Biomedical Research Funding: NIH

Fiscal Year 2026 Recommendation
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Introduction

The National Institutes of Health (NIH) is the largest funder of biomedical research in the world.[1] The United States' (U.S.) federal investment in biomedical research, in particular through NIH, has long been a boon to the health of the American people and to the American economy. It has played a significant role in the dramatic increase in life expectancy, from just 47.3 years for a child born in the U.S. in 1900 to 78.4 years for a child born today.[2] Though NIH's mission is focused on enhancing health and lengthening life, investing in the agency also produces indirect benefits to state and local economies. NIH funding flows to all 50 states and supported more than 400,000 jobs in fiscal year (FY) 2024.[3] Beyond its economic impact, NIH funded research has long kept the U.S. at the forefront of scientific innovation and therapeutic discovery. As countries like China rapidly expand their investments in science and medicine, sustained and reliable increases to the NIH budget are critical to ensure the U.S. will remain the global leader in biomedical research.[4]

NIH funds a robust portfolio of immunological research through many of its Institutes and Centers (ICs), the largest percentage of which is funded through the National Institute of Allergy and Infectious Diseases (NIAID). This investment has a significant impact on public health as the immune system is involved in nearly every disease—from fighting infections and cancer to driving chronic inflammatory and autoimmune conditions like inflammatory bowel disease, rheumatoid arthritis and multiple sclerosis, as well as contributing to aberrant inflammation involved in cardiovascular disease and neurodegeneration. By increasing our understanding of the immune system and how it impacts health and disease, researchers have been able to develop revolutionary preventative measures and treatments to improve human health. Many more exciting immunological discoveries are on the horizon, but progress can only be achieved through strong and predictable federal support for biomedical research.

NIH plays an especially vital role in supporting discovery-based foundational research. This type of science is essential to, and lays the groundwork for, the development of drugs and treatments, yet it often does not have immediate commercial application and thus does not receive significant support from private industry. A 2015 report[5] authored by then-Senators Lamar Alexander (R-TN) and Richard Burr (R-NC) put it this way: "[e]arly-stage research is high-risk--prone to high failure rates--making it less attractive to industry investment or undertaking, but these basic research findings form the foundation of the biomedical research continuum."

Background

Following eight years of steady growth, the NIH base budget was held roughly flat in FY 2024 and again in FY 2025 at approximately $47.1 billion. In FY 2025, though, the NIH budget declined as a whole due to reductions in funding for the initiatives supported by the 21st Century Cures Act.[6] After adjusting for inflation, the NIH budget remains more than 5% below its peak funding level, which was reached 22 years ago in FY 2003.[7]

About 83% of NIH's annual budget is used to support extramural research through the issuance of about 50,000 competitive grants to researchers at over 2,500 universities, medical schools, and other research institutions in every U.S. state.[8] This funding supports basic, translational, and clinical research, all of which are essential for fostering medical breakthroughs, improving lives, reducing mortality rates, and deepening our understanding of complex diseases, ultimately leading to better health for individuals throughout the U.S. and worldwide.

Immunology research is funded and supported by many of NIH's 27 ICs, including the National Cancer Institute (NCI), the National Heart, Lung, and Blood Institute, the National Institute on Aging, and the National Institute of Arthritis and Musculoskeletal and Skin Diseases. The largest share of immunology research, however, is supported by NIAID. With a FY 2025 budget of $6.562 billion, NIAID is the second largest NIH IC (behind NCI) and primary funder of foundational research on the development and function of the immune system. This work is critical to understanding chronic conditions like obesity, autoimmune diseases, cancer and neurodegeneration, as well as infectious diseases like influenza, measles, malaria, and HIV/AIDS. NIAID is also the hub for studying the many emerging threats to the American people in recent years, including H5N1 influenza ("bird flu") and coronaviruses (including SARS-CoV-2, which causes COVID-19).

Considerations

NIH's Essential Role in Improving Human Health

Immune system-related diseases, including autoimmune disorders, infectious diseases, allergies, and cancer, affect millions of Americans each year. Despite the immense burden of cancer, including over 600,000 deaths in 2024 and care costs estimated to exceed $240 billion by 2030, remarkable progress has been made. For example, cancer mortality rates have declined by 33% between 1991 and 2021.[9,10] Some of the biggest breakthroughs in cancer treatment have come in the form of cancer immunotherapy, which was born from decades of NIH-funded basic research on how immune responses are initiated and controlled. Immunotherapy is now an effective treatment option for 29 different types of cancer.[11] Immunologists are on the cusp of additional breakthroughs, and further exploring these lines of research is essential to expanding treatment options for other chronic diseases such as inflammatory bowel disease, rheumatoid arthritis, multiple sclerosis, and neurodegenerative diseases.

