NCI Director's Report

Monica M. Bertagnolli, M.D.
Director, National Cancer Institute

September 6, 2023

19th Virtual Meeting of the National Cancer Advisory Board

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@TheNCI

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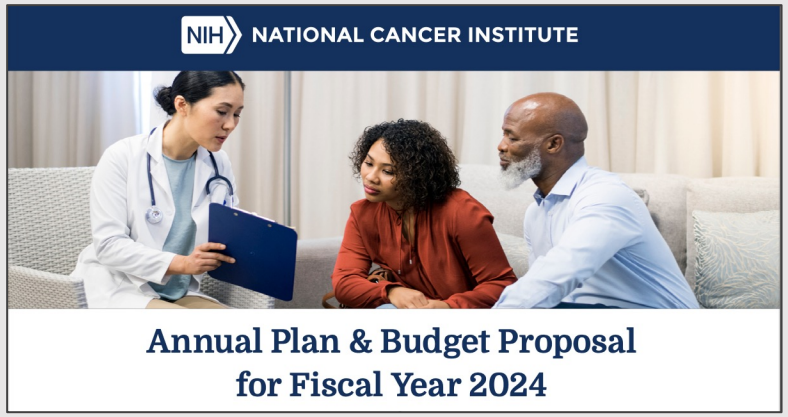
Where we are today

- Congress is currently working on the federal budget for **FY 2024**
- NCI submitted its **Annual Plan and Budget Proposal for FY 2024** (“Bypass Budget”), intended to inform development of the President’s Budget and the overall appropriations process.

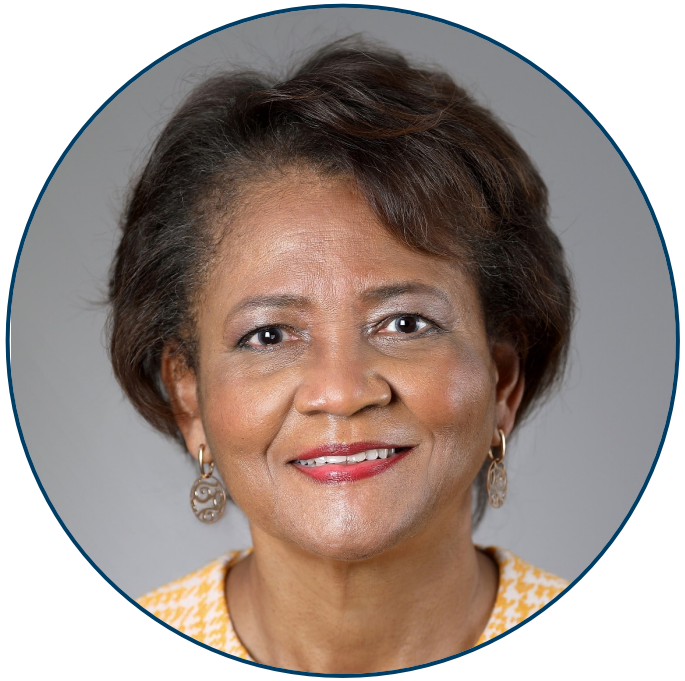


COMING SOON!

- Later this month (September 2023), NCI will publish its **FY 2025** Professional Judgment Budget Proposal.

For more, see www.cancer.gov/about-nci/budget

New Funding Opportunity



Worta McCaskill-Stevens, M.D., M.S.
NCORP Director

NCI Worta McCaskill-Stevens Career Development Award for Community Oncology and Prevention Research

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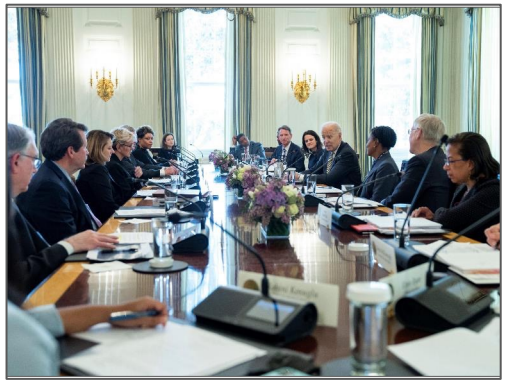
Momentum Toward Achieving the Goals of the Cancer Moonshot and National Cancer Plan

President's Cancer Panel and the National Cancer Plan: Initial stakeholder meeting

Thursday, September 7, 2023



Cancer Cabinet meeting

Mid-September 2023

University of Colorado Cancer Center

Learn about how the CU Cancer Center is helping in each of the eight goals of the National Cancer Institute's National Cancer Plan aimed at changing how we know cancer today.

1. Prevent Cancer.
2. Detect Cancers Early.
3. Develop Effective Treatments.
4. Eliminate Inequities.
5. Engage Every Person.
6. Deliver Optimal Care.
7. Maximize Data Utility.
8. Optimize the Workforce.

