



Leading Progress Against Cancer

NCI Fiscal Year 2028 Professional Judgment Budget

AT A GLANCE

DIRECTOR'S MESSAGE

Virtually every major cancer breakthrough since the signing of the National Cancer Act of 1971 has its origins at the National Cancer Institute (NCI), part of the National Institutes of Health (NIH). Through public support and steady funding increases from Congress, NCI continues to lead the world in advancing cancer prevention, detection, and treatment through rigorous, gold-standard science and innovation.

Remarkable milestones achieved this year alone demonstrate what is possible through sustained federal investment in cancer research. Recent results showing that the drug daraxonrasib extends survival for people with pancreatic cancer have demonstrated that the once “undruggable” RAS family of genes can, in fact, be targeted—bringing new hope against one of the most deadly cancers.

At the same time, decades of NCI-supported research have expanded the promise of immunotherapy beyond blood cancers to common solid tumors, including colorectal, pancreatic, and stomach cancers. We are also seeing promising results from therapeutic cancer vaccines that can help prevent

recurrence, particularly in cancers where relapse is common. These advances show that the immune system can be harnessed to improve outcomes for many cancer types that are responsible for the greatest loss of life.

NCI-funded research is also transforming cancer prevention. Recent advances include at-home cervical cancer screening tests and evidence that a single dose of the HPV vaccine is as effective as two doses in preventing HPV infection, reducing barriers to preventing several common virus-related cancers.

Sustained Investment Saves Lives

These achievements come from the nation's long-term investment in government-supported science and our partnership with the private sector to translate discoveries into cancer advances that improve and save lives.

Since the 1990s, U.S. cancer death rates have declined by about one-third, translating into more than 5 million lives saved. Diseases once considered uniformly fatal, including metastatic melanoma, chronic myeloid leukemia, and multiple

myeloma, have become manageable for many patients. Other meaningful successes have come from increased screening for breast, lung, and colon cancers.

Yet important challenges remain. More than 600,000 Americans are expected to die from cancer this year, the rates of early-onset cancers among younger adults continue to rise, and some populations continue to experience worse outcomes than others for certain cancers.

Pursuing the Most Promising Research

Each year, the NCI Annual Plan and Professional Judgment Budget outlines the investments needed to pursue the nation's most promising scientific opportunities in cancer research. Although overall funding has steadily increased, NCI's budget has not kept pace with inflation, reducing purchasing power and making it more difficult to sustain the high-quality research conducted at NCI and at laboratories across the country.

Looking to the future, artificial intelligence and advanced analytics have the potential to define the next era of cancer research. NCI is leading efforts to collect, harmonize, and share data to make it more accessible, allowing researchers to more easily leverage these new tools to accelerate drug development and advance treatment strategies. This work complements the Administration's broader Genesis Mission to harness the power of AI.

We have already seen the tremendous impact that prevention and screening research can have on cancer survivorship rates nationwide. This year, NCI is building on that progress by co-leading a Department of Health and Human Services (HHS) initiative to expand health screening in communities experiencing the highest rates of cancer.

NCI is also helping the United States maintain and strengthen its global leadership in clinical research so new treatments reach patients sooner. As part of HHS's Project TrialBlazer, NCI is working with cancer centers, researchers, and other stakeholders to streamline clinical trial activation, improve enrollment, and ensure cancer studies move forward faster, removing barriers wherever they slow patients' access to new therapies.

Support through innovative funding models across the full cancer research continuum continues to

be essential for new avenues of research to emerge and expand. This includes support for investigator-initiated fundamental cancer research, which provides insights into the underlying biology of cancer. It also reveals cancer's progression and creates the foundation for identifying new screening, prevention, and treatment targets, and for translating those discoveries into American-made therapies and diagnostics.

Continued progress depends on investments in workforce development to train the next generation of researchers. A strong, adaptable pipeline of researchers, technicians, and skilled laboratory staff will lead the integration of multiple disciplines to advance the cancer research field.

Better Outcomes for All Americans

Ultimately, patients are at the core of NCI's mission; translating the research we support into significant improvements to patient care and quality of life is our number one goal. In this year's plan, we share two stories of how NCI research has made a real difference in the lives of individual patients and their health.

