

# NCI Director's Report

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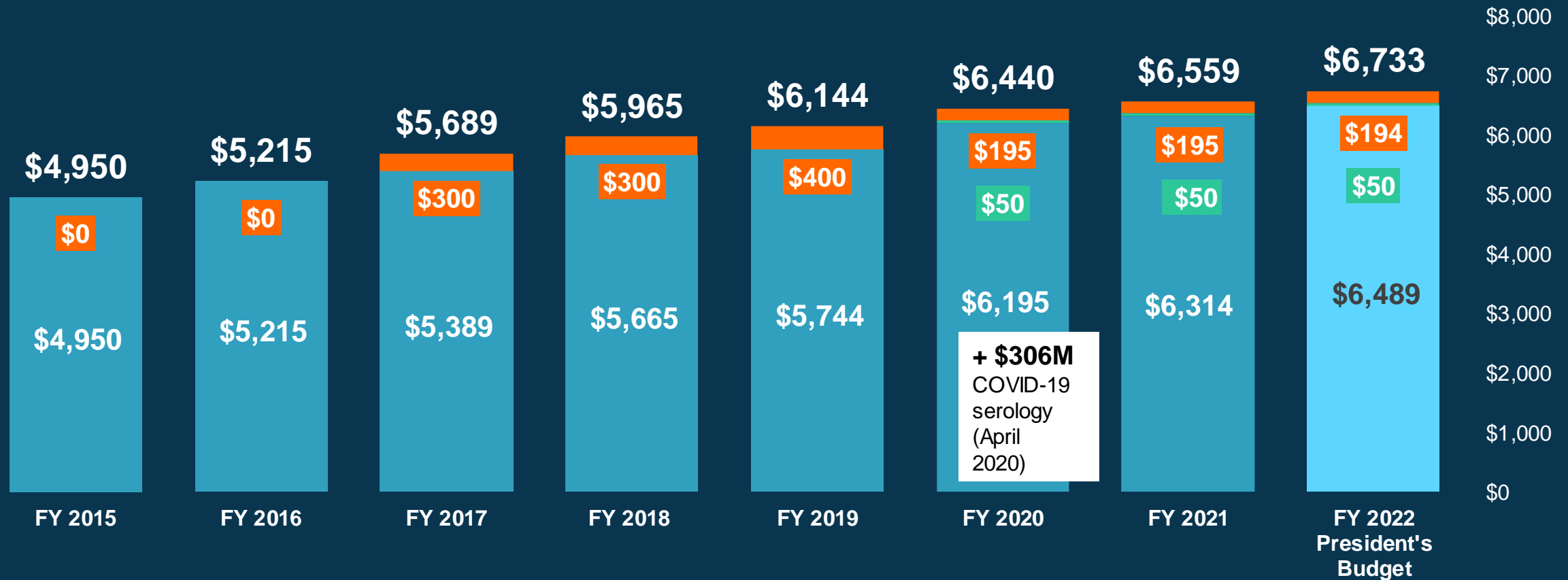
*Clinical Trials and Translational Research  
Advisory Committee (CTAC)*

