

NCI Director's Report

*14th Virtual Meeting of the National Cancer
Advisory Board*

Norman E. Sharpless, M.D.
February 11, 2021

@NCIDirector
@TheNCI

Agenda

- 50th Anniversary of the National Cancer Act
- Moonshot Midpoint
- NCI Appropriations & Paylines
- COVID-19 Impacts and Activities
- NCI Research Highlights
- Equity and Inclusion

VIRTUAL VISIT TO THE NATIONAL CANCER INSTITUTE



FIRST LADY JILL BIDEN



DR. NORMAN E. SHARPLESS
DIRECTOR, NATIONAL CANCER INSTITUTE



DR. WORTA MCCASKILL-STEVENS
DIRECTOR OF NCI'S COMMUNITY ONCOLOGY
RESEARCH PROGRAM (NCORP)



DR. STEPHANIE GOFF
STAFF CLINICIAN IN THE NCI'S CENTER
FOR CANCER RESEARCH



DR. LIGA PINTO
DIRECTOR OF THE VACCINE, IMMUNITY
AND CANCER PROGRAM AT NCI'S
FREDERICK NATIONAL LABORATORY
FOR CANCER RESEARCH



THE WHITE HOUSE
WASHINGTON

FOR IMMEDIATE RELEASE

February 4, 2021

Statement of President Joe Biden on World Cancer Day

The fight against cancer is personal for me and my family, for Vice President Harris and her family, and for millions of families across the country and around the world. As every family facing cancer does, our family learned as much as we could about the cancer our Beau fought, from his diagnosis to the very end. We had access to the world's finest nurses, physicians, and researchers. And the more time we spent with them, the more we understood that even if we couldn't save our son, the science, medicine, and technology are progressing faster than ever to save countless others. Now, as president, I am committed to ending cancer as we know it.

