

# NCI Director's Report

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Norman E. Sharpless, M.D.

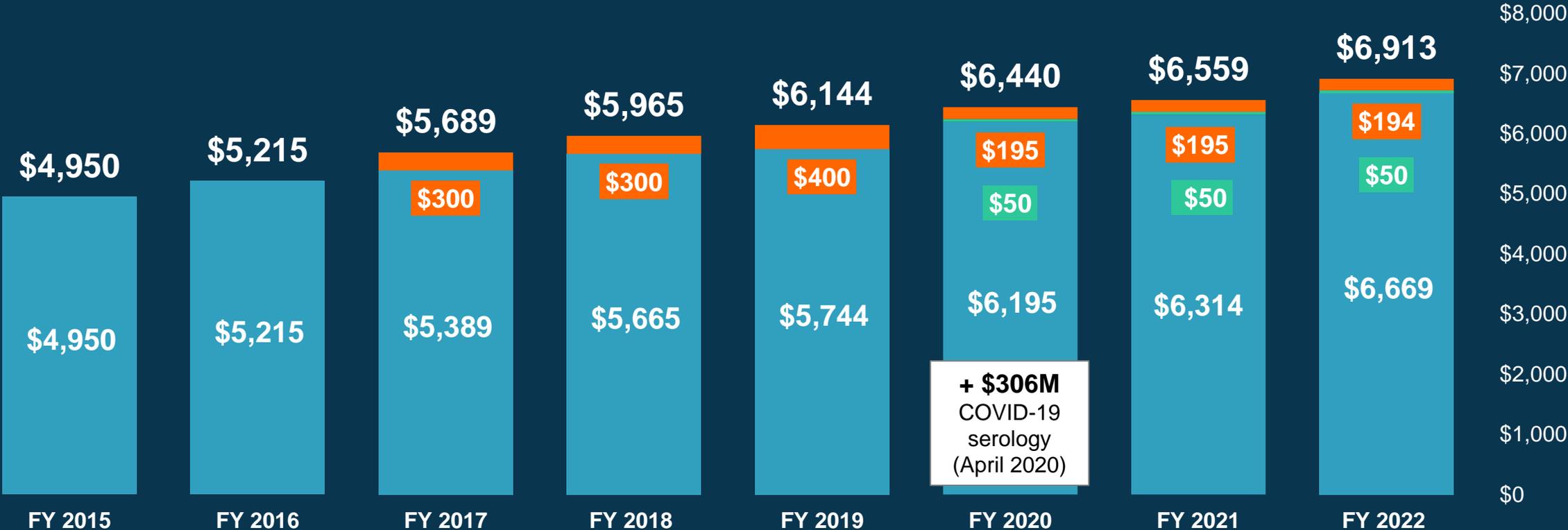
*6<sup>th</sup> Virtual Meeting of the Board of Scientific Advisors (BSA)*

*March 28, 2022*

@NCIDirector  
@TheNCI

# NCI Appropriations FY 2015 – 2022 (in millions)

21<sup>st</sup> Century Cures Act - orange  
Childhood Cancer Initiative - green



**Also, ARPA-H: \$1B**  
(available FY 2022 - 24)

# Advanced Research Projects Agency for Health (ARPA-H)



\$1 Billion (FY 2022 – 2024)

## Still TBD:

- Within NIH or external? – Secretary Becerra to decide within 30 days
- Leadership
- Authorizing legislation
- Flexibilities, Authorities

# NCI Research Project Grants (RPG) Funding Policy for FY 2022

Competing Grants		Non-Competing Grants
TYPE	PAYLINE	
<b>R01</b> Grants for Established and New Investigators	<b>11th Percentile</b>	Will be funded at <b>98%</b> of the committed level. <b>Exempt</b> from the 2% reduction: <ul style="list-style-type: none"> <li>• Most <b>ESI</b> awards</li> <li>• <b>Training</b> awards</li> <li>• R00, R03, R50</li> <li>• SBIR/STTR awards</li> <li>• <b>P30</b> Cancer Center awards</li> </ul>
<b>R01</b> Grants for Early-Stage Investigators (ESIs)	<b>16th Percentile</b>	
<b>R21</b> Exploratory Grants	<b>9th Percentile</b>	