Norman E. Sharpless, M.D.  
July 14, 2021

@NCIDirector  
@TheNCI

# NCI Appropriations FY 2015 – 2022 (in millions)

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



# Just released: Cancer Trends Progress Report

## Cancer Trends Progress Report

### Online Summary of Trends in U.S. Cancer Control Measures



**Prevention**



**Early  
Detection**



**Diagnosis**



**Treatment**



**Life After  
Diagnosis**



**End of Life**

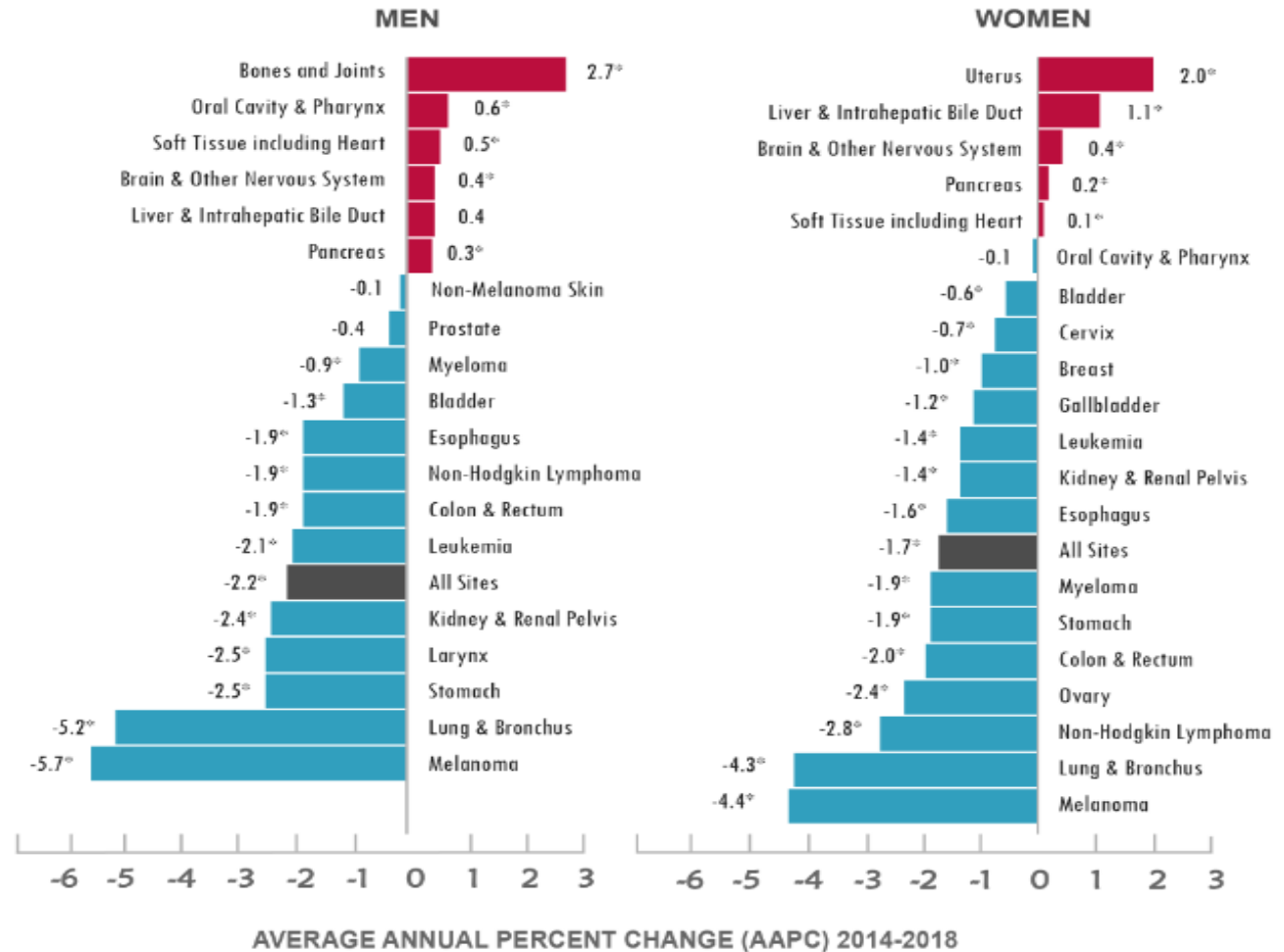


**NATIONAL CANCER INSTITUTE**  
Division of Cancer Control  
& Population Sciences


[progressreport.cancer.gov](https://progressreport.cancer.gov)