NCA-50 commemoration launched February 8



Cancer Moonshot



MOONSHOT PROGRESS 2017-2020

240

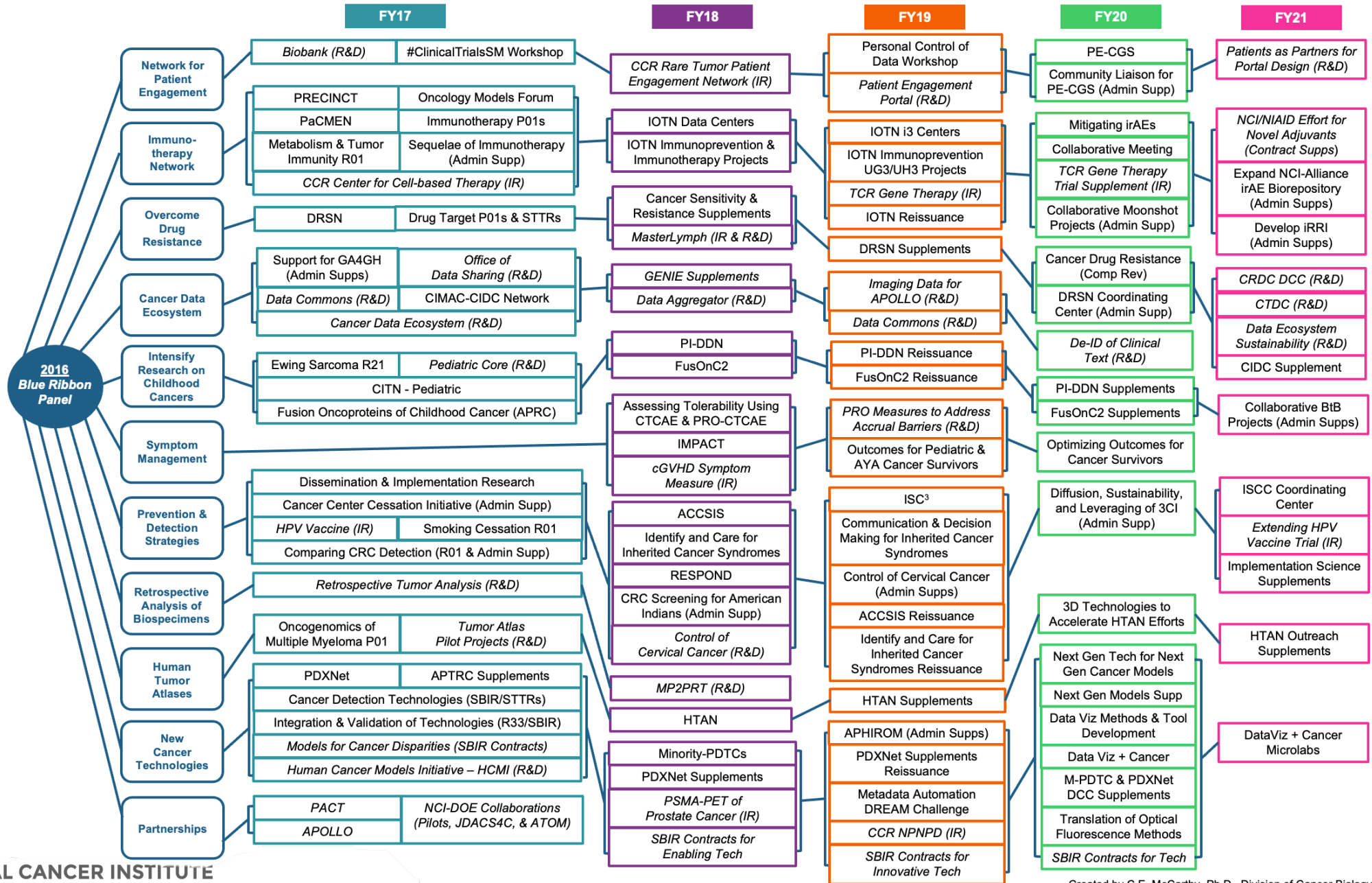
RESEARCH PROJECTS & INITIATIVES

Cancer Currents: An NCI Cancer Research Blog

The Cancer Moonshot: A Midpoint Progress Update

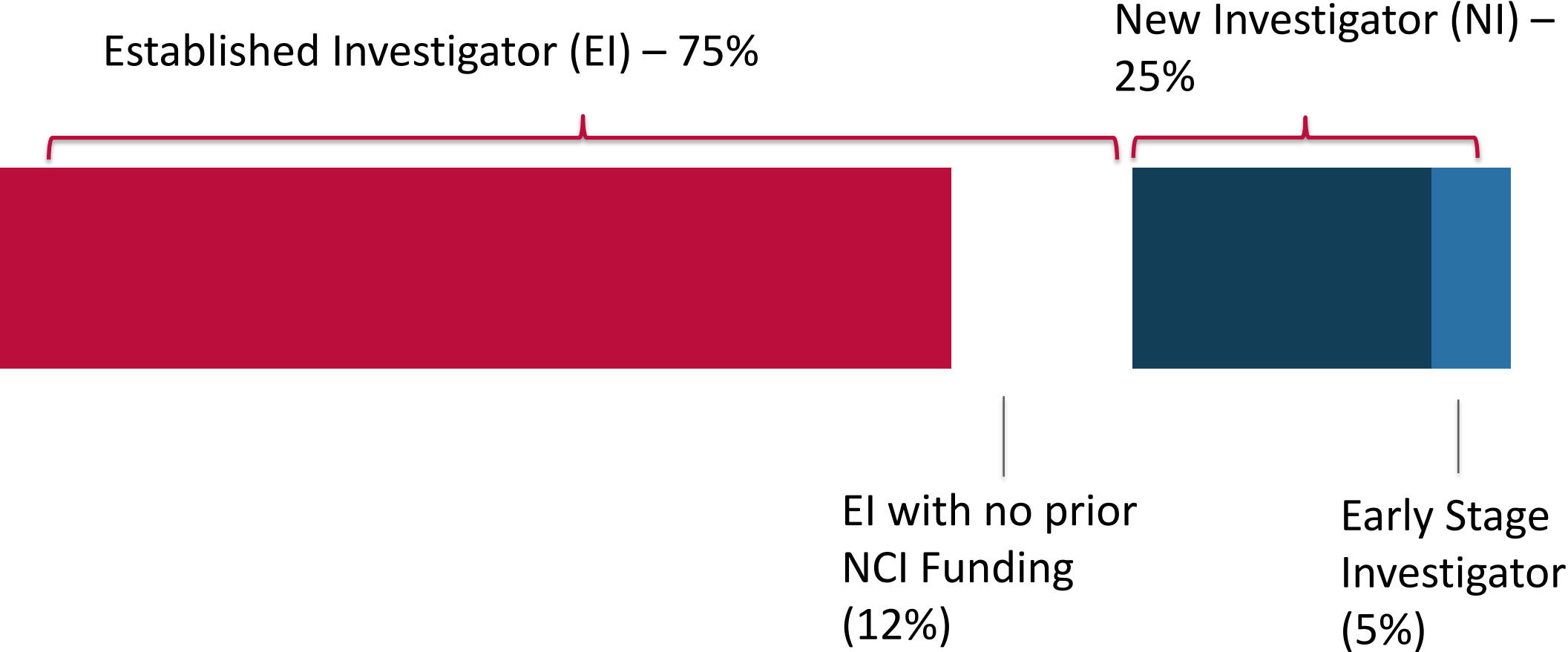
January 11, 2021, by Norman E. Sharpless, M.D., and Dinah Singer, Ph.D.

