-based economy. The additional funding in the ARRA and the FY 2009 omnibus are critical first steps to returning the NIH to a course for even greater discovery. These investments give patients, their families and researchers renewed hope for the future, and will help ensure the success of America's medical research enterprise and leadership. The funding increases in the ARRA and the FY 2009 omnibus will provide an immediate infusion of funds into the nation's proven and highly competitive medical research enterprise to sustain the pursuit of improved diagnostics, better prevention strategies and new treatments for many devastating and costly diseases as well as support innovative research ideas, state-of-the-art scientific facilities and instrumentation, and the scientists, technicians, laboratory personnel, and administrators necessary to maintain the enterprise. These funds will be also reinvigorating this nation's ability to produce the human and intellectual capital that will continue to drive scientific discovery, transform health, and improve the quality of life for all Americans. Moreover, we see this as the first step in renewing a national commitment to sustained, predictable growth in NIH funding, which we believe is an essential element in restoring and sustaining both national and local economic growth and vitality as well as maintaining this nation's prominence as the world leader in medical research.

As a result of this Subcommittee's prior investment in NIH, we have made critical advances in understanding basic science, saved and improved the lives of millions of Americans and provided doctors with tools to prevent and treat costly and devastating diseases including:

- ***Cardiovascular Disease:*** New results from multiple studies provided the strongest evidence to date that a simple blood test for high-sensitivity C-reactive protein (hsCRP), whose characterization was funded by NIH, is a useful marker for cardiovascular disease. Furthermore, scientists have discovered that a daily dose of a commonly used statin, rosuvastatin (Crestor), reduced the risk of heart attack, stroke, and death by nearly half (44 percent) in individuals with high levels of hsCRP but with normal or low levels of low density lipoprotein (LDL), the so-called "bad cholesterol." These developments show great promise in helping clinicians better identify and treat individuals at risk for cardiovascular disease – potentially saving millions more lives.
- ***Cancer:*** For the first time in a decade, incidence rates for all cancers combined are decreasing, driven largely by declines in some of the most common types of cancer, including breast cancer (2.2 percent decline among women) and prostate cancer (4.4 percent decline). Death rates declined for 10 of the top 15 causes of cancer death among both men and women.
- ***Alzheimer's:*** Researchers isolated a toxic substance that appears to be a key to understanding Alzheimer's disease, suggesting a possible new target for developing drug therapies to combat the irreversible and progressive disorder. In addition, further insights into the early stages of Alzheimer's may answer questions not only about the disease, but also about age-related memory impairments.
- ***Type 2 Diabetes:*** An international team that included NIH-funded scientists identified six new genetic variants associated with increased risk of type 2 diabetes. By pinpointing

particular pathways involved in diabetes risk, this discovery can empower new approaches to understanding environmental influences and to the development of better, more precisely targeted drugs.

Investment in NIH is Critical to Taking Advantage of Emerging Scientific Opportunities

Prior investment in NIH has begun to unlock the secrets of the human genome and allowed scientists to gain new insight into how disease works at the most basic levels within our bodies. Scientists are working tirelessly to translate research results into interventions for our most debilitating medical conditions. NIH also serves an invaluable role in communicating research findings to patients and their families, health care providers, and the general public in critical areas such as increasing knowledge about infectious diseases, improving cognitive health, and reducing health disparities.

The Consequences of Stagnant Funding for Research

The re-emergence of previously eradicated diseases such as mumps, the development of new health threats, a rapidly aging population, and significant increases in longevity lends a sense of urgency to the need to expedite scientific discovery. Yet even as our need to prevent disease becomes greater and the opportunities to succeed become more numerous, our national commitment to medical research has stagnated:

- “Success rates” dropped to an estimated 18 percent in fiscal year 2009. This means that more than 80 percent of the highly qualified, peer-reviewed research proposals go unfunded. With every unfunded idea, we risk missing or delaying critical discoveries leading to therapies for our most debilitating health conditions.
- The competition for funding is coming at a time when both the interest in careers in the science field and the number of newly-trained researchers entering the workforce is increasing. Doctorates in the critical fields of engineering and biological sciences increased 10 percent and 11 percent respectively, in one year.¹
- The medical schools, teaching hospitals, universities, and research institutes where NIH research takes place are among the largest employers in their respective communities. In fiscal year 2007, NIH grants and contracts created and supported more than 350,000 jobs that generated wages in excess of \$18 billion in the 50 states.²

The Importance of Sustained, Predictable Funding for Research

The research engine needs a predictable, sustained investment in science to maximize our return on investment. The discovery process—while it produces tremendous value—often takes a

¹ Council of Graduate Schools. 2008. *Graduate Enrollment and Degrees: 1997-2007*.
http://www.cgsnet.org/portals/0/pdf/N_pr_ED2007.pdf

² Families USA. 2008. *In your own backyard: How NIH funding helps your state's economy*.
<http://www.familiesusa.org/assets/pdfs/global-health/in-your-own-backyard.pdf>

lengthy and unpredictable path. Recent experience has demonstrated how cyclical periods of rapid funding growth followed by periods of stagnation is disruptive to training, to careers, long range projects and ultimately to progress. NIH needs sustainable and predictable budget growth to achieve the full promise of medical research to improve the health and longevity of all Americans. We must ensure that after the stimulus money is spent we do not have to dismantle our newly built capacity and terminate valuable, on-going research.

The FY 2009 omnibus and the ARRA provided \$38.5 billion for NIH to provide over 16,000 new research grants for life-saving research into diseases such as cancer, diabetes and Alzheimer's. Keeping up with the rising cost of medical research in the 2010 appropriations will help NIH begin to prepare for the "post-stimulus" era. In 2011 and beyond we need to make sure that the total funding available to NIH does not decline and that we can resume a steady, sustainable growth that will enable us to complete the President's vision of doubling our investment in basic research. Consistent with the President's proposal, we respectfully urge this Subcommittee to increase funding for NIH in Fiscal Year 2010 by at least 7 percent over the fiscal year 2009 level.

The federal commitment to biomedical research is profoundly transforming medical practice, preventing disease, and creating better therapies but additional resources are needed to pursue the historic level of scientific opportunity that is available today. We recognize this subcommittee has the especially difficult task of providing funding for a wide range of critical human service programs and thank you for recognizing that prosperity and quality of life are increasingly shaped by investments in science and technology.