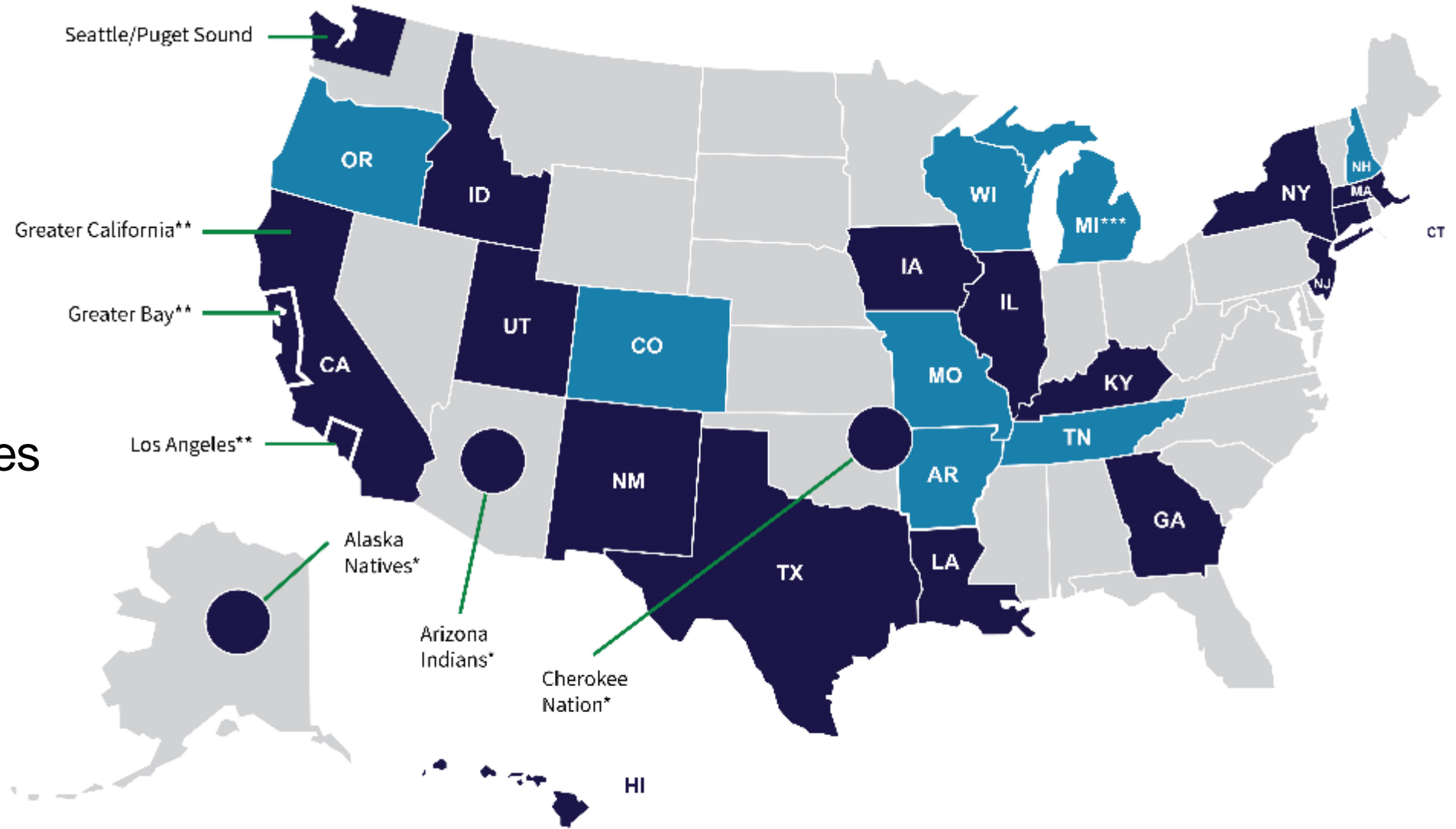
# Just released: Annual Report to the Nation

## National Trends in Cancer Death Rates



# SEER Coverage As of June 2021

-  Core Registries
-  Research Support Registries



# U.S.-U.K. Bilateral Cancer Summit



*Doug Mills/The New York Times*

*“We will convene the first U.S.-U.K. Bilateral Cancer Summit and bring together researchers, patients, and other stakeholders to share ideas and identify opportunities for collaboration to accelerate advances in lifesaving approaches to cancer, which remains a leading cause of death worldwide.”*

- Joint statement issued June 10, 2021

# NCI COVID-19 in Cancer Patients Study (NCCAPS)

**875**

TRIAL SITES  
ACTIVATED  
IN

**50**

STATES  
+ DC, PUERTO  
RICO, AND  
CANADA

Special emphasis on  
minority,  
underserved and  
rural communities

Participants  
will be  
followed for  
2 years

**1,150**  
ENROLLED

91 pediatric patients  
enrolled

Launched May 21, 2020  
Conception to Launch in  
6 weeks

Aims to enroll  
2,000 patients  
across 1,000  
sites in U.S.

