We seek the immediate restoration of funding for the National Institutes of Health to advance life-saving medical research for patients around the world.

The National Institutes of Health is America’s medical research agency. NIH research saves lives, fuels our economy, strengthens our national security, and ensures global leadership.

Why NIH Investment Matters

Our Families: Diseases like cancer, stroke, opioid addiction, and mental illness touch each of us. Investing in NIH helps the people we care about most, now and in the future. For example, half of all men and a third of all women in the U.S. will develop cancer in their lifetimes. Someone’s mother, father, husband, or wife develops Alzheimer’s disease every 65 seconds. And in 2017, opioid and heroin overdoses took nearly twice as many American lives as were lost in auto accidents. Without sustained NIH investment, research to cure diseases and save lives will stall or cease. Investing in NIH helps the people we care about most, now and in the future.

Our Health: Americans are living longer and healthier lives, thanks in large part to NIH-funded research. Cancer deaths dropped more than 25 percent between 1990 and 2015, and survival rates are rapidly increasing for many types of cancer. Thirty years ago, HIV was a death sentence but, today, a 20-year-old diagnosed with HIV who receives treatment is expected to live into their 70s. And from 1968-2013, deaths from heart disease and stroke fell by 78%.

Many new NIH-funded therapies are reaching patients today

• Cancer Immunotherapy: Until 2011, there were three common therapies for cancer — chemotherapy, surgery, and radiation. In 2011, the first of a new wave of therapies, known as cancer immunotherapy, was approved by the FDA and began to reach patients. These new immunotherapies, referred to as checkpoint inhibitors, teach the patient’s immune system to recognize and attack cancer cells that immune cells would otherwise ignore. Forty percent of cancer patients who receive these therapies see their cancers disappear. This therapy resulted from years of basic research pioneered by ACTforNIH Advisory Committee member Jim Allison, who received the 2018 Nobel Prize for Medicine. His co-winner, Tasuko Honjo, discovered a similar target in cancer cells, and the drug resulting from Dr. Honjo’s work cured President Jimmy Carter of metastatic melanoma.
• Sickle cell therapy in human clinical trials: at least six different companies are testing potential new genetic and cellular therapies for sickle cell disease.
• Precision medicine through the All of Us initiative: this historic effort to gather data from more than one million people living in the U.S. will uncover new paths toward delivering precision medicine, accelerating research, and improving health. One of the world’s largest and most diverse biomedical data sets in history, this initiative will spark a new era of evidence-based and more precise preventive care and medical treatment.
Why NIH Investment Matters

Our Budget:
Medicare spends $1 out of every $3 dollars to care for Americans with diabetes, and $1 of every $5 to care for Americans with Alzheimer’s. If we want to save Medicare and balance the budget, we must invest in biomedical research.

Our Economy:
Nearly 95% of NIH’s budget funds medical research by scientists, research institutions, and small businesses in every state across the country. This investment is a multiplier in local economies, creating more than 433,000 jobs and driving nearly $74 billion in economic activity. The American bioscience industry employs more than 1.74 million people, consistently generating high-quality jobs and significant economic output across the nation. The $3.8 billion federal investment in the Human Genome Project has generated more than $1 trillion in economic activity, and continues to grow.

Our National Security:
Public health security is national health security. NIH-funded research defends us against bioterrorism, new and emerging diseases, flu, and other pandemics. This research is essential to protecting the nation against deadly outbreaks of diseases like Zika and Ebola.

Developments in technology and genomics have dramatically shortened vaccine development times. Where it used to take years to develop and test a vaccine, during the 2015 Zika virus outbreak, NIH scientists were able to develop a vaccine that moved from concept to first-in-human trial in less than four months - likely the shortest development period ever for such a vaccine.

U.S. Global Leadership:
NIH is the foremost biomedical research agency in the world, and the U.S. has long been the global leader in medical research. But other countries are quickly catching up. China is now outspending the U.S. on all research and development.