## Opinion

### A \$1-Billion Boost to the NCI Will Help Us Beat Cancer

The organization's underfunding means critical research is not being done

*Scientific American* – December 28, 2021

“ We must work together to treat cancer with the same urgency that we tackled the pandemic—starting with a **robust, sustained investment in cancer research through the National Cancer Institute (NCI).** ”



**Senator Chris Coons**  
Delaware (D)



**Senator Jerry Moran**  
Kansas (R)

## Ending cancer as we know it

BY CARYN LERMAN, PH.D., AND ROBERT A. WINN, MD, OPINION CONTRIBUTORS — 02/17/22 08:00 AM EST  
THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT THE VIEW OF THE HILL

*The Hill* – February 17, 2022

“ Cancer is projected to cost the U.S. \$245 billion by 2030... **Now is the time for Congress to invest in cancer research to support the president's plan to end cancer as we know it.** We all stand to benefit. ”



**Caryn Lerman**  
President, AACI



**Robert A. Winn**  
VP and  
President-Elect, AACI

# White House Commitment to New Cancer Moonshot Goals



“I’m proud to announce our plan to supercharge the Cancer Moonshot as a central effort of the Biden-Harris administration... This is a presidential priority. I will do my part on funding and using my authority as president to speed breakthroughs. I challenge and encourage all of you to do your part.”

– *President Joe Biden (February 2, 2022)*

# New White House Cancer Mortality Goal

**1990** **215** deaths per 100,000

**2019** **146** deaths per 100,000

**In 25 years...**

**73** deaths per 100,000



“The goal is to **cut the cancer death rate in half in the next 25 years.**”

— President Biden  
Feb. 2, 2022

# Ending Cancer As We Know It

## DIAGNOSE CANCER SOONER



Increase access to screening, support patients through diagnosis, evaluate new technologies like multi-cancer detection tests

## PREVENT CANCER



Explore mRNA technology, address environmental exposures to cancer

## ADDRESS INEQUITIES



Ensure every community in the nation has access to diagnostics, therapeutics, and clinical trials

## TARGET TREATMENTS TO THE RIGHT PATIENTS



Learn more about genetics, immune responses, and other factors, to tell which combination of treatments will work best in an individual patient

## SPEED PROGRESS AGAINST DEADLIEST & RAREST CANCERS



Invest in a robust pipeline for new treatments

## SUPPORT PATIENTS, CAREGIVERS, & SURVIVORS



Help people overcome medical, financial, and emotional burdens; provide support to navigate diagnosis, treatment, and survivorship

## LEARN FROM ALL PATIENTS



Leverage diverse experiences of patients and families to develop approaches to end cancer as we know it

# First Lady Jill Biden and NCI Work Together on ‘Returning to Screening’



Healthy People 2030 screening targets		Current uptake*
<b>Lung cancer</b>	<i>7.5% of adults aged 55-80 years receive lung cancer screening</i>	<b>4.5%</b>
<b>Colorectal cancer</b>	<i>74.4% of adults aged 50-75 years have received a colorectal screening test</i>	<b>67.1%</b>
<b>Breast cancer</b>	<i>77.1% of women aged 50-74 years have received a breast cancer screening</i>	<b>76.4%</b>
<b>Cervical cancer</b>	<i>84.3% of women aged 21-65 years received cervical cancer screening</i>	<b>73.5%</b>

\*Most recent data available as of July 2021

# President Biden Announces OSTP Leadership



**Dr. Alondra Nelson**  
Director of the White House Office  
of Science and Technology Policy



**Dr. Francis Collins**  
Science Advisor to the President and  
Co-Chair of the President's Council of  
Advisors on Science and Technology