Implementation of the Cancer Moonshot



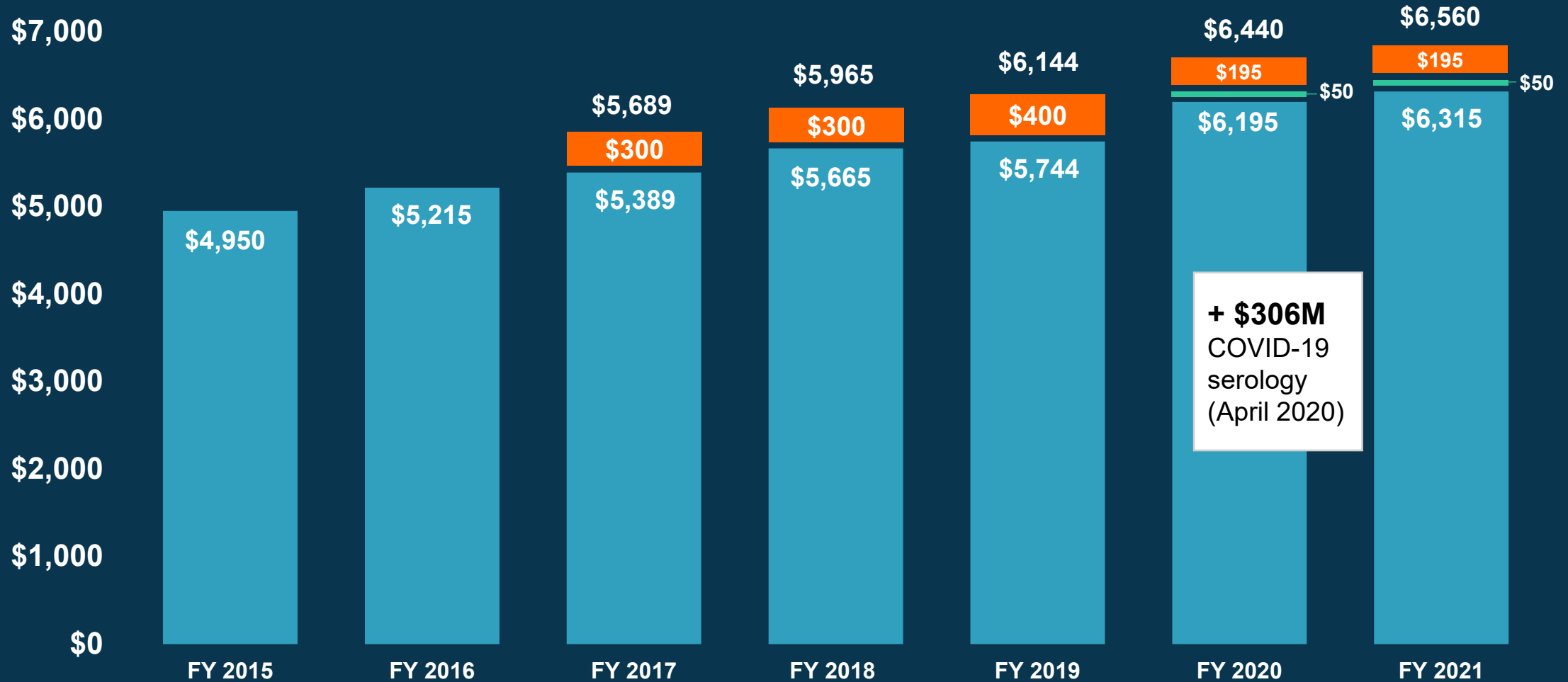
25% of Moonshot Extramural PIs are New Investigators

