

# NCI Director's Report

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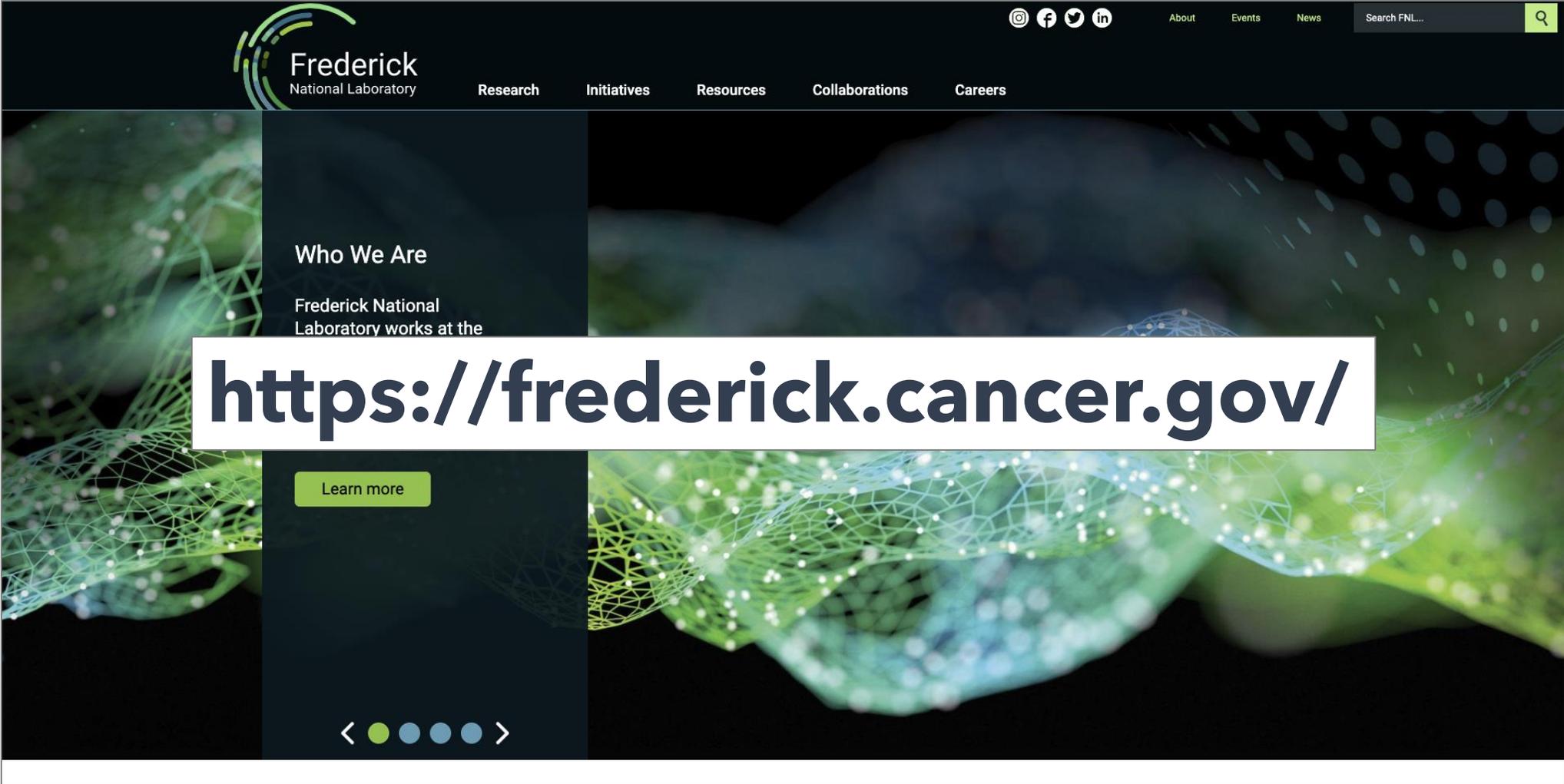
Norman E. Sharpless, M.D.

*7<sup>th</sup> Virtual Meeting of the Frederick National  
Laboratory Advisory Committee*

*June 28, 2021*

@NCIDirector  
@TheNCI

# Redesigned FNL website



# Enhancing awareness of the Frederick National Laboratory



- **What is the Lab?**
- **What does it offer?**
- **How can researchers use it?**

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## AUDIENCES

- Extramural researchers
- Members of Congress
- Cancer research advocates
- Partners and potential partners

