

THE AD HOC GROUP FOR MEDICAL RESEARCH

Statement by the Ad Hoc Group for Medical Research on FY 2013 Appropriations for the National Institutes of Health submitted April 27, 2012, for the record to the Subcommittee on Labor, Health and Human Services, Education and Related Agencies Committee on Appropriations United States Senate

The Ad Hoc Group for Medical Research is a coalition of more than 300 patient and voluntary health groups, medical and scientific societies, academic and research organizations, and industry. We appreciate the opportunity to submit this statement in support of enhancing the federal investment in biomedical, behavioral, and population-based research conducted and supported by the National Institutes of Health (NIH).

We are deeply grateful to the Subcommittee for its long-standing and bipartisan leadership in support of NIH. These are difficult times for our nation and for people all around the globe, but science and innovation are the key to a better future. To ensure continued improvement of our nation's health and to sustain our global leadership in medical research, the Ad Hoc Group for Medical Research recommends at least \$32 billion for NIH in fiscal year (FY) 2013.

NIH: A Public-Private Partnership to Save Lives and Provide Hope

The partnership between NIH and America's scientists, medical schools, teaching hospitals, universities, and research institutions is a unique and highly-productive relationship, leveraging the full strength of our nation's research enterprise to foster discovery, improve our understanding of the underlying cause of disease, and develop the next generation of medical advancements. More than 83 percent of NIH research funding is awarded to more than 3,000 research institutions located in every state. These are funded through almost 50,000 competitive, peer-reviewed grants and contracts to more than 350,000 researchers.

Research funded by NIH has contributed to nearly every medical treatment, diagnostic tool, and medical device developed in modern history, and we are all enjoying longer, healthier lives thanks to the federal government's wise investment in this lifesaving agency. From the major advances – including a nearly 70 percent reduction in the death rate for coronary heart disease and stroke – to moving stories of personalized medicine – such as children with rare diseases like dopa-responsive dystopia, whose prognosis has been transformed from severely disabled to happy and healthy through genomic medicine – NIH's role in improving human health has been extraordinary. For example:

- Between 1990 and 2007, death rates in the U.S. for all cancers combined decreased by 22 percent for men and 14 percent for women, resulting in 898,000 fewer deaths from the disease during this time period;
- Genomic advances have led us to the brink of approval for a new drug for cystic fibrosis, which tragically affects 30,000 Americans, whose current average life expectancy is only 37 years;

- Remarkable breakthroughs in HIV/AIDS announced within the past year have put the possibility of an AIDS-free world within sight; and
- We are within reach of a universal influenza vaccine, eliminating the need for annual flu shots.

NIH research impacts the full spectrum of the human experience, resulting in a 40 percent decline in infant mortality over the past 20 years, as well as a 30 percent decrease in chronic disability among seniors. For patients and their families, the scientific opportunities addressed by NIH provide hope.

NIH is the world's premiere supporter of peer-reviewed, investigator-initiated basic research. This fundamental understanding of how disease works and insight into the cellular, molecular, and genetic processes underlying life itself, including the impact of social environment on these processes, underpin our ability to conquer devastating illnesses. The application of the results of basic research to the detection, diagnosis, treatment, and prevention of disease is the ultimate goal of medical research. Ensuring a steady pipeline of basic research discoveries while also supporting the translational efforts absolutely necessary to bring the promise of this knowledge to fruition requires a sustained investment in NIH.

NIH Supports Jobs, the Economy, and Innovation

The research supported by NIH drives not only medical progress but also local and national economic activity, creating skilled, high-paying jobs and fostering new products and industries. A report released in March by United for Medical Research showed NIH directly and indirectly supported more than 432,000 jobs nationwide, while generating \$62.1 billion in new economic activity. Another report, produced by Tripp Umbach, calculated a \$2.60 return on investment for every dollar spent on research at American medical schools and teaching hospitals.