Chinese venture capital and private equity funds raised $45 billion for investment in the life sciences from 2015-2017, and Chinese spending on research and development has risen twice as fast as its gross domestic product. There has also been exponential growth in the number of PhD graduates in China. In 1978, only 18 students were enrolled in doctoral courses. In 2014, 34,000 science and engineering doctorates were awarded in China. The U.S. has a slight edge with 40,000 but the gap is closing fast. Finally, China is the first to pioneer new technologies such as the gene-editing method known as CRISPR. They have already used CRISPR to treat 86 people, and there are as many as 11 clinical trials in China using CRISPR to fight HIV, liver cancer, and leukemia. The U.S. has not yet begun working on this technology with humans.
Even with recent Congressional investments, NIH's purchasing power is still 13% below its 2003 level. If NIH funding had kept up with biomedical inflation, it would receive almost $5 billion more than it does today -- money that could be funding thousands of worthy research projects across the country.

**NIH Restoration is Within Our Grasp!**

NIH was flat funded from 2003-2015, and received a five-percent cut in FY 2013. By FY 2015, NIH's budget had dropped by nearly 25 percent in inflation-adjusted terms, and NIH’s grant portfolio over these years reflects the damage done to research efforts and scientific opportunity. In FY 2004, NIH supported more than 39,000 individual research projects across the country. By FY 2015, NIH’s portfolio had shrunk by nearly 5,000 grants. Which of the thousands of unfunded projects over the past decade might have unlocked a treatment for Alzheimer’s disease or a genetic marker for autism or Parkinson’s?

At the beginning of this decade, our brightest young scientists began leaving research, and NIH Director Francis Collins publicly worried about the loss of a generation of researchers. Other nations, especially China, began to invest in research and infrastructure to lure back students who might have stayed in the U.S., and to achieve scientific advances that now threaten our global leadership.

**Looking Ahead**

Fortunately, in FY 2016 a bipartisan Congress recognized the crisis in biomedical research and, over the past four fiscal years, has increased NIH spending by nearly 30 percent! Over FY 2016-2018, NIH’s grant portfolio has grown by more than 4,500. Rather than being turned away from labs, hundreds of our best and brightest young scientists have been able to launch research careers. We are grateful for Congress' action on this issue.

Still, there is work to be done to fully restore NIH funding. If NIH funding had kept up with biomedical inflation, *it would receive nearly $5 billion more than it does today* -- and that funding could be going toward thousands of deserving research projects at universities across the U.S.

Progress depends on NIH funding receiving stable, predictable growth every year. Scientific progress doesn't just stop and start again with the flip of a switch. The greatest research builds upon previous discoveries through continued, steady advances that build upon the momentum of new discoveries. That is why we continue to press for the restoration of lost funding for NIH so researchers can follow the science to find treatments and cures for all Americans.

*ACT for NIH educates policymakers and others about the importance of the federal government’s role in funding biomedical research. For more information, visit [www.ACTforNIH.org](http://www.ACTforNIH.org).*
Advisory Committee

James Allison, PhD  
Nobel Prize Winner; Department of Immunology, Division of SVP Chief Academic Advisor, The University of Texas MD Anderson Cancer Center

David Baltimore, Ph.D.  
Nobel Prize Winner; President Emeritus, California Institute of Technology

Retta Beery  
Founder and President, Hope Knows No Boundaries

The Honorable Eric Cantor  
Vice Chairman and Managing Director, Moelis & Company

Ronald DePinho, M.D.  
Past President and Professor, The University of Texas MD Anderson Cancer Center

Jennifer Doudna, Ph.D.  
Professor, University of California, Berkeley

Bernadette Gray-Little, Ph.D.  
17th Chancellor, University of Kansas

The Honorable Tom Harkin  
The Harkin Institute for Public Policy and Citizen Engagement

Michael Milken  
Medical Research Innovator and Public Health Advocate

Siddhartha Mukherjee, M.D., Ph.D.  
Pulitzer Prize-winning author of Emperor of All Maladies: A Biography of Cancer

Perry Nisen, M.D., Ph.D.  
Board of Directors, Teva Pharmaceuticals

Sean Parker  
Founder, The Parker Foundation

Ronald Petersen, M.D., Ph.D.  
Director, Mayo Alzheimer’s Disease Research Center Professor of Neurology, Mayo Clinic College of Medicine

Lori Wilson, M.D., FACS  
Associate Professor of Surgery, Howard University College of Medicine