# Cancer Cabinet meeting at the White House – March 16, 2022



BRIEFING ROOM

## Fact Sheet: White House Announces Initial Steps for Reignited Cancer Moonshot

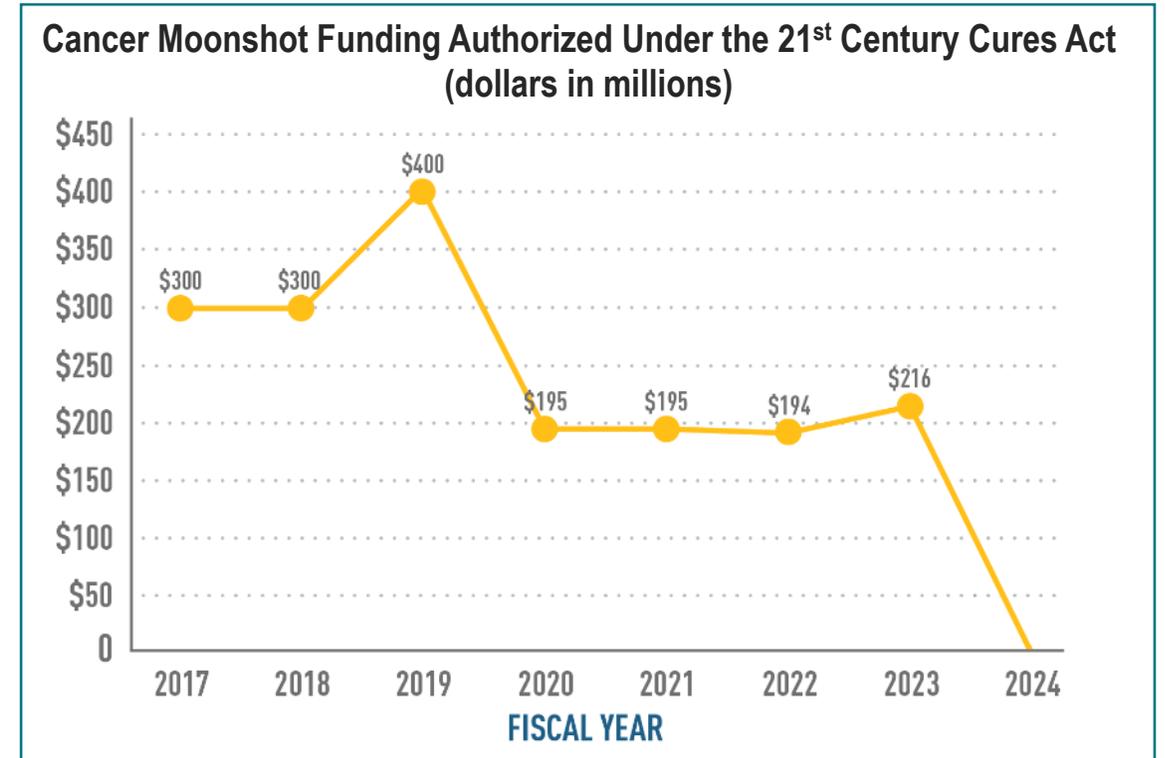
MARCH 17, 2022 • PRESS RELEASES

*The White House convened the Cancer Cabinet to establish a prioritized agenda including the development of new interagency programs and collaborations and announced initial steps for the Cancer Moonshot*

*“What’s next is doing what we can together that is more collaborative and innovative than ever before.”*

—Dr. Alondra Nelson, Director, OSTP

# Cancer Moonshot<sup>SM</sup>



The Cancer Moonshot has three ambitious goals: to **accelerate scientific discovery in cancer**, **foster greater collaboration**, and **improve the sharing of data**.