At the same time, the private sector depends on the basic research funded by NIH to fuel the next generation of drugs, diagnostics, and devices. Chris Viehbacher, CEO of Sanofi, recently warned of the negative impact on the drug industry that withdrawal of support for NIH would have, saying, "I don't think there's enough appreciation in the United States about what a jewel the NIH is. It's fundamentally important to health everywhere in the world that the NIH be properly funded."

NIH also plays a significant role in supporting the next generation of innovators, the young and talented scientists and physicians who will be responsible for the breakthroughs of tomorrow. As competition for NIH grant funding reaches historically high levels, there is a real and present danger of losing our best and brightest minds at a time when scientific opportunity has never been better. Only with an increase in funding can NIH continue to attract the highest quality research talent from all over the world. The challenges of maintaining a cadre of physician-scientists to facilitate translation of basic research to human medicine, ensuring a biomedical workforce that reflects the racial and gender diversity of our citizenry, and maximizing our nation's human capital to solve our most pressing health problems will only be addressed through continued support of NIH.

NIH is Critical to U.S. Competitiveness

While the U.S. maintains our preeminence in biomedical research, we must not take for granted the agency that established us as the world life sciences leader. Even as we have seen NIH's budget eroded by inflation – with a purchasing power 20 percent lower than it was in FY 2003 – other nations have emulated our example and begun to invest in what can only be described as a life science revolution. A 2011 report by the Milken Institute warned that the U.S. was beginning to lose its competitive edge in the biomedical sciences, stating, “Europe and Japan are working to close the gap, while China, India, and Singapore have made impressive strides... These efforts are part of larger economic development plans that increasingly focus on cultivating biomedical innovation for its economic contributions and high-wage jobs.” To illustrate this, a single Chinese company, BGI (formerly the Beijing Genomics Institute) has recently acquired more genomic sequencing capacity in terms of machines and people than the entire U.S. sequencing capacity combined.

In the past six months alone, we have heard ambitious pledges from India, the European Union, Russia, and China to commit substantial funding to research, even as the world struggles to recover from unprecedented fiscal challenges. Talented medical researchers from all over the world, who once flocked to the U.S. for training and stayed to contribute to our innovation-driven economy, are now returning to better opportunities in their home countries.

According to a new national public opinion poll commissioned by Research!America, more than half of likely voters doubt that the United States will be the world leader in science, technology, and health care by the year 2020. The findings reveal deep concerns among Americans about the country's ability to maintain its world-class status in innovation, research and development before the next decade.

We cannot afford to lose that intellectual capacity, much less the jobs and industries fueled by medical research. The U.S. has been the leader in medical research because of bipartisan recognition of the critical role played by NIH. To maintain our dominance, we must reaffirm this commitment to provide NIH the funds needed to maintain our competitive edge.

NIH: A Priority in Challenging Times

The Ad Hoc Group's funding recommendation represents the minimum investment necessary to avoid further loss of promising research and at the same time allows the NIH's budget to keep pace with biomedical inflation. Even before adjusting for inflation, enacted spending bills in recent years have imposed cuts on the NIH budget and the agency can now fund only one in six highly meritorious grant applications it receives – the lowest in history. Accordingly, NIH's ability to sustain current research capacity and encourage promising new areas of science is significantly limited. More distressing, the looming sequestration mandated by the Budget Control Act threatens to continue this trend with further cuts estimated between 7 and 10 percent in FY 2013 alone.

We recognize the tremendous challenges facing our nation's economy and acknowledge the difficult decisions that must be made to restore our country's fiscal health. Nevertheless, we believe strongly that NIH is part of the solution to the nation's economic restoration, and we are thankful that the Subcommittee has recognized that role in its past support. Strengthening our commitment to medical research, through funding NIH, is a critical element in ensuring the health and well-being of the American people and our economy.

Therefore, the Ad Hoc Group for Medical Research respectfully requests that NIH be recognized as an urgent national priority as the Subcommittee prepares the FY 2013 appropriations bill.