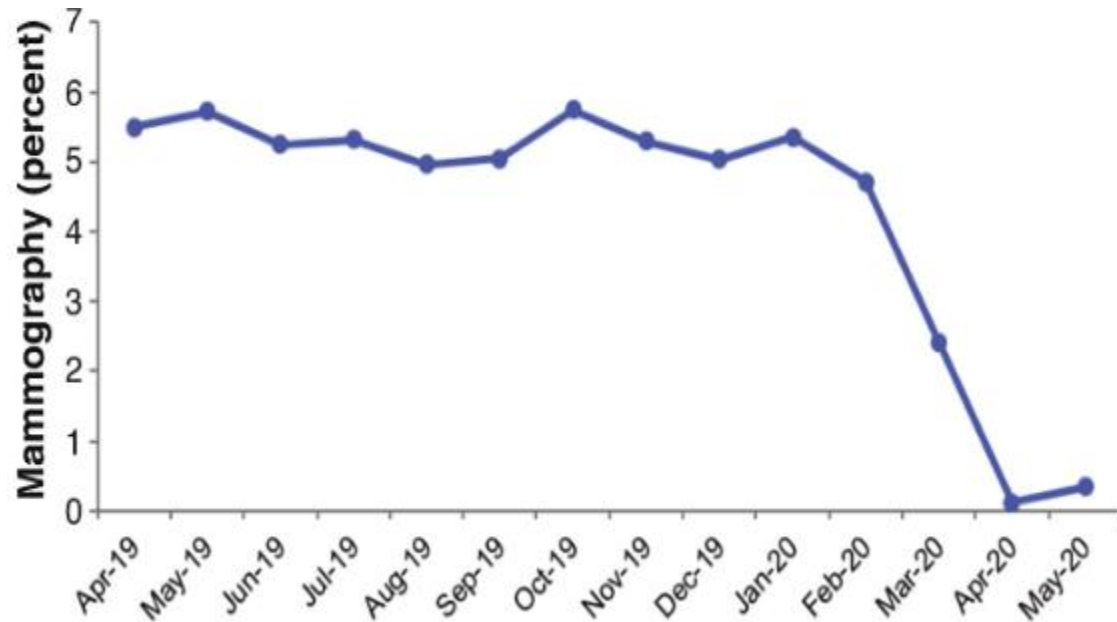
ASCO 21  
ABSTRACTS

**#6565**  
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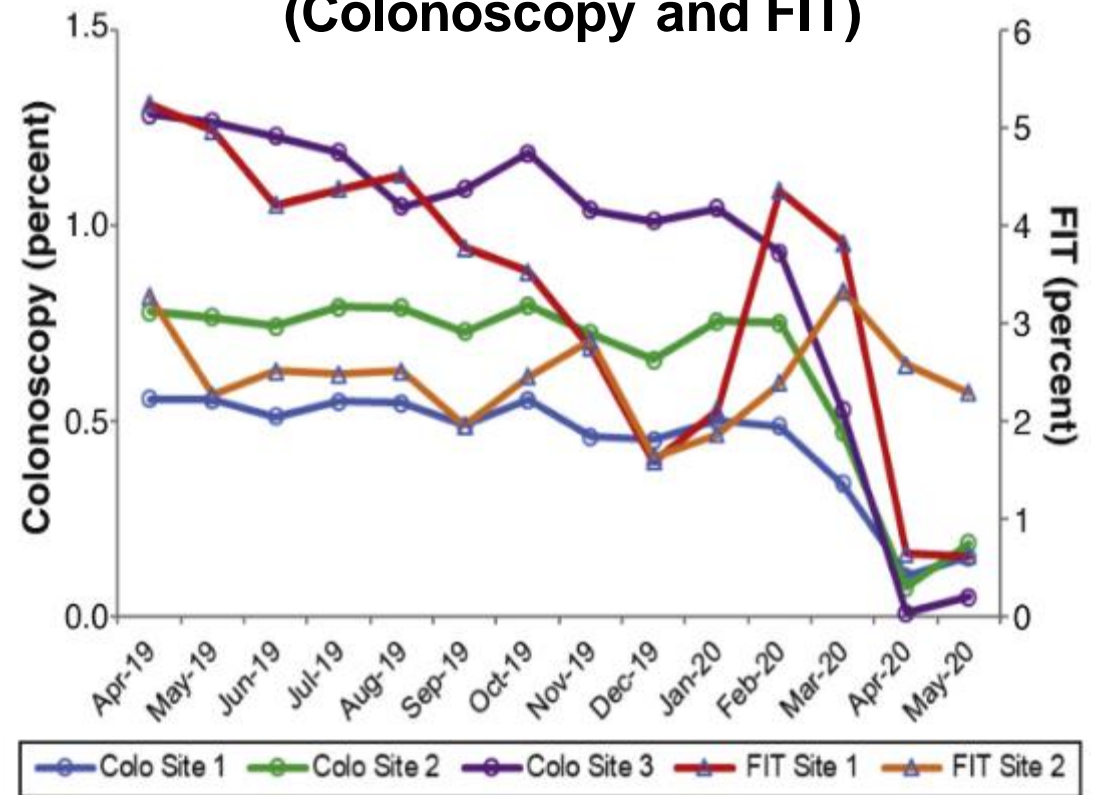