HHS Cancer Moonshot Data initiative

Long-term data aspiration / north star:

- *HHS has made significant strides to establish secure sharing of privacy-protected health data as standard practice throughout research.*
- *HHS is actively facilitating researchers' sharing and use of available data to achieve rapid progress against cancer.*

Near-term work streams:

1. Secure federated linked data
2. Create and implement data standards & interoperability
3. Drive innovative public/private data partnerships
4. Streamline CMS data access for research

National Cancer Plan Goal – Maximize Data Utility:

Secure sharing of privacy-protected health data is standard practice throughout research, and researchers share and use available data to achieve rapid progress against cancer.

Prevention, Screening, and Early Detection

Recent Highlights

- Multi-cancer detection tests (Vanguard Study)
- Cancer Screening Research Network (CSRN)
- NCI Cervical Cancer 'Last Mile' Initiative
- Single-dose HPV vaccine research
- Cancer Immunoprevention Network (CIP-Net)
- Cancer PathCHART: Pathology Coding Histology And Registration Terminology (SEER partnership)
- …and more

Clinical Trials

Recent Highlights

- Clinical Trials Innovation Unit (CTIU)
- Pragmatica-Lung
- ComboMATCH: Combination Therapy Platform Trial with Molecular Analysis for Therapy Choice
- NCI Experimental Therapeutics Clinical Trials Network (ETCTN)
- Virtual Clinical Trials Office Monitoring Pilot Activity
- …and more

Health Disparities Research
Recent Highlights

- Persistent Poverty Initiative (PPI)
- Connecting Underrepresented Populations to Clinical Trials (CUSP2CT)
- Telehealth Research Centers of Excellence (TRACE)
- Cancer Centers Community Outreach and Engagement expansion to focus on underserved populations
- Cancer Health Disparities and Minority Health (CHD-MH) SPORE Program
- …and more

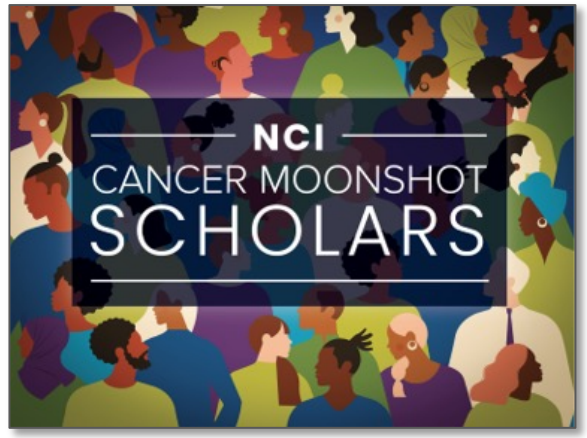
Workforce and Training

Recent Highlights

- Cancer Moonshot Scholars
- Early Investigator Advancement Program (EIAP)
- NCI intramural research training programs (CCR, DCEG)
- Frederick National Laboratory for Cancer Research training programs
- Continuing Umbrella of Research Experiences (CURE)
- Intramural Continuing Umbrella of Research Experiences (iCURE)
- Partnerships to Advance Cancer Health Equity (PACHE)
- NCI Early-Stage Surgeon Scientist Program (ESSP) Pilot Program
- …and more

CCR: Center for Cancer Research
DCEG: Division of Cancer Epidemiology and Genetics

Spotlight: Cancer Moonshot Scholars



The Cancer Moonshot Scholars program seeks to:

- ✓ **Advance cancer science**
- ✓ **Diversify the NCI R01 portfolio** by enhancing the number of applications from early-stage investigators from diverse backgrounds
- ✓ **Increase diversity of thought and approach** to cancer research

Research projects	
Cancer sites:	**Approaches/topics**:
• Rectal cancer	• Treatment
• Glioma	• Basic science
• Hepatocellular carcinoma	• Screening
• Prostate cancer	• Prevention
• Lung cancer	• Implementation Science
• Cervical cancer	
• Pancreatic cancer	

Data Sharing and Infrastructure

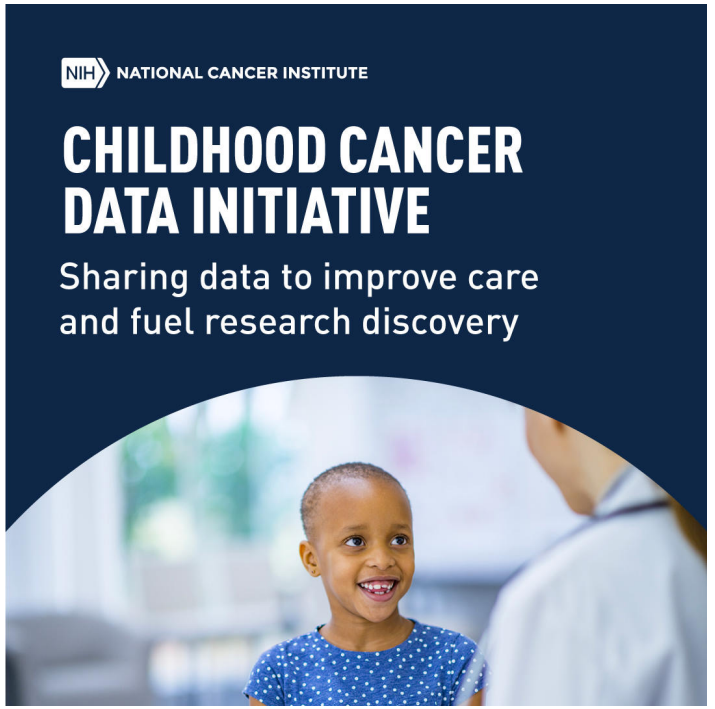
Recent Highlights

- National Cancer Data Ecosystem
- Cancer Research Data Commons (CRDC)
- Clinical Proteomic Tumor Analysis Consortium (CPTAC)
- Childhood Cancer Data Initiative (CCDI)
- Human Tumor Atlas Network (HTAN)
- …and more