343 Extramural Moonshot PIs (FY17-FY20)



NCI Appropriations FY 2015 – 2021 (in millions)

21st Century Cures Act - orange
Childhood Cancer Initiative - green



NCI Paylines for FY 2021

GRANT TYPE	PAYLINE
R01 Grants for Established and New Investigators	11th Percentile
R01 Grants for Early-Stage Investigators (ESIs)	16th Percentile
R21 Exploratory Grants	9th Percentile
Non-competing grants will be funded at 100%.	



NCI Bottom Line: A Blog about Grants and More

[Subscribe](#)

Funding from Congress Allows NCI to Raise Grants Payline

February 4, 2021, by Dr. Norman E. Sharpless

NCI COVID-19 activities

FOUNDATIONAL SEROLOGY

Serological Sciences Network (SeroNet)

- 8 Centers of Excellence
- 13 Research Projects
- 4 Capacity Building Centers
- FNL Serology Lab & Network Coordinating Center

CLINICAL & TRANSLATIONAL SEROLOGY

Sero-protection Studies:

- Mount Sinai, University of Arizona
- NIH All of Us
- NCI SEER + Health Verity

COVID-19 Seroprevalence Studies Hub (SeroHub)

Antibody test performance evaluation, with FDA

Standard reference serum

Clinical trials for COVID-19 therapeutics

- Tocilizumab
- CD24Fc

SUPPORT FOR CANCER RESEARCH AND CARE AMID THE PANDEMIC

NCI COVID-19 in Cancer Patients Study (NCCAPS)

Flexibilities for grantees

Clinical trials adaptations

Modeling to predict long-term cancer outcomes

ADDITIONAL COVID-19 RESEARCH

- Excess Mortality Study
- Digital Health Solutions (with NIBIB)
- ACTIV (trans-NIH)

NCI COVID-19 in Cancer Patients Study (NCCAPS)