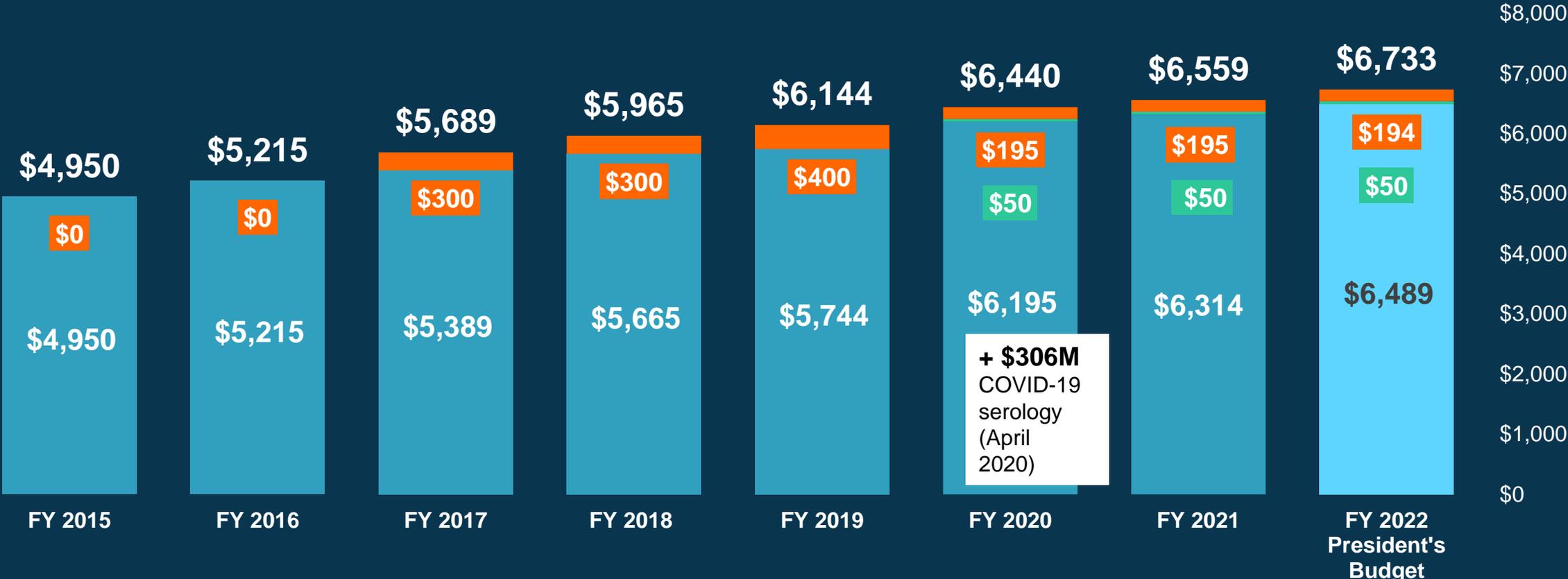
# FFRDC Contract Recompetition Update

- Industry Day held on April 8<sup>th</sup>
  - Registrants – ~130 potential prime contractor individuals; ~110 potential subcontractor individuals
  - Over 25 Government presentations -- Recorded for future viewing
- **Draft Request for Proposal (RFP) issued on June 24<sup>th</sup> - Response date: July 23<sup>rd</sup>**
  - **Posted to: Beta Sam at <https://beta.sam.gov/>**
- RFP Issuance contemplated for 1st Quarter FY22. Receipt of Proposals contemplated for 3rd Quarter FY22.
- Contract Award is planned in Fall 2023, subject to change.
- The Government expects to provide 150 days for proposal response.
- Additional information concerning the competitive process will be announced on the Government-wide point of entry, Beta Sam at <https://beta.sam.gov/>, as well as at the FNLCR Acquisition Portal at <https://www.cancer.gov/about-nci/contracts/fnlcr-acquisitions>.
- Questions regarding this acquisition should be directed to the Contracting Officer via [FNLCR\\_ACQinfo@nih.gov](mailto:FNLCR_ACQinfo@nih.gov)

# NCI Appropriations

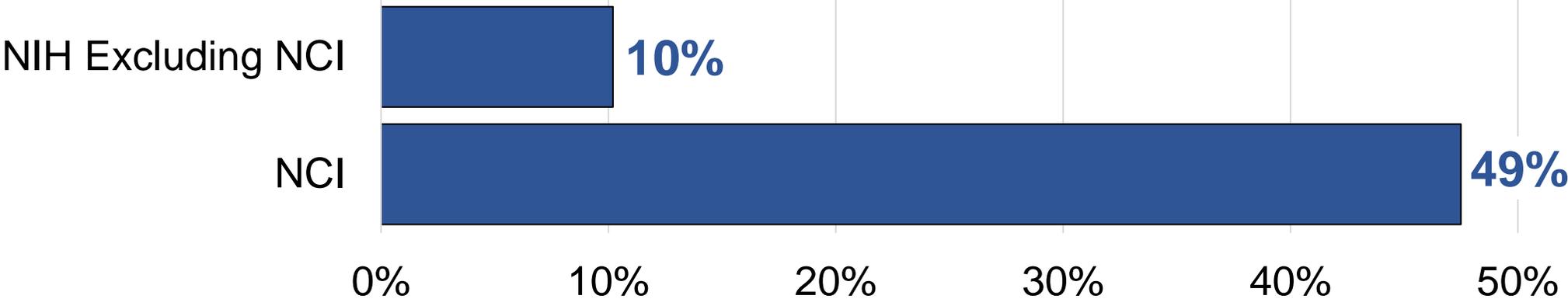
## FY 2015 – 2022 (in millions)