As a physician-scientist, I have seen firsthand how a single scientific idea can change a life. Twenty years after completing my oncology fellowship, I watched one of my patients with leukemia respond to venetoclax, a therapy that grew directly from our laboratory's research on cell death. It was the most gratifying moment of my career and a reminder that we must continue finding better ways to move promising discoveries from the laboratory to patients who cannot afford to wait.

Delivering on these opportunities to meaningfully improve patient outcomes will require a budget that keeps pace with inflation and provides access to the technologies, infrastructure, and scientific talent needed to sustain the nation's cancer research enterprise.

I look forward to working with you during this exciting time.



Anthony Letai, M.D., Ph.D.

Director
National Cancer Institute

HIGHLIGHTED SCIENTIFIC OPPORTUNITIES

NCI continually pursues new and emerging scientific opportunities that, with further investment, would catalyze additional progress in cancer research. Read about four areas of opportunity highlighted in the NCI Fiscal Year 2028 Annual Plan and Professional Judgment Budget: Leading Progress against Cancer.



ADVANCING FUNCTIONAL PRECISION MEDICINE

Functional precision medicine exposes living patient-derived tissues to different therapies to identify the most effective treatment against the patient's cancer. This allows scientists and clinicians to learn from a patient's individual biology in real time and test multiple drugs simultaneously to make informed choices about what is most likely to work, getting the right treatment to the right patient at the right time. Additional funding for this area will support critical infrastructure, as well as basic and clinical research to speed up patient treatment decisions.



EXPANDING THE REACH OF CELL-BASED IMMUNOTHERAPIES

Cell-based immunotherapy is a revolutionary personalized treatment that attacks cancer by using the patient's own immune cells. Although cell-based immunotherapies were initially developed to treat certain blood cancers, recent approvals of the first cell-based immunotherapies for solid tumors have demonstrated the potential of these therapies to treat a wider range of cancers. Additional funding would enable fundamental research and early-phase clinical trials to test improved cell-based immunotherapy approaches, including the ability to modify the cancer-fighting abilities of cells directly within the body.



FULLY UTILIZING PEDIATRIC CANCER DATA

NCI and the childhood cancer research community are working together to improve the accessibility, integration, and reuse of pediatric cancer data, with recent progress in data collection and coordination led by the NCI Childhood Cancer Data Initiative. Researchers are leveraging comprehensive datasets and artificial intelligence tools in their studies to discover better therapies, determine personalized treatment options, and improve outcomes for all children, adolescents, and young adults experiencing cancer.



LEVERAGING TUMOR ATLASES TO PREDICT CANCER'S EVOLUTION

Ending cancer as we know it includes a future where we can predict a tumor's trajectory based on a detailed profile of each patient's disease and develop personalized approaches to care. Dynamic, 3-dimensional cancer atlases offer a way to understand key changes as cancer progresses. Addressing the complexity of cancer will require further investments in basic research, coupled with fully leveraging the data from cancer atlases and advances in computer science and molecular techniques.

NCI FISCAL YEAR 2028 (FY 28) PROFESSIONAL JUDGMENT BUDGET (DOLLARS IN MILLIONS)

NCI's Professional Judgment Budget for FY 2028 includes continued support for its broad portfolio across the full cancer research continuum, including investments to advance fundamental cancer biology, accelerate new treatments, improve delivery of cancer interventions, and sustain a robust cancer research infrastructure nationwide. This budget would also allow NCI to keep pace with inflation and strategically invest in exciting scientific opportunities. Underpinning each of these areas of opportunity is a strong portfolio of foundational research essential to speeding progress against cancer and reducing the burden of cancer for all people.

FY 2026 NCI Appropriation

\$7,352

**Maintain Support for the Full
Cancer Research Continuum**

Inflation Adjustment*

\$402

**Estimated Additional
Increase over FY 2026 NCI
Appropriation**
(Allocation by Research Opportunity)

\$1,948

\$577 Strengthen Global
Competitiveness in Clinical Trials

\$384 Harness the Power of
Cancer Immunology

\$328 Leverage Advanced
Analytics and AI

\$376 Improve Prevention, Screening,
and Early Detection

\$283 Train the Next Generation
of Researchers

FY 2028 TOTAL**

\$9,702

*Inflation adjustment is based on the NIH Biomedical Research and Development Price Index, which estimates an inflation rate of 2.7% in both FY 27 and FY 28.

**Professional Judgment Budget assumes continuation of the current level of multi-year funding implemented at NCI. To achieve a higher level of multi-year funding across the NCI portfolio, more resources would be required.