# Equity & Inclusion



## Connecting Underrepresented Populations to Clinical Trials (CUSP2CT)



- Funding Opportunity Announcement (FOA) for **Data, Evaluation & Coordinating Center**
- Deadline: **March 28, 2022**
- FOA #: RFA-CA-21-058

## NIH Faculty Institutional Recruitment for Sustainable Transformation (FIRST)



- FOA: RFA-RM-22-008
- Deadline for third/final cohort FOA: **July 12, 2022**

## Early Investigator Advancement Program (EIAP)



- Received 89 eligible applications in December. **The first cohort of 20+ scholars will start this month** and aim to submit R01 applications in the fall.

## Notice of Special Interest



- Administrative supplements to recognize **excellence in diversity, equity, inclusion, and accessibility (DEIA) mentorship** in the biomedical sciences.
- Deadline: **April 7, 2022**
- Notice #: NOT-OD-22-057

# NCI Bottom Line



## Reducing Administrative Burdens on Cancer Researchers

March 25, 2022, by NCI Director Dr. Norman E. Sharpless

Securing and maintaining a grant from NCI requires cancer researchers to prepare the initial application and comply with additional requirements during the life of the grant, which is demanding and time-consuming. In this edition of the NCI Bottom Line blog, NCI Director Dr. Ned Sharpless describes several NCI efforts to reduce administrative burdens on grantees and shares helpful resources for the community.



## Modular versus Non-Modular Budgets: What's the Bottom Line?

February 17, 2022, by Dr. Norman E. Sharpless

In this edition of the NCI Bottom Line, NCI Director Dr. Ned Sharpless breaks down some commonly asked questions from investigators about using the modular budget option with R01 grant applications. Dr. Sharpless addresses these questions using an analysis conducted by the NCI's Center for Research Strategy about modular versus non-modular budgets.

**Read more at:**

**[www.cancer.gov/grants-training/nci-bottom-line-blog](http://www.cancer.gov/grants-training/nci-bottom-line-blog)**

# New cohort study finds racial disparities in adherence to lung cancer screening (LCS) and follow-up care

## Annals of the American Thoracic Society

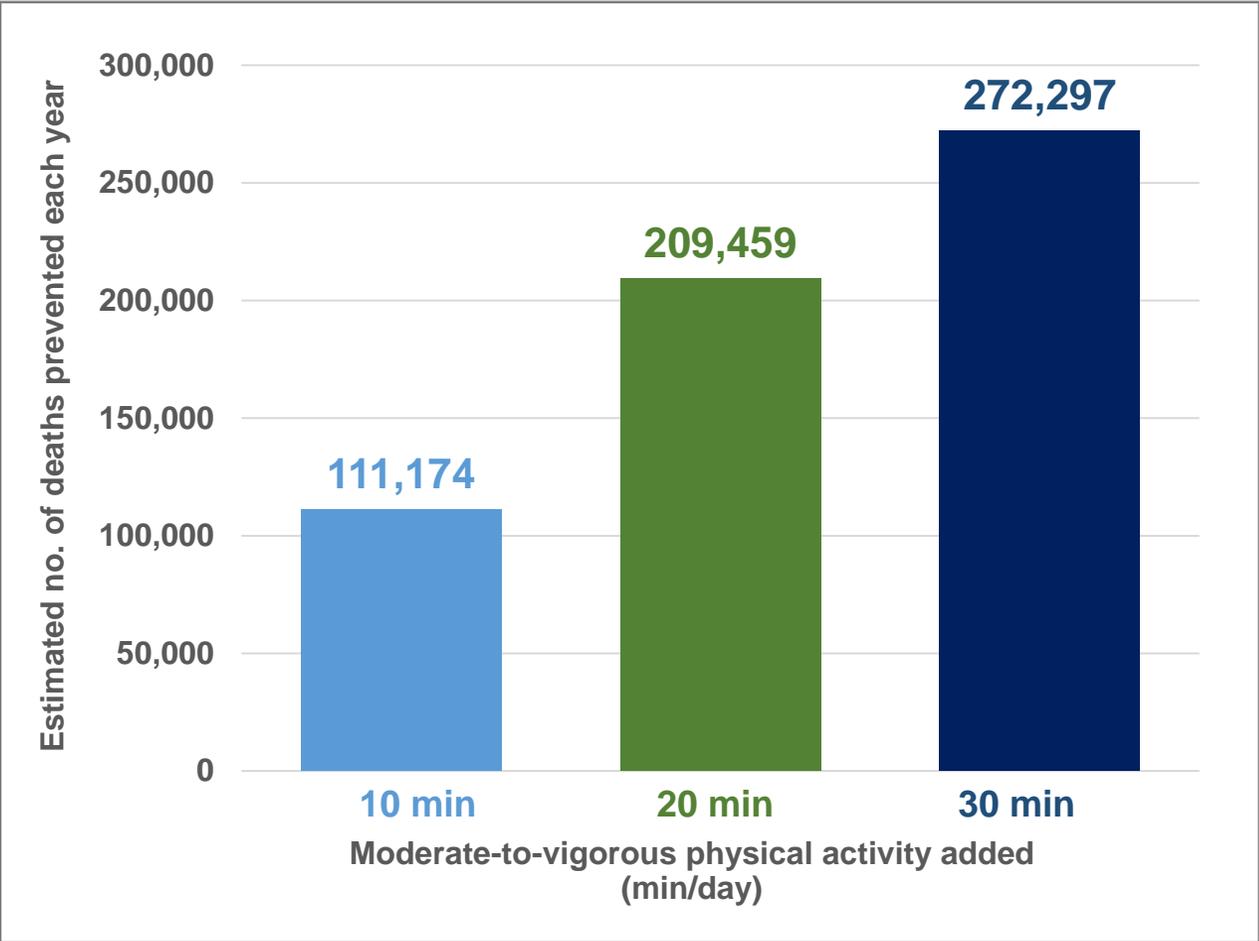
### Racial Disparities in Adherence to Annual Lung Cancer Screening and Recommended Follow-up Care: A Multicenter Cohort Study