Spotlight: Childhood Cancer Data Initiative (CCDI)

Recent Highlights

- **Release of additional molecular characterization data and clinical data** collected from the Children's Brain Tumor Network, the Pacific Pediatric Neuro-Oncology Consortium, and the Children's Hospital of Philadelphia Division of Genomic Diagnostics
- New improvements to the **CCDI Molecular Targets Platform**
- Launch of new **CCDI Hub**
- New database of **Genotypes and Phenotypes (dbGAP)** resource added to CCDI Data Catalog



Important Research Advances This Fiscal Year

Advance / Finding	Journal / Trial	Area
Cell division can be stopped before it happens	*Nature* (Cornwell et al)	Prevention, treatment
Alternative fuel for pancreatic cancer growth in absence of glucose, uridine	*Nature* (Nwosu et al)	Treatment
Fatty liver disease increases risk of colorectal cancer metastasis	*Cell Metabolism* (Wang et al)	Prevention, treatment
ecDNA directly influences the initial formation and continued progression of esophageal cancer	*Nature* (Luebeck et al)	Detection, treatment
Two key drivers of hereditary kidney cancer identified	*EMBO Molecular Medicine* (Di Malta et al)	Treatment
New understanding of RNA shapes could lead to drug design	*Nature Communications* (Ding et al)	Treatment
AI predicts aggressiveness of childhood cancer rhabdomyosarcoma	*Clinical Cancer Research* (Milewski et al)	Detection, treatment
NCI clinical trial leads to FDA approval of atezolizumab for advanced alveolar soft part sarcoma	Trial: NCT03141684	Treatment
Clinician-focused nudges can result in more patients engaging in tobacco use treatment	*Journal of Clinical Oncology* (Jenssen et al)	Health care delivery, implementation science
Sex/gender differences in metabolic syndrome among cancer survivors in the US: an NHANES analysis	*Journal of Cancer Survivorship* (Ezeani et al)	Survivorship

Spotlight: Atezolizumab approval for advanced alveolar soft part sarcoma

- **An NCI-led clinical trial resulted in the first approval of a treatment for advanced alveolar soft part sarcoma** (ASPS) – an extremely rare cancer that affects mostly adolescents and young adults
- First time atezolizumab has been approved for children
- Largest study on ASPS
- First study conducted in the NCI-funded Experimental Therapeutics Clinical Trials Network (ETCTN) that has resulted in a drug approval
- Approved for treating several cancer types, including liver cancer, melanoma, and lung cancer

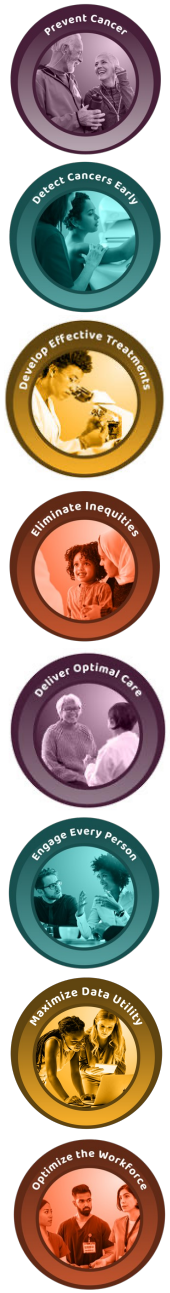
Atezolizumab binds to PD-L1 and blocks it from binding to another checkpoint protein, PD-1.

*"Forty percent of the patients were treated at the NIH Clinical Center in Bethesda. Our ability to **bring patients in from all over the world** was a key factor in the ability to do the study."*

– James Doroshow, M.D.,
NCI Deputy Director for Clinical and Translational Research

Looking forward: Together, we can do more

- **Sustaining current and new programs**
  - (e.g., Clinical Trials Innovation Unit, Persistent Poverty Initiative, Childhood Cancer Data Initiative)
- **Raising Research Project Grant paylines**
- **More comprehensive systems biology work**
- **Expanding community outreach/engagement work through cancer centers with focus on underserved populations**
- **Direct patient engagement**
- **Expansion of prevention and screening network**
- **More clinical trials**
- **Data ecosystem and data to power machine learning**
- **New ARPA-H collaborations**
- **Enhanced support for trainees**



Thank you!

www.cancer.gov

www.cancer.gov/espanol

1-800-4-CANCER

NCIinfo@nih.gov

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