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



# The volume of R01 applications to NCI continues to outpace those across NIH

**% Increase in Applications from 2013 to 2020**



# 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

**1,137**  
ENROLLED

88 pediatric patients  
enrolled

Launched May 21, 2020  
Conception to Launch in  
6 weeks

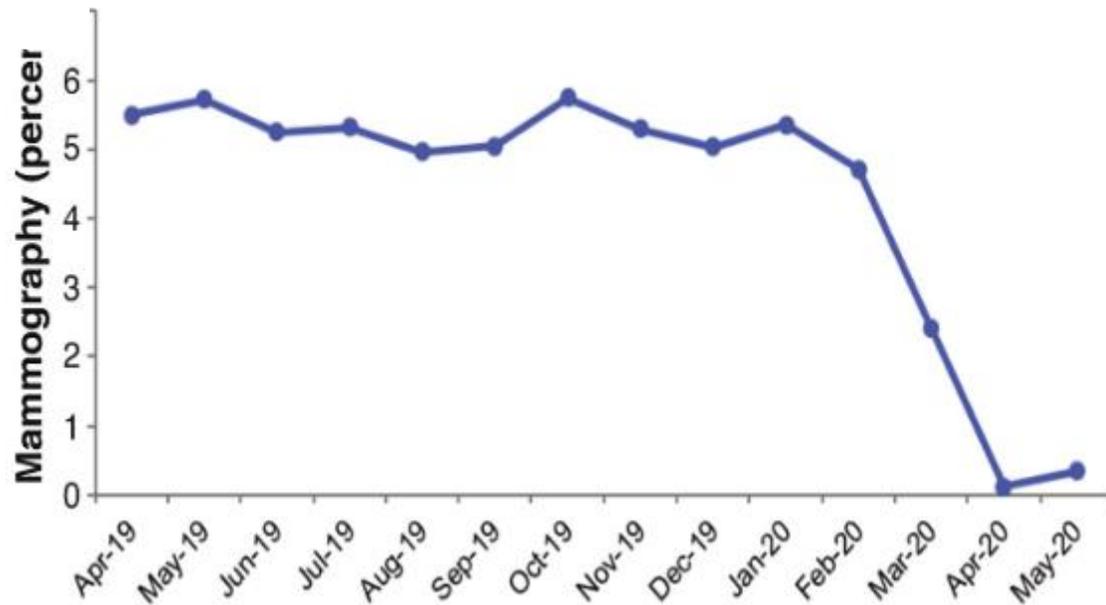
Aims to enroll  
2,000 patients  
across 1,000  
sites in U.S.

ASCO 21  
ABSTRACTS

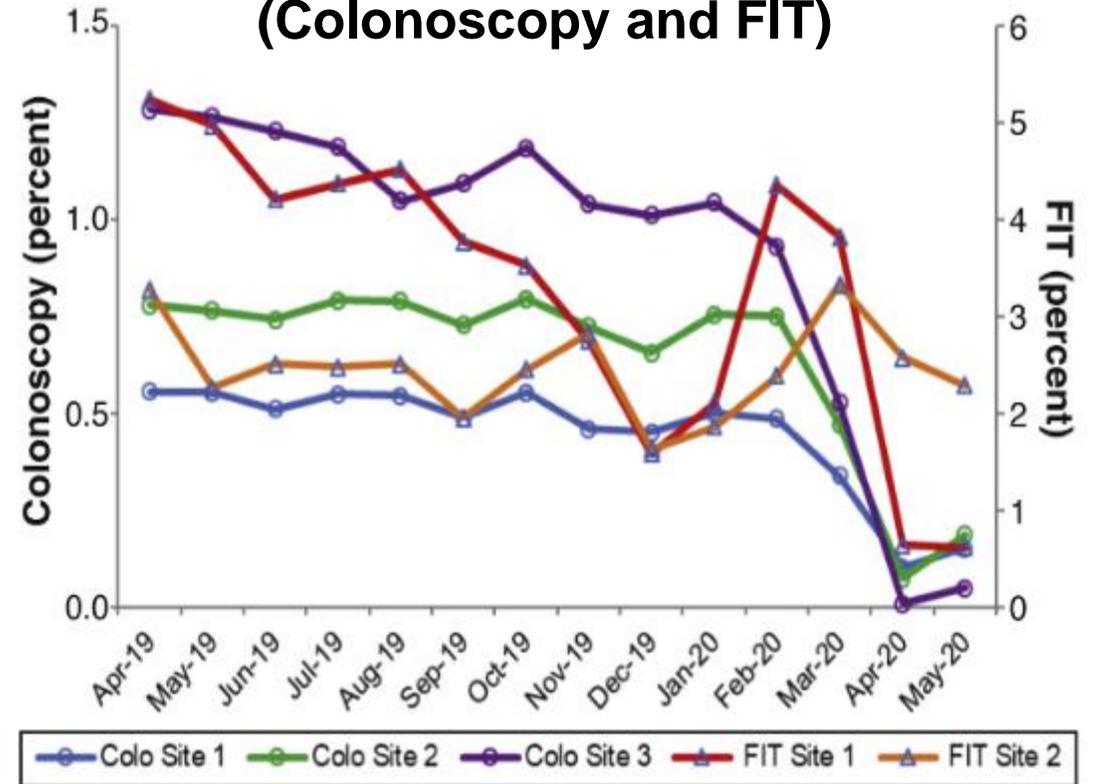
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**#6566**