- **Adherence** to both annual LCS and recommended follow-up care was **greater at centralized screening programs**
- **Black patients** were **less likely to receive annual LCS** compared to White patients **at decentralized** compared to centralized LCS programs



Photo: John Carl D'Annibale / Times Union

# Small increase in physical activity could avert 7-17% of deaths/year



Added physical activity (min/day)	Est. deaths averted a year	% decrease in deaths/year
10	111,174	7%
20	209,459	13%
30	272,297	17%

**First study to estimate preventable deaths through physical activity using accelerometer-based measurements among US adults**

*Saint-Maurice PF, Graubard BI, Troiano RP, et al. Estimated Number of Deaths Prevented Through Increased Physical Activity Among US Adults. JAMA Internal Medicine. January 24, 2022.*

# NCI SeroNet study shows how COVID-19 immunity holds up over time

Science Translational Medicine

Neutralizing antibody responses elicited by SARS-CoV-2 mRNA vaccination wane over time and are boosted by breakthrough infection

February 15, 2022

Evans JP, Zeng C, Carlin C, Lozanski G, Saif LJ, Oltz EM, Gunmina RJ, and Liu S-L

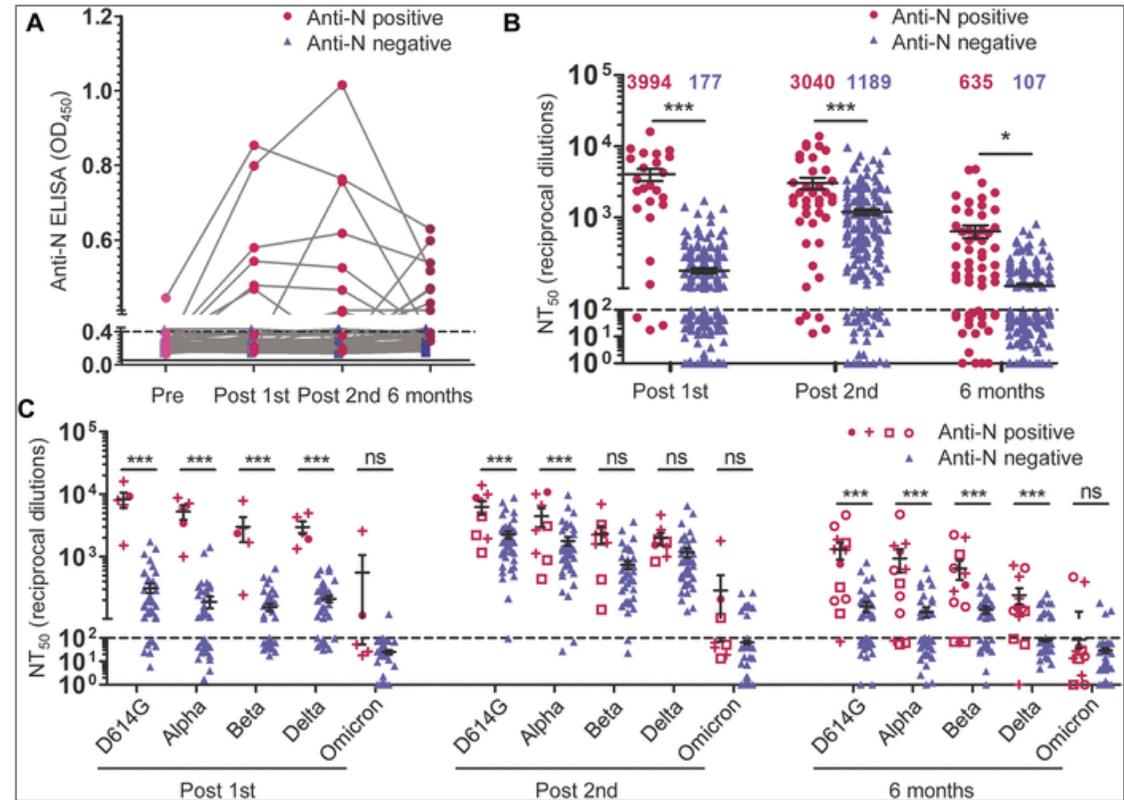


Figure: Durability of nAb response is influenced by prior COVID-19 infection and mRNA vaccine type

# Blood-based multi-cancer early detection tests (MCEDs)



## OUTSTANDING QUESTIONS

Can MCED tests detect many subclinical cancers at early stage **and reduce mortality?**

How safe is an MCED-negative test result?

What are the rates of false-positive/negative results, and of finding indolent cancers (overdiagnosis)?

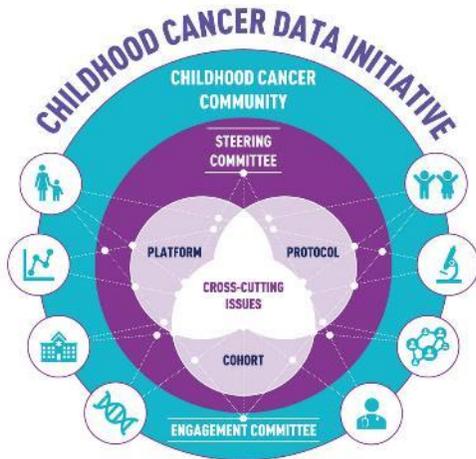
## Request for Information (RFI)

Seeking Input from Multi-Cancer Early Detection Test Developers on Readiness for Participation in an NCI-Sponsored Clinical Utility Randomized Controlled Screening Trial

