

Mission

The National Cancer Institute (NCI) leads, conducts, and supports cancer research across the nation to advance scientific knowledge and help all people live longer, healthier lives.

History

NCI is the federal government's principal agency for cancer research, training, and education. Established under the National Cancer Act of 1937, NCI's scope and responsibilities were expanded with the National Cancer Act of 1971, which directed NCI to lead the National Cancer Program. This included expansion of the Cancers Center program and creation of a data bank for the collection, storage, analysis, and dissemination of cancer data to support research.



Dr. W. Kimryn Rathmell, MD, PhD, was sworn in as the 17th NCI Director in December 2023.

Funding History

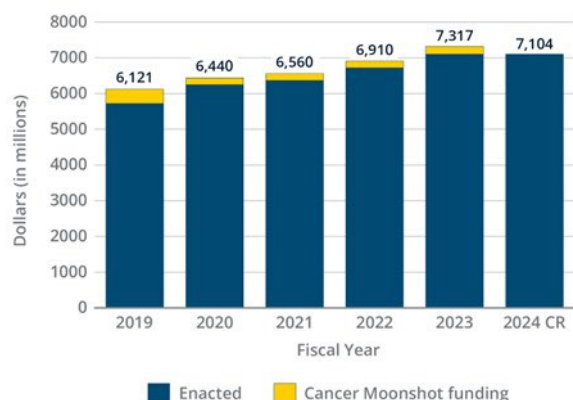


Figure 1. NCI Funding History for FY 2019 – 2024. FY 2025 President's Budget: \$7,839 million*
*Does not include mandatory Biden Cancer Moonshot Funding

Research Highlights

- Overall cancer death rates continued to decline for all age groups in every major racial and ethnic group in the U.S. from 2015 to 2019, according to the NCI co-issued 2022 Annual Report to the Nation on the Status of Cancer; individual cancer rate trends vary.
- Recent research showed we must accelerate progress, particularly for rare and difficult-to-treat cancers, to achieve the Biden Cancer Moonshot goal of a 50 percent reduction in age-adjusted cancer death rates by 2047.
- With \$1.8 billion from the 21st Century Cures Act, NCI has supported over 70 programs and over 300 research projects to achieve the goals of the Cancer Moonshot. This includes addressing cancer disparities, identifying evidence-based strategies for health care delivery, and developing new approaches to prevent, screen, diagnose, and treat cancer.
- NCI has launched several programs to help improve cancer outcomes in rural areas where populations experience higher average death rates for all cancer sites combined, compared to populations in urban counties. These include a new Persistent Poverty Initiative to improve cancer screening rates and improve the quality of cancer care in rural communities.

Facts & Figures

In FY 2023 NCI supported:

- 8,008 Extramural Principal Investigators (PIs) and 318 Intramural Investigators
- 131 new Early-Stage Investigator (ESI) awards
- 1,100 Fellowship/Career Development awards
- 72 NCI-Designated Cancer Centers across the United States

NCI Awards History

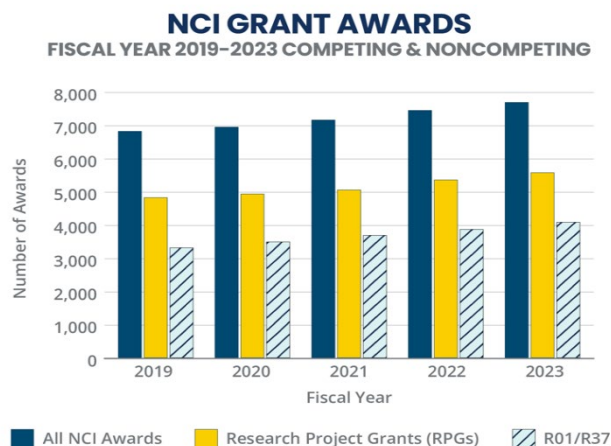


Figure 2. Overview of NCI's grant awards for FY 2019 – 2023. All NCI Awards include Research Project Grants (RPGs), fellowship and career development awards, center grants (e.g., Cancer Centers Support Grants), and Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) awards. RPGs are over 70 percent of total NCI grant awards and include R01/R37 awards, multi-component research grants, cooperative agreements, and more. R01/R37s are over 50 percent of RPGs.

and developing new approaches to prevent, screen, diagnose,

NCI SUPPORT FOR THE CANCER RESEARCH ENTERPRISE

NCI FUNDING

NCI funds programs, platforms, and people to power the cancer research enterprise. These investment areas depend on each other and interact dynamically in a complex system to produce improved health outcomes.

Cancer Researchers

R01s and other grants provide funds for investigator-initiated research projects; those researchers also need other resources to power their work.

Clinical Trials Networks

NCI's clinical trials networks are essential for testing new approaches and expanding options for people with cancer.



Specialized Technologies

Through the Frederick National Laboratory for Cancer Research, NCI provides researchers access to specialized technologies and platforms, such as databases and repositories.

Infrastructure

Researchers at NCI-Designated Cancer Centers rely on the critical infrastructure, supported by NCI funding.

IMPROVED OUTCOMES

NCI-supported scientists, research, and programs collectively improve our understanding of cancer biology; produce new approvals for cancer prevention, diagnosis, and treatment; and enhance patient care.



These components are not a comprehensive representation of NCI investments.

Recent Accomplishments

FDA Approvals

- An NCI clinical trial led to the first FDA-approved drug for the treatment of advanced alveolar soft part sarcoma, an extremely rare cancer that mainly affects adolescents and young adults.
- An NCI-sponsored Children's Oncology Group trial led to the FDA approval of a drug in combination with chemotherapy for high-risk Hodgkin lymphoma in children and adolescents, providing the first targeted therapy for children with this disease.

Cancer Moonshot Progress

- Immunotherapy research networks for both adult and pediatric cancers have made significant advances in cell therapy for solid tumors including identifying new antigens to target, engineering more effective T cells and natural killer cells, overcoming T cell exhaustion, and reducing the side effects associated with this type of therapy.

Current Activities:

Rural Cancer Control Initiatives

- NCI launched the Persistent Poverty Initiative to alleviate the cumulative effects of persistent poverty on cancer outcomes by building research capacity, fostering cancer prevention research, and promoting the implementation of community-based programs. It is the first major program to address the structural and institutional factors of persistent poverty in the context of cancer.

Diversifying the Cancer Research Workforce

- The first Cancer Moonshot Scholars cohort was announced in FY 2023 with at least two more cohorts planned. This program is designed to advance cancer science while also diversifying the pool of researchers and the approaches to cancer research.

Future Initiatives:

Clinical Trials

- In 2024, the new Cancer Screening Research Network will launch the NCI Vanguard Study, a pilot study that will evaluate whether the benefits of using multi-cancer detection tests to screen for cancer outweigh the harms, and whether these tests can detect cancer early enough to reduce deaths. The Vanguard Study will inform the design of a larger trial involving about 225,000 people.
- NCI is revolutionizing cancer clinical trials to increase accrual and completion rates and make them more representative of the US population. This initiative also includes designing flexible or pragmatic trials that save on cost and time, such as the NCI Pragmatica-Lung study.

A Cancer Research Data Ecosystem

Building a Cancer Research Data Ecosystem will harness the power of cancer research data and support all of cancer research and cancer care. This ecosystem will collect, integrate, and share data from a broad range of sources to maximize data utility from every laboratory experiment, clinical trial, and patient experience. The cloud-based Cancer Research Data Commons is an important component of this ecosystem.