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

## Breast Cancer Screening (Mammography)



## Colorectal Cancer Screening (Colonoscopy and FIT)

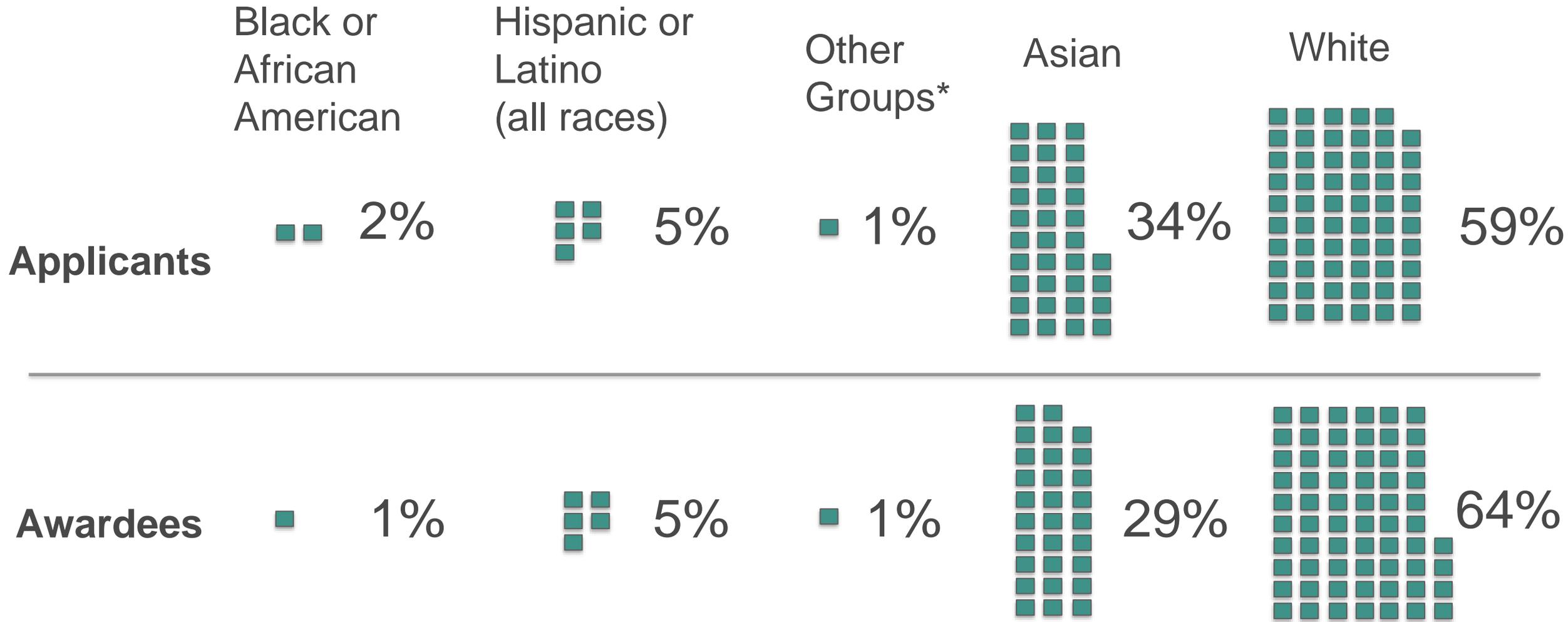


*Cancer Screening During the Coronavirus Disease-2019 Pandemic: A Perspective From the National Cancer Institute's PROSPR Consortium. Gastroenterology, Volume 160, Issue 4, 999 - 1002*