# Impact of COVID-19 pandemic on cancer screening in the US

## Breast Cancer Screening (Mammography)



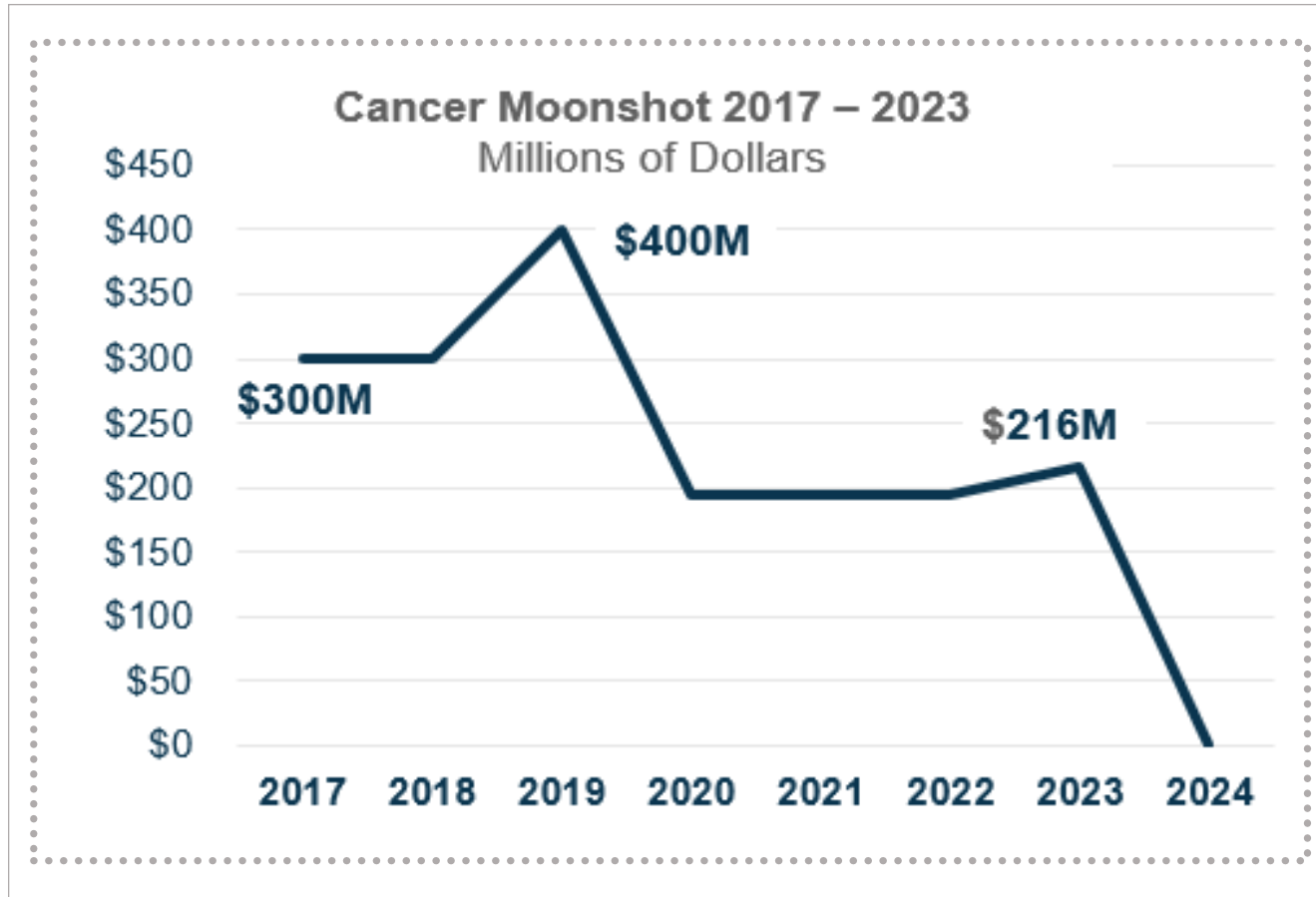
## Colorectal Cancer Screening (Colonoscopy and FIT)



