

**Statement by the Ad Hoc Group for Medical Research on
FY 2015 Appropriations for the National Institutes of Health
Submitted for the record on May 22, 2014, 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 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, social, and population-based research conducted and supported by the National Institutes of Health (NIH).

The Consolidated Appropriations Act of 2014 included a welcome and much needed increase for the NIH. However, this increase did not restore all of the funds cut by sequestration in FY 2013 or the purchasing power NIH has lost over the past decade due to inflation. We hope FY 2014 represents a first step toward restoring our nation's preeminence in medical research.

The Ad Hoc Group for Medical Research recommends that NIH receive at least \$32 billion in FY 2015 as the next step toward a multi-year increase in our nation's investment in medical research. The Ad Hoc Group also urges Congress and the Administration to work in a bipartisan manner to end sequestration and the continued cuts to medical research that squander invaluable scientific opportunities, discourage young scientists, threaten medical progress and continued improvements in our nation's health, and jeopardize our economic future.

The Ad Hoc Group is deeply grateful to the Subcommittee for its long-standing and bipartisan leadership in support of NIH. We continue to believe that science and innovation are essential if we are to continue to improve our nation's health, sustain our leadership in medical research, and remain competitive in today's global information and innovation-based economy.

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. Approximately 84 percent of the NIH's budget goes to more than 300,000 research positions at over 2,500 universities and research institutions located in every state.

The federal government has an irreplaceable role in supporting medical research. No other public, corporate or charitable entity is willing or able to provide the broad and sustained funding for the cutting edge research necessary to yield new innovations and technologies of the future.

Research funded by NIH has contributed to nearly every medical treatment, diagnostic tool, and medical device developed in modern history, from a new treatment for cystic fibrosis to an awareness campaign that resulted in a dramatic decrease in the number of infants lost to Sudden Infant Death Syndrome to a new vaccine to prevent cervical cancer. We are all enjoying longer,

healthier lives thanks to the federal government's wise investment in this lifesaving agency. Examples of recent clinical breakthroughs made by NIH-supported scientists include:

- NIH-funded researchers have discovered a way to harness the body's own immune system to fight cancer. The promising results in both adults and children with leukemia lead Science Magazine to name Cancer Immunotherapy as the 2013 Breakthrough of the Year for all of science;
- NIH scientists have developed new treatments for hepatitis C – the leading reason for liver transplants in the U.S. – that have shortened treatment times and produced cures in 85 to 95 percent of patients, even those with advanced disease;
- NIH-funded researchers found that certain molecules in urine can provide an early sign of kidney transplant rejection, a test that allows doctors to act earlier to protect transplanted kidneys;
- An NIH-supported clinical trial demonstrated that an intensive early behavioral intervention delivered before the age of two years can improve symptoms as well as normalize brain activity in some children with autism; and
- NIH-funded scientists developed an innovative method to quickly identify antibiotics that can treat multidrug-resistant bacteria—and reveal how these bacteria-killing medications work.

For patients and their families, NIH is the “National Institutes of Hope.”

NIH is the world's premier supporter of merit-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.

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. According to a report released by United for Medical Research, a coalition of scientific advocates, institutions and industries, in fiscal year 2011, NIH-funded research supported an estimated 432,000 jobs all across the United States, enabled 13 states to experience job growth of more than 10,000 jobs, and generated more than \$62 billion in new economic activity.

Stagnant Funding Threatens Scientific Momentum

Despite the increase provided in the current year, over the past decade NIH has lost more than 22 percent of its budget after inflation, significantly impacting the nation's ability to sustain the scientific momentum that has contributed so greatly to our nation's health and our economic vitality. The leadership and staff at NIH and its Institutes and Centers has engaged patient groups, scientific societies, and research institutions to identify emerging research opportunities and urgent health needs, and has worked resolutely to prioritize precious federal dollars to those areas demonstrating the greatest promise. But a continued erosion of our national commitment

to medical research threatens our ability to support a medical research enterprise that is capable of taking full advantage of existing and emerging scientific opportunities.

Perhaps one of the greatest concerns is the obstacle these continued cuts will present to the next generation of scientists, who will see training funds slashed and the possibility of sustaining a career in research diminished. NIH 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.

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

Our country still has the most robust medical research capacity in the world, but that capacity simply cannot weather repeated blows such as persistent below-inflation funding levels and cuts of sequestration, which jeopardize our competitive edge in an increasingly innovation-based global marketplace.

Other countries have recognized the critical role that biomedical science plays in innovation and economic growth and have significantly increased their investment in biomedical science. Between 1999 and 2009, Asia's share (including China, India, Japan, Malaysia, Singapore, South Korea, Taiwan, and Thailand) of worldwide research and development (R&D) expenditures grew from 24 percent to 32 percent, while U.S. R&D expenditures declined from 38 percent to 31 percent. While the U.S. currently leads the world in R&D spending, China's increasing investment in R&D is projected to close the gap and surpass the U.S. in total R&D spending by about 2022. The European Commission also has recently urged its member nations to increase their investment in research substantially, recommending budgets of €80 billion (equivalent to \$108 billion) from 2014 to 2020, a 40 percent increase over the previous seven-year period.

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

NIH: An Answer to Challenging Times

The Ad Hoc Group's members 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 an essential part of the solution to the nation's economic restoration. Strengthening our commitment to medical research, through robust funding of the 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 recommends that NIH receive at least \$32 billion in FY 2015 as the next step toward a multi-year increase in our nation's investment in medical research.