# 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 Doroshov 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>

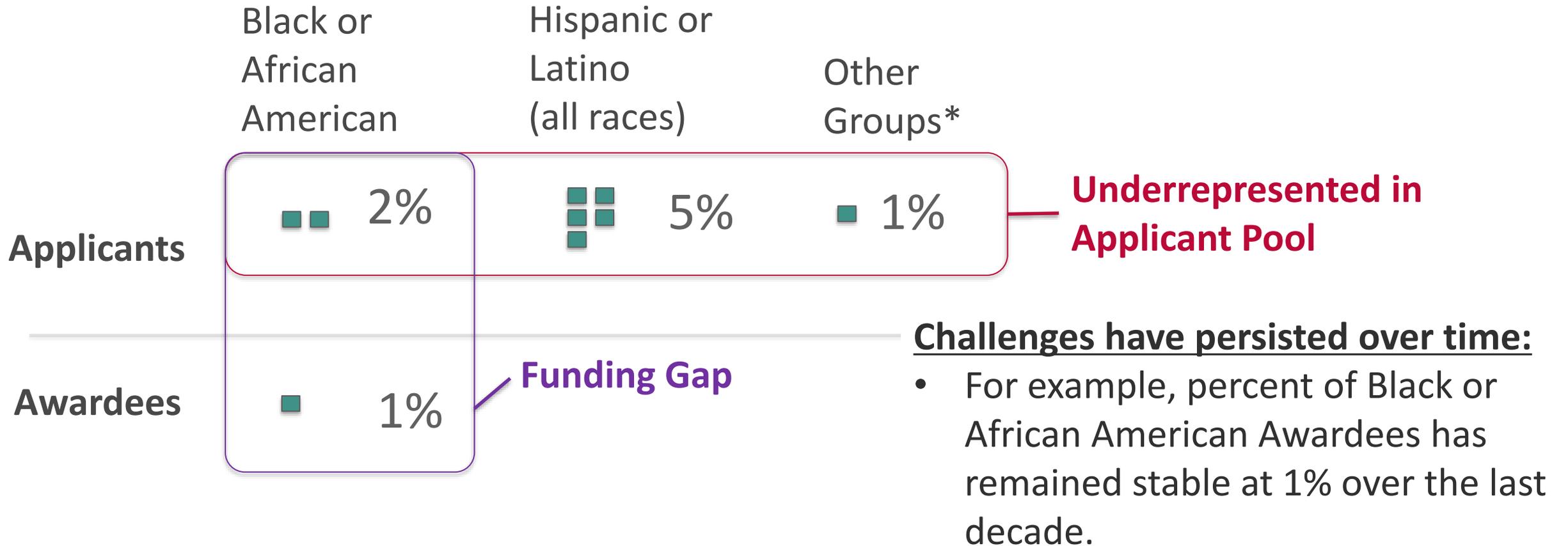
# Demographics of NCI R01 Equivalent PIs (FY 2020)



\*More than one race, American Indian or Alaska Native, and Native Hawaiian or Other Pacific Islander

*Data Source:* Data from NIH OER with analysis by NCI Center for Research Strategy. *Method:* Percents rounded to nearest 1%. Percentages are calculated using the number of PIs that have self-reported their race or ethnicity (92% of all PIs). Hispanic may be any race; race categories exclude Hispanic origin.

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# Immediate Action: Early Investigator Advancement Program

**Goal:** To promote the transition of extramural and intramural early career investigators to independent investigators

## Program Components



## Outcomes for Each Participant

- Complete an R01 grant proposal
- Become part of a group of peers with similar career goals
- Engage with mentors who are established investigators
- Become familiar with job and funding opportunities
- Develop professional and management skills critical to growing a research group

- *20 participants per cohort*
- *1 cohort per year*

# CUSP2CT Connecting Underrepresented Populations to Clinical Trials

## PURPOSE

To implement and evaluate multi-level and culturally tailored outreach and education interventions with the primary goal to increase referral of racial/ethnic minority populations to NCI-supported clinical trials.

## CUSP2CT Network – FY 22- 26

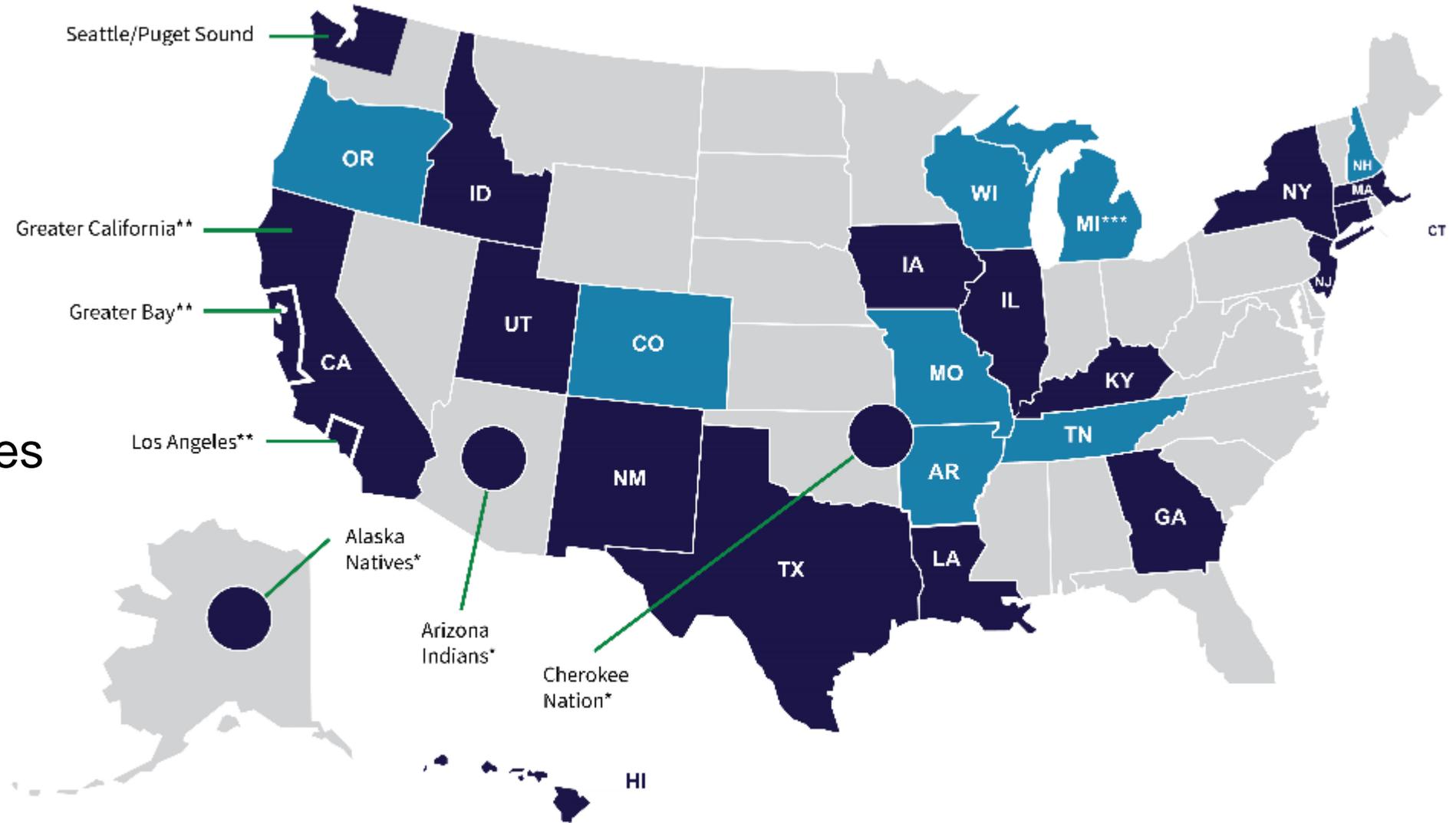
- Data, Evaluation, and Coordinating Center – 1 U24
- Up to 4 U01s