873

TRIAL SITES
ACTIVATED
IN

50

STATES
+ DC, PUERTO
RICO, AND
CANADA

Special emphasis on
minority,
underserved and
rural communities

Enrolled
patients will
be followed
for 2 years

994
PATIENTS
SCREENED

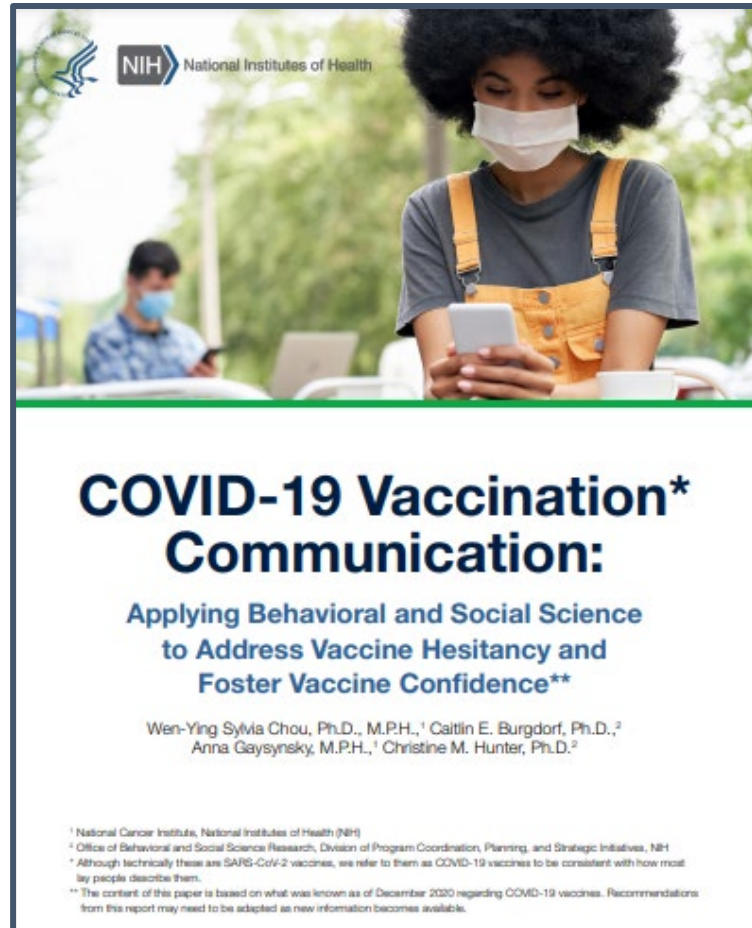
Now open to pediatric
patients

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

894
ENROLLED

Launched May 21
Conception to Launch in
6 weeks

NCI Research on Vaccine Hesitancy



“...communication about COVID-19 vaccines can benefit from drawing on the extant social and behavioral science literature about successful strategies to influence health decisions and behaviors.”

NCI

Wen-Ying Sylvia Chou, Ph.D., M.P.H.

Anna Gaysynsky, M.P.H.

NIH Office of Behavioral and Social Sciences Resesarch

Caitlin E. Burgdorf, Ph.D.

Christine M. Hunter, Ph.D.

U.S. SARS-CoV-2 Serology Standard

A tool to enable serology assay harmonization and to increase comparability of results from different serology studies

- To be used as an **assay calibrator** by laboratories conducting SARS-CoV-2 serology testing
- The main goal is to **harmonize assays** that measure anti-SARS-CoV-2 antibodies to **increase comparability** of results from different studies, including different candidate vaccines
- Will be calibrated to the **WHO International Standard** when it becomes available