Significant advancements are already underway for treating autoimmunity and allergy. Chimeric antigen receptor T cell (CAR-T) therapy revolutionized the treatment of many blood cancers and is now being used to experimentally treat autoimmune diseases like lupus, idiopathic inflammatory myositis, and systemic

sclerosis.[12] In addition, a recent NIAID and industry-led large scale clinical trial found that the medication omalizumab, an antibody-based therapeutic, remarkably improved food tolerance in children with food allergies, leading to approval by the U.S. Food and Drug Administration (FDA) for use in individuals over one year old.[13]

Incredible progress has also been made over the last few years on infectious diseases, including respiratory syncytial virus (RSV) and HIV, because of decades-long research funded by NIH. There are now multiple interventions for RSV, which are extraordinarily effective at protecting the most vulnerable populations (infants and the elderly) from severe disease, hospitalization, and death. The FDA recently approved lenacapavir,[14] an injectable antiretroviral drug which was 99.9% efficacious (in clinical trials) at preventing HIV transmission when given twice annually. This astonishing achievement, which has the potential to end the HIV/AIDS epidemic, was made possible due to sustained investment in NIH.

Federal Support for NIH Fuels the Economy

NIH is an economic engine that drives local economic growth and the creation of a highly skilled American workforce. Every dollar invested in NIH extramural research creates $2.56 in economic activity and in FY 2024 this resulted in $94.58 billion in total economic activity.[15] NIH funding directly or indirectly created nearly 408,000 jobs last year across all 50 states and the District of Columbia. It also helps fuel a thriving biopharmaceutical industry that has a total economic impact of more than $1.6 trillion annually.[16] The biomedical research industry as a whole supports more than seven million jobs across the country.[17]

Notably, NIH-funded research contributed to 354 out of the 356 drugs that gained approval by the FDA between 2010 and 2019.[18] This is an astonishing example of why NIH funded basic research, in particular, is so crucial as it lays the foundation upon which private industry can build. In addition, NIH plays an irreplaceable role in cultivating the next generation of talented scientists and a skilled biomedical research workforce through its support of training and fellowship opportunities. This support ensures a steady biomedical research workforce pipeline across academia and private industry.

Sustained Support is Essential to Maintaining U.S. Global Competitiveness and Supporting National Security

The U.S. remains a global leader in research and development (R&D) spending, but China has been closing the gap for many years and has already surpassed the U.S. in key metrics like total patents awarded and scientific papers published annually.[19] As a percentage of GDP, U.S. R&D investment has now dropped below that of countries like South Korea and Taiwan.[20] China and other nations continue to bolster their R&D investments, positioning themselves as formidable competitors in various scientific domains. This global shift underscores the critical importance of sustained and strategic investment in U.S. biomedical research to maintain international competitiveness and continue driving advancements in science, health, and technology. NIH-funded research is also crucial to strengthening America's national security. This includes preparing for potential acts of bioterrorism and developing treatments for the severe diseases and trauma suffered by members of our nation's military and veterans.[21]

As President Trump wrote in a letter to the Director of the White House Office of Science and Technology Policy (OSTP) Michael Kratsios, "[w]e have the opportunity to cement America's global technological leadership and usher in the Golden Age of American Innovation. We are not just competing with other nations; we are seeking, striving, fighting to make America greater than ever before."[22] AAI agrees, but this cannot be achieved without robust support for the biomedical research enterprise.

Recommendations

AAI recommends that Congress:

- Provide NIH with at least $51.303 billion for FY 2026
  This is a 9% increase over the comparable FY 2025 funding level. Following two years of flat or negative investment in NIH, it will enable the agency to provide meaningful growth to all NIH Institutes and Centers and to invest robustly in the treatments and cures of tomorrow.
- Provide NIAID with at least $7.29 billion for FY 2026
  AAI believes that NIAID should grow at the same rate, at minimum, as NIH as a whole, and thus recommends a 9% increase. This increase would allow NIAID to support a higher percentage of meritorious research proposals geared toward better understanding, preventing, treating, and curing, infectious, immunologic, and allergic diseases.

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