*Will enhance clinical trial participation among racial/ethnic minority populations through a partnership of*

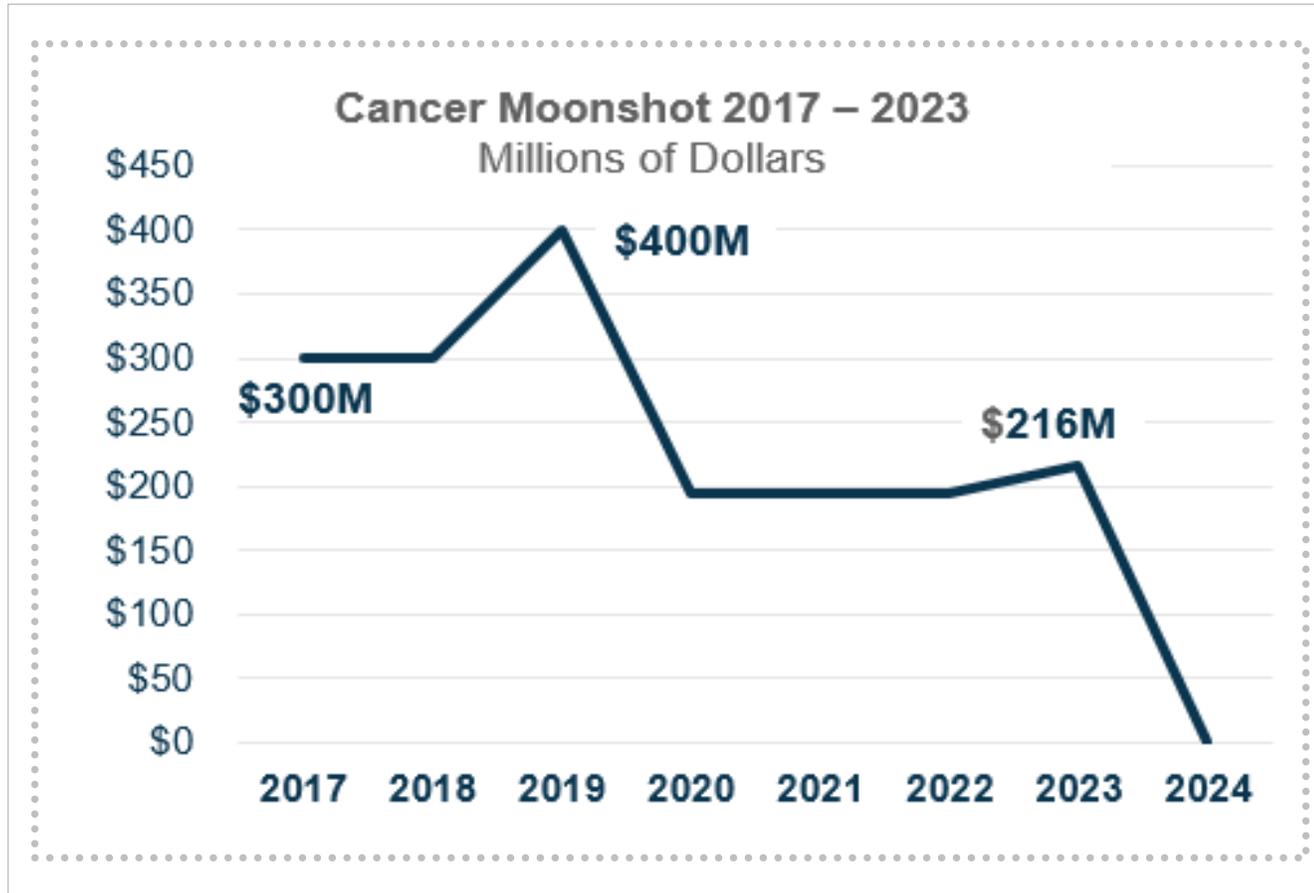
- **Community Health Educators**
- **Lay Health Advisors**
- **Clinical Trial Coordinators**
- **Referring providers (primary care and oncologists)**

