The Value of Sustained, Predictable Funding Growth for the NIH May 2019

Introduction

The National Institutes of Health (NIH) is a premier research agency, which leverages the full strength of our nation's research enterprise to translate discoveries into the next generation of diagnostics, therapeutics, and cures. The Ad Hoc Group believes that science and innovation are essential if we are to continue to meet current and emerging health challenges, improve our nation's physical and fiscal health, and sustain our leadership in medical research. To remain a global leader in accelerating the development of life-changing cures, pioneering treatments, and innovative prevention strategies, it is essential that Congress sustain robust increases in the NIH budget.

NIH 101

- The National Institutes of Health (NIH) is America's medical research agency. NIH research saves lives, fuels our economy, and protects national security.
- Adjusting for inflation, NIH was flat funded for over a decade, limiting NIH's ability to support lifesaving medical research in the United States. Our brightest young scientists began reconsidering their careers, and foreign countries' scientific advances now threaten our global leadership in biomedical research. Progress on cures was stalled.
- Congress started to turn this around with strong bipartisan support for NIH funding increases in FY 2016, FY 2017, FY 2018, and FY 2019 and we must continue this momentum. Thanks to bipartisan leadership in Congress, the NIH has seen a \$9 billion (30 percent) increase to its budget over the past four fiscal years. This has helped recapture lost ground, and continued support is necessary to fully recover from more than a decade of underfunding.
- If NIH funding had kept up with biomedical inflation, it would receive \$44 billion in FY 2020 over \$5 billion more than it does today - and that funding could be going toward thousands of deserving research projects across the country.¹
- Even with the renewed investment in NIH, nearly 4 of every 5 research ideas that are proposed to NIH every year cannot be funded.² Which of these thousands of unfunded projects might unlock a better treatment for chronic pain, or find the genetic marker for autism or Parkinson's?
- Without a robust investment, NIH is unable to support the full scope of research proposals that could lead to cures and treatments for cancer, Alzheimer's, heart disease, stroke, and other conditions.
- In order to make the most progress in medical research, NIH funding needs stable, predictable growth every year. Research can't just stop and start up again with the flip of a switch. The greatest research builds upon previous discoveries through continued, steady advances that follow the momentum of new discoveries.

¹ National Institutes of Health, "Biomedical Research and Development Price Index (BRDPI)," (Accessed May 1, 2019). <u>https://officeofbudget.od.nih.gov/gbiPriceIndexes.html</u>

² National Institutes of Health, "Research Project Success Rates by NIH Institute for 2018," (Accessed May 1, 2019). https://report.nih.gov/success_rates/Success_ByIC.cfm

Why NIH Funding Matters

- **Our Health:** Americans are living longer and healthier lives thanks in large part to NIH-funded research. Cancer deaths dropped nearly 27 percent between 1991 and 2016.³ Thirty years ago, HIV was a death sentence, but today, newly diagnosed patients can live into their 70s. Who knows what discovery could come next a treatment for ALS? A vaccine to combat addiction?
- Our Families: Diseases like cancer, stroke, and mental illness touch each of us. Half of all men and a third of all women in the United States will develop cancer in their lifetimes.⁴
 Without NIH funding, research to cure diseases and save lives will stall or end.
- **Our Budget:** The Federal government spends 1 of every 3 Medicare dollars to care for Americans with diabetes, and 1 of every 5 Medicare dollars to care for Americans with Alzheimer's. ^{5, 6} Investing in biomedical research not only saves lives but also could reduce these costs by preventing progression of highly complex diseases.
- Our Economy: More than 80 percent of NIH's budget funds medical research by scientists, research institutions, and small businesses in every state across the country and the District of Columbia.⁷ This investment multiplies in its return to local economies, creating over 433,000 jobs and nearly \$74 billion in economic activity. Learn about the impact of NIH dollars in your state with <u>United for Medical Research</u>.
- Our Future: NIH-funded research drives scientific innovation and develops new and better diagnostics, prevention strategies, and more effective treatments. This work – conducted at more than 2,500 universities, medical schools, teaching hospitals, and research institutions in all 50 states and Washington, D.C. – yields life-changing benefits for every American. Visit FASEB's <u>database</u> to learn about NIH funding in your state.
- **Our National Security:** NIH research defends us against bioterrorism, new and emerging diseases, and flu and other pandemics. This research is essential to protecting the nation against deadly outbreaks of diseases like Zika and Ebola.
- **Our Global Leadership:** The 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 catching up. If current trends continue, China will outspend the U.S. on all research and development by the year 2020.⁸

³ American Cancer Society, "Facts & Figures 2019: US Cancer Death Rate has Dropped 27% in 25 Years (Posted January 8, 2019). https://www.cancer.org/latest-news/facts-and-figures-2019.html

⁴ American Cancer Society, "Who Gets Cancer?" in *After Diagnosis: A Guide for Patients and Families* (Updated February 20, 2015). https://www.cancer.org/latest-news/facts-and-figures-2019.html

⁵ American Diabetes Association, "The Staggering Cost of Diabetes," (Accessed August 14, 2018). <u>http://www.diabetes.org/assets/img/advocacy/2018-cost-of-diabetes.jpg</u>

⁶ Alzheimer's Association, "Costs of Alzheimer's to Medicare and Medicaid," (Accessed August 14, 2018). <u>http://act.alz.org/site/DocServer/2012_Costs_Fact_Sheet_version_2.pdf?docID=7161</u>

⁷ National Institutes of Health, "NIH Budget History: NIH Extramural & Intramural Funding: FY 2017 Operating Plan," (Accessed August 14, 2018). <u>https://report.nih.gov/NIHDatabook/Charts/Default.aspx?showm=Y&chartId=283&catId=1</u>

⁸ Barbara Casassus, "China predicted to outspend the US on science by 2020," *Nature* (November 12, 2014). <u>http://www.nature.com/news/china-predicted-to-outspend-the-us-on-science-by-2020-1.16329</u>