ISSUE SUMMARY

The partnership between the National Institutes of Health (NIH) and the nation’s medical schools and teaching hospitals, forged just after World War II, has led to a deeper understanding of the mechanisms of human health and disease and has provided better diagnostics, treatments, cures, and ways to improve health and save lives. Continued advances require sustaining robust, predictable increases in the NIH budget.

Issue

NIH is the nation’s largest medical research agency and a leading source of research support at medical schools and teaching hospitals. NIH-funded research has led to advances in treating cancer, declining death rates from heart disease and stroke, and extended survival for persons with HIV/AIDS. Such research requires adequate, sustained funding over many years. Support for medical research is, therefore, a long-term investment. Thousands of organizations supported by NIH, including medical schools, universities, teaching hospitals and health systems, research institutes, and small businesses, are partners in the biomedical research system, also investing from their own internal resources to maintain their cutting-edge research. Though strong bipartisan support in Congress has led to significant recent funding increases, NIH’s budget—adjusted for inflation—remains lower than it was a decade ago, while the health challenges and complexity of medical research have increased. Continuing the momentum of these recent investments will enable researchers at medical schools and teaching hospitals to continue driving the innovation that improves health for all.

Background

With an annual budget of $32.1 billion (fiscal year [FY] 2016), NIH is the primary source of federal funding for medical research. NIH research funding is divided between intramural research (conducted by NIH employees at NIH facilities) and extramural research (mostly conducted at academic medical centers, universities, and independent research institutes). Approximately half of NIH’s extramural funds supports research by distinguished physicians and scientists at U.S. medical schools and teaching hospitals. These researchers apply for NIH funding through an intensely competitive peer-review process that funds only the most promising and highest-quality research. Today, NIH receives about 90,000 grant applications a year, with fewer than one in six receiving support through its extramural research program.

Funding the NIH budget, and thus continuing the support NIH provides to the nation’s leading researchers, is a critical priority for Congress. With bipartisan support, the NIH budget doubled in the period from FY 1999–2003. However, after the doubling, NIH’s base budget has failed to keep pace with biomedical inflation (known as the Biomedical Research and Development Price Index or BRDPI). Since FY 2003, a combination of nominal increases and cuts has resulted in a stagnant budget base leading to a 20 percent decline in the agency’s purchasing power and has undermined the strengthened research potential and accomplishments enabled by the doubling.

NIH FUNDING FYs 2000–2016 ($ IN BILLIONS)

The current probability that less than 15 percent of new NIH grant proposals will be funded is especially worrying as it discourages new trainees who represent the next generation of our research workforce. The scientific pipeline is in serious danger of breaking as new investigators struggle to find support for their research. In the face of declining paylines from NIH, institutions must also invest their own resources to sustain their research programs. A recent AAMC study
found that academic medical centers, on average, invest 53 cents for every dollar of externally sponsored support, including NIH support, in an effort to keep pace with existing costs.

Over the past 30 years, our nation’s investment in medical research through NIH has amounted to about $75 per American per year. But the return on this investment has been truly spectacular, with an increase in life expectancy and a decrease in deaths from many chronic and infectious diseases. Yet today, we are still spending far more to treat disease and disability than we do to prevent or cure it. Total U.S. health care spending, currently more than $3.0 trillion, is more than 90 times the NIH budget.

NIH has also launched a series of new initiatives meant to accelerate our understanding of human health and disease. The Precision Medicine Initiative, started in 2015, is an effort to create a data-driven enterprise by engaging a million citizens in a large-scale research cohort. NIH is heavily engaged in the Cancer Moonshot to speed progress in cancer treatment and care. The Brain Research Through Advancing Innovative Neurotechnologies (BRAIN) Initiative, started in 2014, has already made a significant contribution to our understanding of the human brain.

To further advance its mission and enhance decision making, NIH, at the request of Congress, recently released a five-year agencywide strategic plan to serve as a framework for the most effective use of its resources. Because NIH funds research to address critical gaps in the basic biomedical and behavioral sciences that have the potential to catapult fields forward and speed the translation of basic discoveries into improved health, we must ensure predictable and sustainable funding to maintain the biomedical research enterprise.

AAMC Policy Recommendations

- The AAMC strongly supports sustained, predictable growth in NIH funding. The AAMC is cognizant of our responsibility to work with the Administration and Congress to balance the many interests of our constituents, while acknowledging the long-term fiscal challenges faced by the nation.
- NIH Director Francis Collins has testified that “a stable trajectory of inflation plus 5 percent for multiple years” could optimally support medical research. Thus, in FY 2017 the AAMC and the Ad Hoc Group for Medical Research recommended an increase of at least 5 percent above the level of inflation for NIH’s FY 2017 appropriation. As appropriators worked to finalize the FY 17 spending bills, the AAMC and the Ad Hoc Group urged Congress to adopt the Senate Appropriations Committee-approved level of $34.1 billion for NIH in the final spending package.
- The AAMC also commends efforts by NIH’s congressional authorizers to reform key elements of the medical research system, especially with regard to reducing and streamlining regulatory burden so that resources can be used more efficiently; fostering more strategic coordination across institutes and centers in pursuing research objectives; ensuring the vitality of future generations of medical researchers, including physician scientists; and exploring innovative opportunities to supplement NIH’s annual budget with new long-term investments in targeted areas.

Related Issues

- Other Priority Health and Research Agencies
- Agency for Healthcare Research and Quality
- Research Training and Workforce
- Research Regulatory Burden

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Web Resources

AAMC Information on Medical Research
www.aamc.org/initiatives/research

AAMC’s Research Means Hope Campaign
http://medresearch.tumblr.com