# SEER Coverage As of June 2021

-  Core Registries
-  Research Support Registries



# 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

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

Atlases

8

Organs

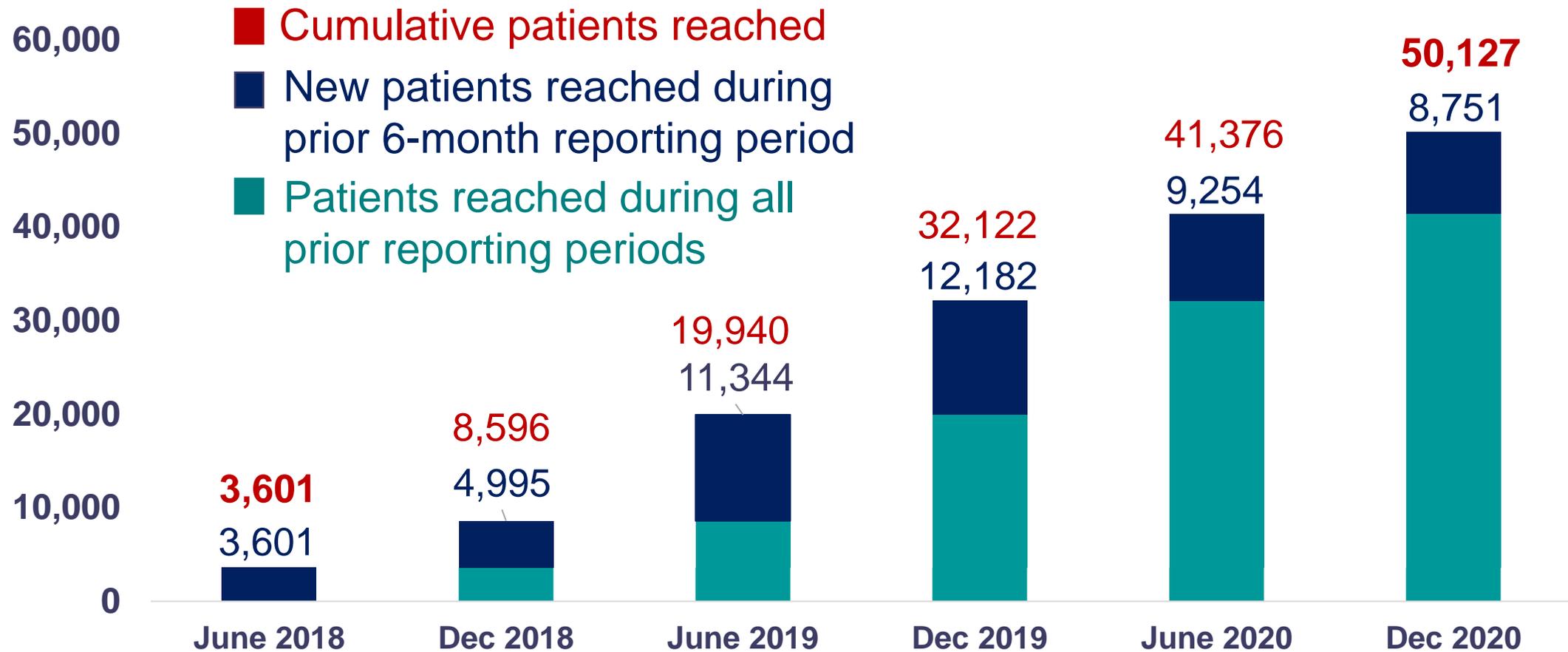
509

Cases

1260

Biospecimens

# Over 50,000 oncology patients reached by an NCI Cancer Center Cessation Initiative (C3I) tobacco treatment program since 2018