*Cancer Screening During the Coronavirus Disease-2019 Pandemic: A Perspective From the National Cancer Institute's PROSPR Consortium. Gastroenterology, Volume 160, Issue 4, 999 - 1002*



# Cancer Moonshot<sup>SM</sup>



**CANCER MOONSHOT**

PROGRESS

OVER  
**70**  
CONSORTIUMS  
OR PROGRAMS

OVER  
**240**  
RESEARCH  
PROJECTS

National Cancer Institute

# Human Tumor Atlas Network Data Portal

**HTAN**  
HUMAN TUMOR ATLAS NETWORK

EXPLORE DATA STANDARDS DATA TRANSFER ANALYSIS TOOLS HTAN MAIN SITE

data.humantumoratlas.org

## Human Tumor Atlas Network Data Portal

Welcome to the HTAN Data Portal!

The Human Tumor Atlas Network (HTAN) is a National Cancer Institute (NCI)-funded Cancer Moonshot<sup>SM</sup> initiative to construct 3-dimensional atlases of the dynamic cellular, morphological, and molecular features of human cancers as they evolve from precancerous lesions to advanced disease.

Explore the Data

9	8	509	1260
Atlases	Organs	Cases	Biospecimens



The NEW ENGLAND  
JOURNAL of MEDICINE

2021 ASCO<sup>®</sup>  
ANNUAL MEETING

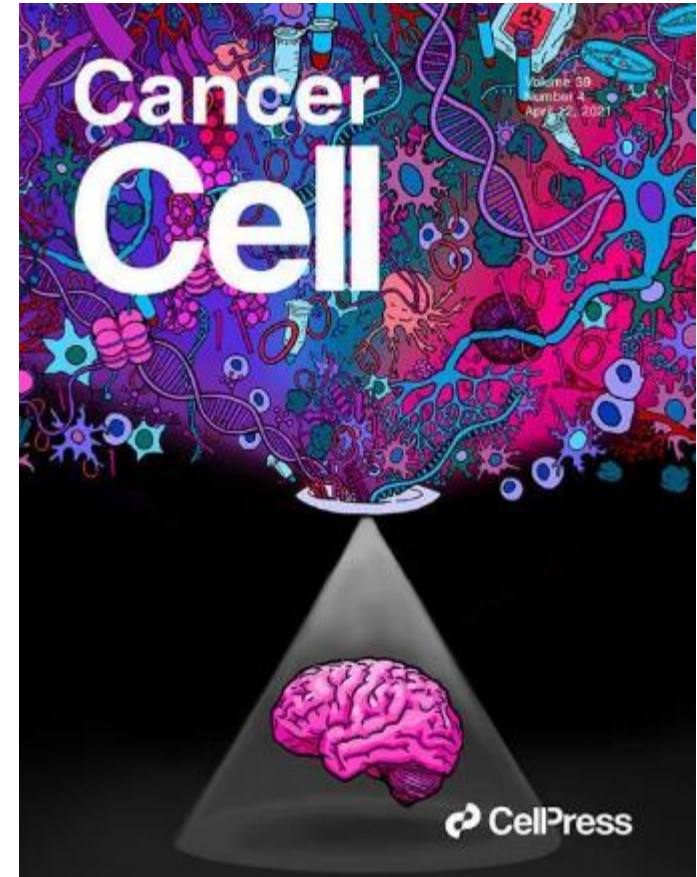
## Adjuvant Olaparib for Patients with BRCA1- or BRCA2-Mutated Breast Cancer