Now widely available:
e.g., Operation Warp
Speed, SeroNet,
academic institutions

Download request form at

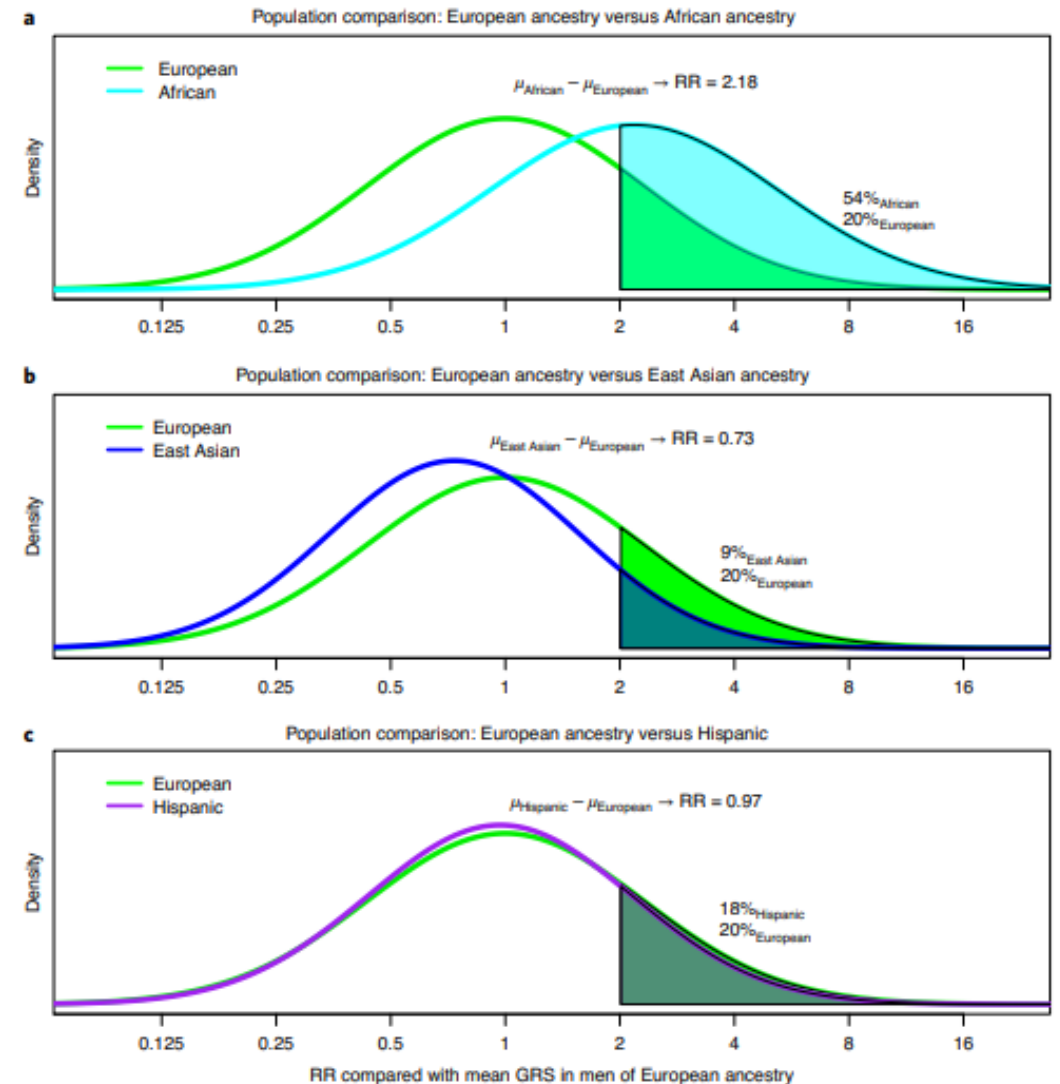
<https://frederick.cancer.gov/seronet/serology-standard>