*Courtesy of Dr. Betsy Rolland, C3I PI. Data through April 15, 2021.*



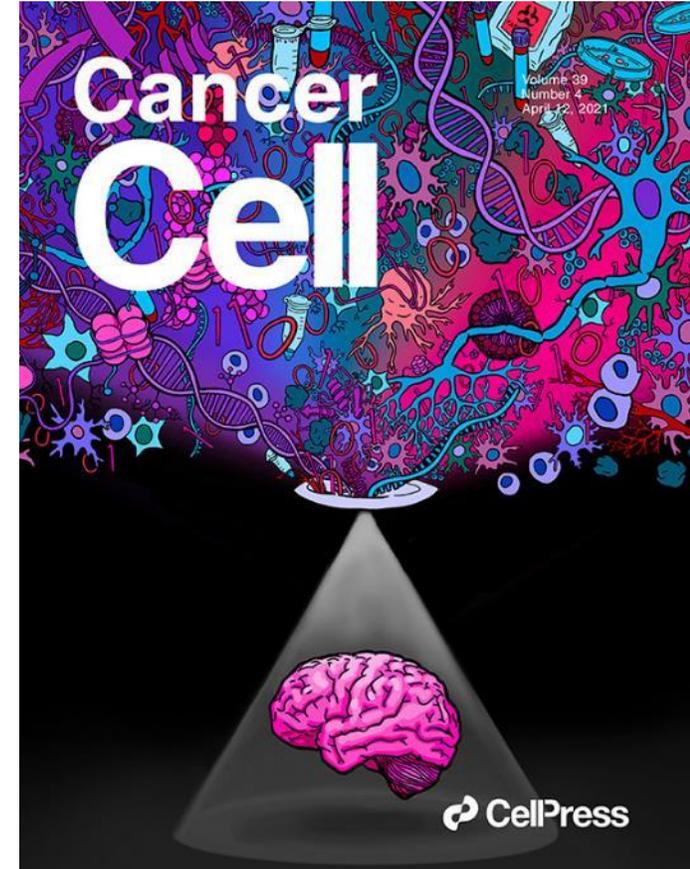
## Adjuvant Olaparib for Patients with BRCA1- or BRCA2-Mutated Breast Cancer

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 Furnagalli, 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>	

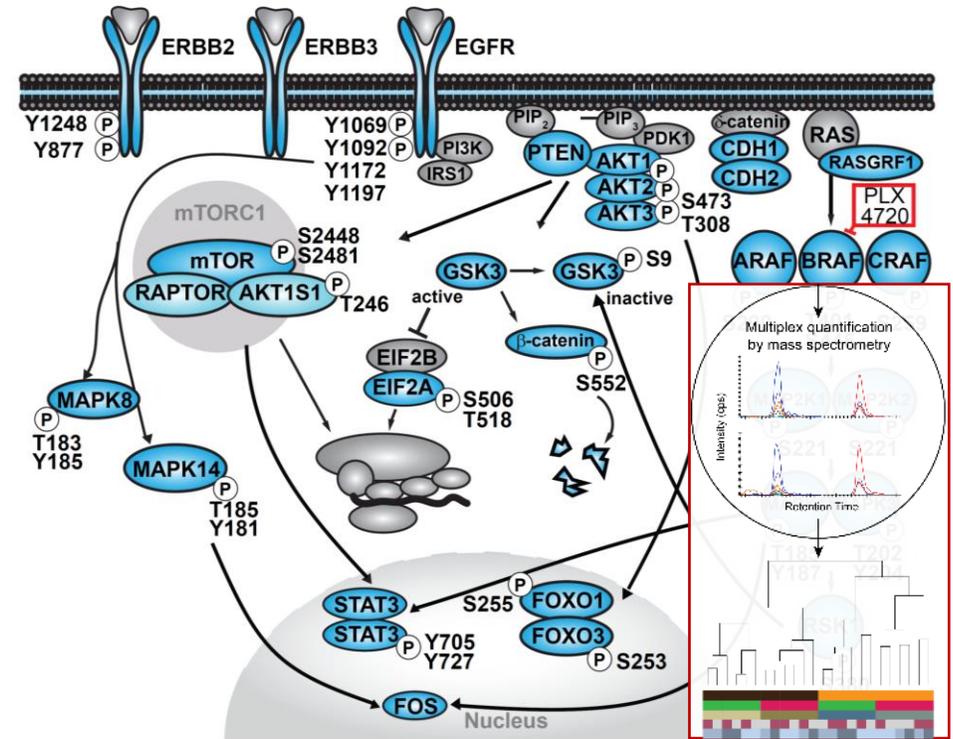
# Proteogenomic and metabolomic characterization of human glioblastoma

- 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



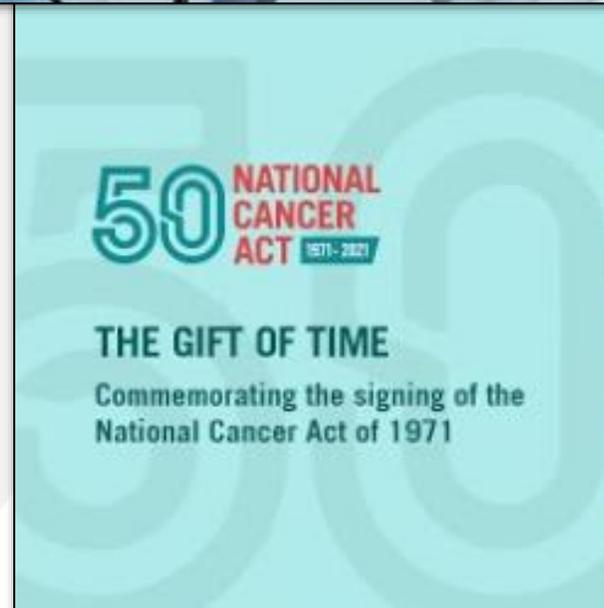
# NCI RAS Initiative - Proteomic Assays to Oncogenic Growth Signaling Networks

- 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

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



# Discussion