Andrew N.J. Tutt, M.B., Ch.B., Ph.D., Judy E. Garber, M.D., M.P.H., Bella Kaufman, M.D., Giuseppe Viale, M.D., Debora Fumagalli, M.D., Ph.D., Priya Rastogi, M.D., Richard D. Gelber, Ph.D., Evandro de Azambuja, M.D., Ph.D., Anitra Fielding, M.B., Ch.B., Judith Balmaña, M.D., Ph.D., Susan M. Domchek, M.D., Karen A. Gelmon, M.D., *et al.*, for the OlympiA Clinical Trial Steering Committee and Investigators\*

<b>3-year invasive disease-free survival</b>	Placebo <b>77.1%</b>	<b>3-year distant disease-free survival</b>	Placebo <b>80.4%</b>
	Olaparib <b>85.9%</b>		Olaparib <b>87.5%</b>
<i>Difference: 8.8 percentage points 95% CI: 4.5 to 13.0.</i>		<i>Difference: 7.1 percentage points 95% CI: 3.0 to 11.1</i>	

# Proteogenomic and metabolomic characterization of human glioblastoma

- Phosphorylated PTPN11 and PLCG1 represent a signaling hub in RTK-altered tumors
- Four immune GBM subtypes exist, characterized by distinct immune cell populations
- Mesenchymal subtype EMT signature is specific to tumor cells, but not to stroma
- Histone H2B acetylation is enriched in classical GBMs with low macrophage content

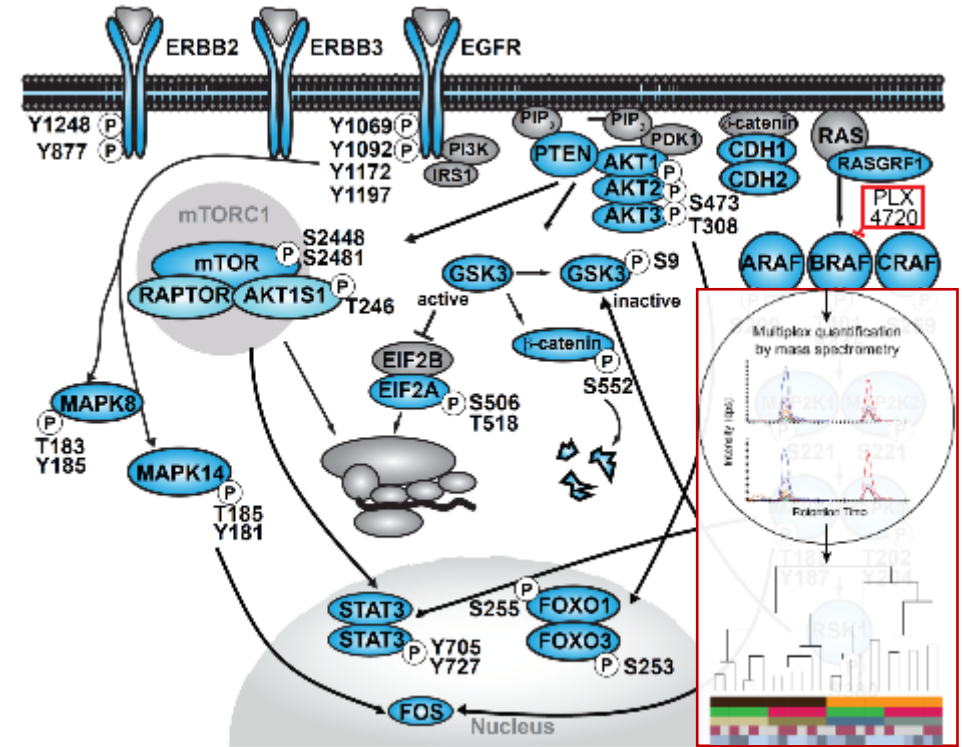


Wang et al., 2021, *Cancer Cell* 39, 509–528  
April 12, 2021 <https://doi.org/10.1016/j.ccell.2021.01.006>