Notice Number: **NOT-CA-22-033**

Closed on **March 21, 2022**

# Molecular Characterization Initiative



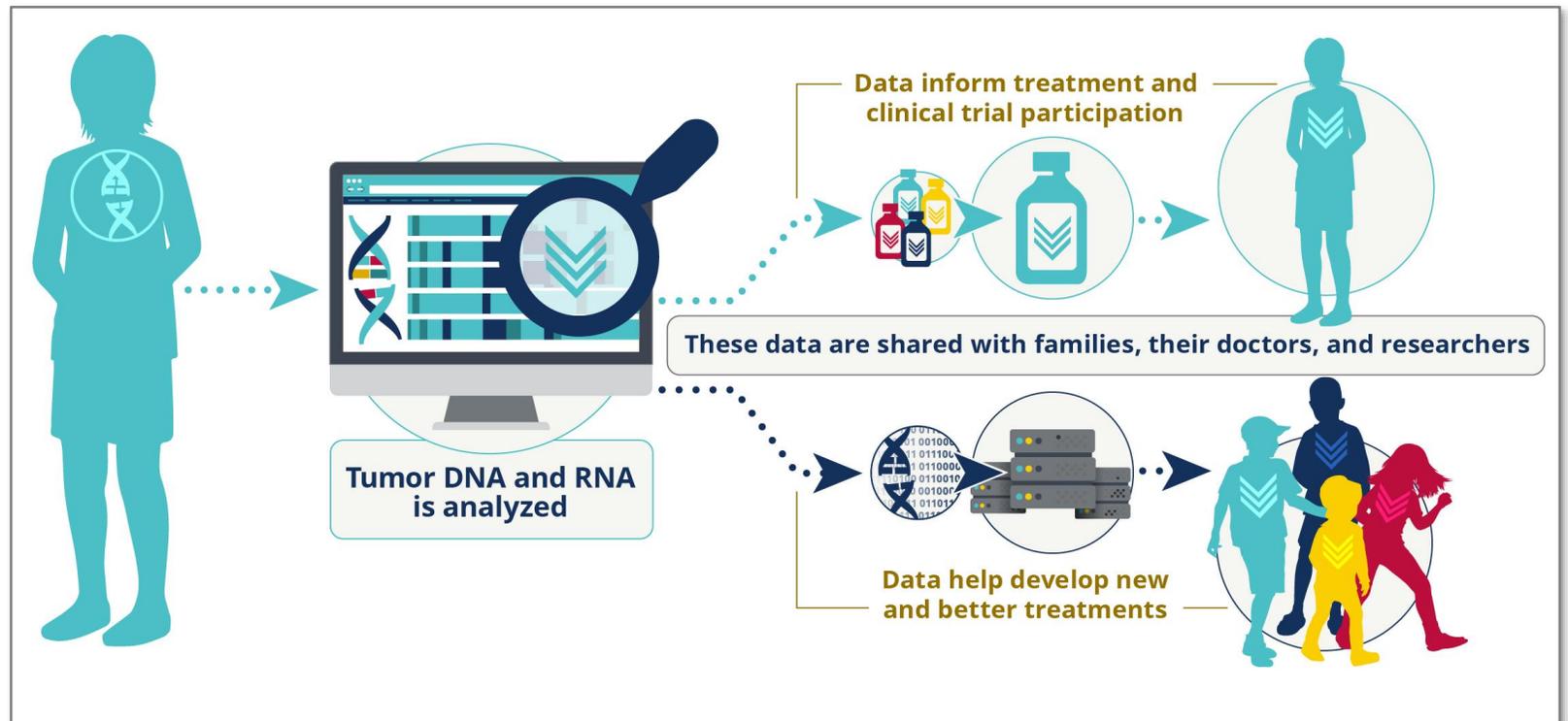
Learn more at  
[cancer.gov/  
CCDI-molecular](https://cancer.gov/CCDI-molecular)

NCI Press Release

## NCI launches program to offer molecular characterization of childhood cancers

Posted: March 21, 2022

Contact: NCI Press Office



# NCI Personnel Announcement



**Dr. Brigitte Widemann**

**Special Advisor to the Director  
for Childhood Cancer**



*“We are living in a golden age of research and discovery.*

*We can end this terror, and all of us have a role to play.”*

First Lady Dr. Jill Biden  
February 2, 2022

# Discussion