# NCI RAS Initiative - Proteomic Assays to Oncogenic Growth Signaling Networks

- Goal of RAS initiative - develop assays to quantify RAS signaling
- Developed community resource of 256 validated multiplexed mass spec assays for quantifying protein expression and phosphorylation through the receptor tyrosine kinase, MAPK, and AKT signaling networks
- Assays replace over 60 western blots
- SOPs, fit-for-purpose validation, and reagents publicly available



assays.cancer.gov & antibodies.cancer.gov

# Genomic Classification and Clinical Outcome in Rhabdomyosarcoma (RMS)

- International consortium study designed to determine the incidence of driver mutations and their association with clinical outcome
- Led by Javed Khan, M.D and Jack F. Shern, M.D. of CCR
- Analyzed DNA from 641 patients
- The presence of mutations in *TP53*, *MYOD1*, and *CDKN2A*, appears to be associated with a more aggressive form of the disease and a poorer chance of survival.



*Journal of Clinical Oncology; Published online  
June 24, 2021; DOI: 10.1200/JCO.20.03060*

# NCI Equity and Inclusion Program

<p><b>EQUITY COUNCIL</b></p>	<p><b>Chair</b> Ned Sharpless</p> <p><b>Co-Chair</b> Paulette Gray</p>	<p>Mark Alexander Andrea Apolo Nelvis Castro Bob Croyle</p>	<p>Montse Garcia-Closas Anne Lubenow Ji Luo</p>	<p>Donna Siegle Dinah Singer Sanya Springfield</p>
<p><b>WORKING GROUP 1</b> <i>Enhancing Research to Address Cancer Health Disparities</i></p> <p><b>CO-CHAIRS</b></p> <p>Jim Doroshow Worta McCaskill-Stevens Tiffany Wallace</p>	<p><b>WORKING GROUP 2</b> <i>Ensuring Diversity of Thought and Background in the Cancer Research Workforce</i></p> <p><b>CO-CHAIRS</b></p> <p>LeeAnn Bailey Susan McCarthy Glenn Merlino</p>	<p><b>WORKING GROUP 3</b> <i>Promoting an Inclusive and Equitable Community at NCI</i></p> <p><b>CO-CHAIRS</b></p> <p>Shannon Bell Satish Gopal Paige Green</p>	<p><b>WORKING GROUP 4</b> <i>Systematic Tracking and Evaluation of Equity Activities</i></p> <p><b>CO-CHAIRS</b></p> <p>Michelle Bennett Doug Lowy</p>	<p><b>WORKING GROUP 5</b> <i>Communications and Outreach for Equity Activities</i></p> <p><b>CO-CHAIRS</b></p> <p>Peter Garrett Angela Jones Anita Linde</p>



# Joint BSA-NCAB Meeting - June 14, 2021



View the presentations and discussions at [cancer.gov](https://cancer.gov).

## Enhancing Research to Address Cancer Health Disparities

Tiffany Wallace, Ph. D.

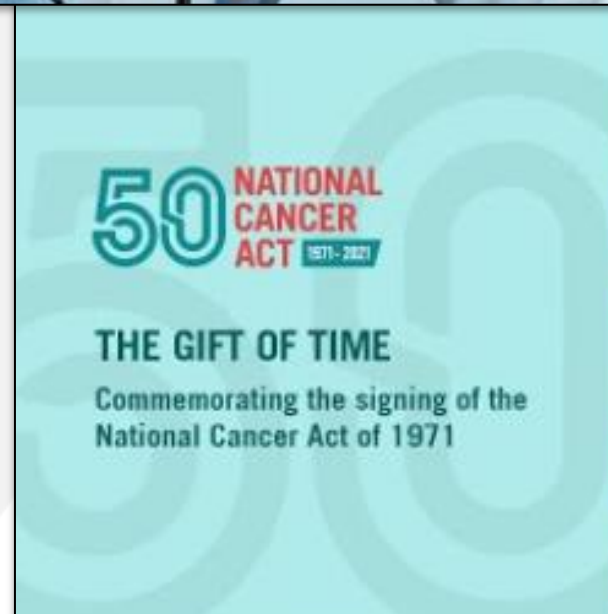
## Ensuring Diversity of Thought and Background in the Cancer Research Workforce

LeeAnn Bailey, Ph.D.

## Promoting an Inclusive and Equitable Community at NCI

Paige Green, Ph.D.

# National Cancer Act of 1971 50<sup>th</sup> Anniversary



# Discussion