Prostate cancer GWAS



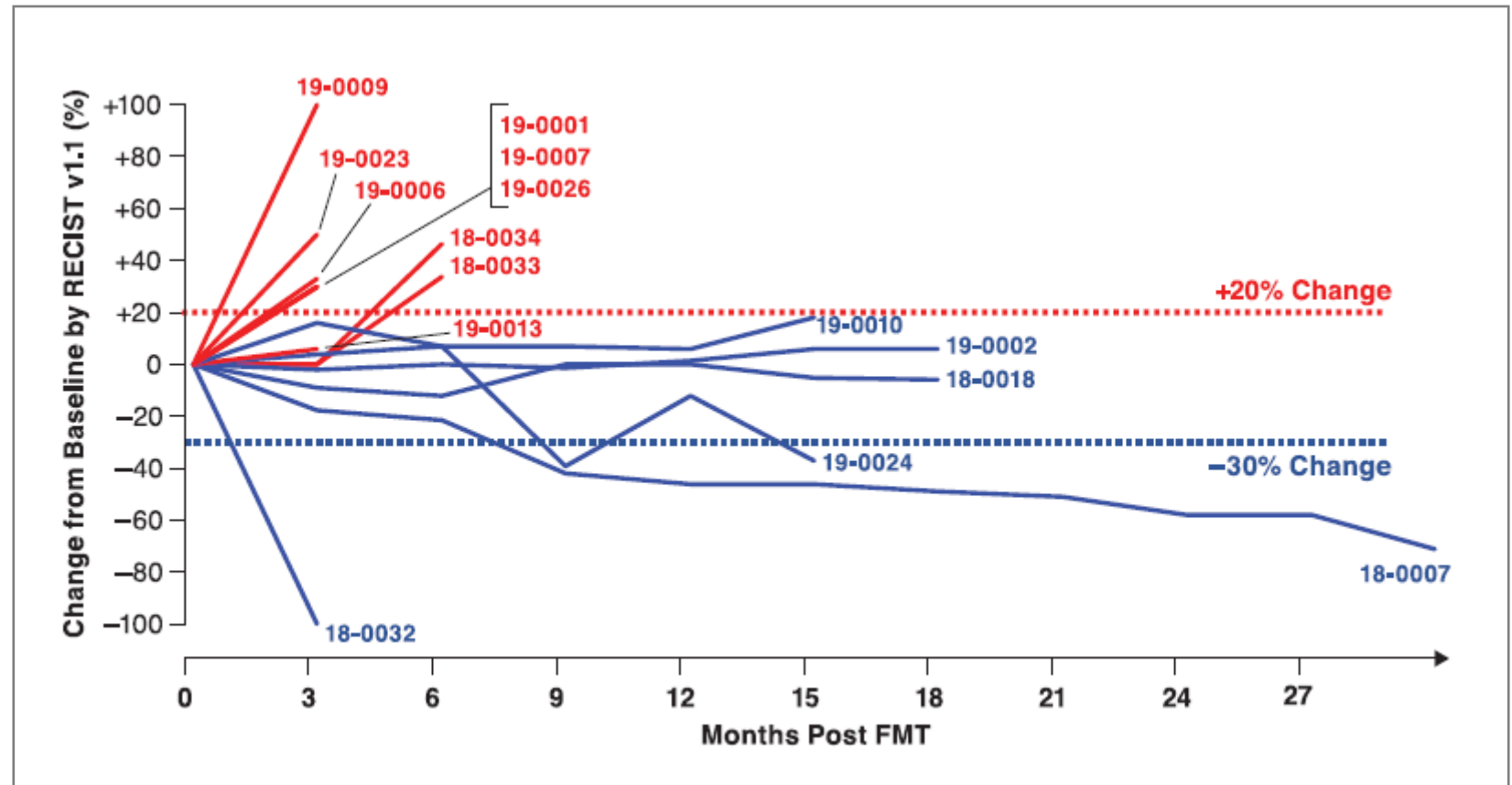
Article | Published: 04 January 2021

Trans-ancestry genome-wide association meta-analysis of prostate cancer identifies new susceptibility loci and informs genetic risk prediction



Fecal microbiota transplant in melanoma

Fecal microbiota transplant promotes response in immunotherapy-refractory melanoma patients



Science 05 Feb 2021: Vol. 371, Issue 6529, pp. 602-609

DOI: 10.1126/science.abb5920

Cancer Grand Challenges



cancer.gov

cancergrandchallenges.org

Expressions of interest
accepted until **April 22, 2021**

- Understand how cells and tissues maintain “normal” phenotypes while harboring oncogenic mutations and how they transition to become a tumor
- **Determine the potential benefits and risks of e-cigarette use**
- Develop novel therapies to target unique features in solid tumors in children
- **Systematically deliver macromolecules to intracellular targets for therapeutic benefit in cancer**
- Understand and exploit senescence to improve cancer treatment
- Determine how inflammation causes cancer
- **Identify and target dormant cancer cells**
- Understand the biology of extrachromosomal DNA (ecDNA) generation and action and develop approaches to target these mechanisms in cancer
- **Understand and reverse cachexia and declining performance status in cancer patients**

Request for Information (RFI)

New National Programs at the NCI's Frederick National Laboratory for Cancer Research

NOT-CA-21-018

Open until February 19

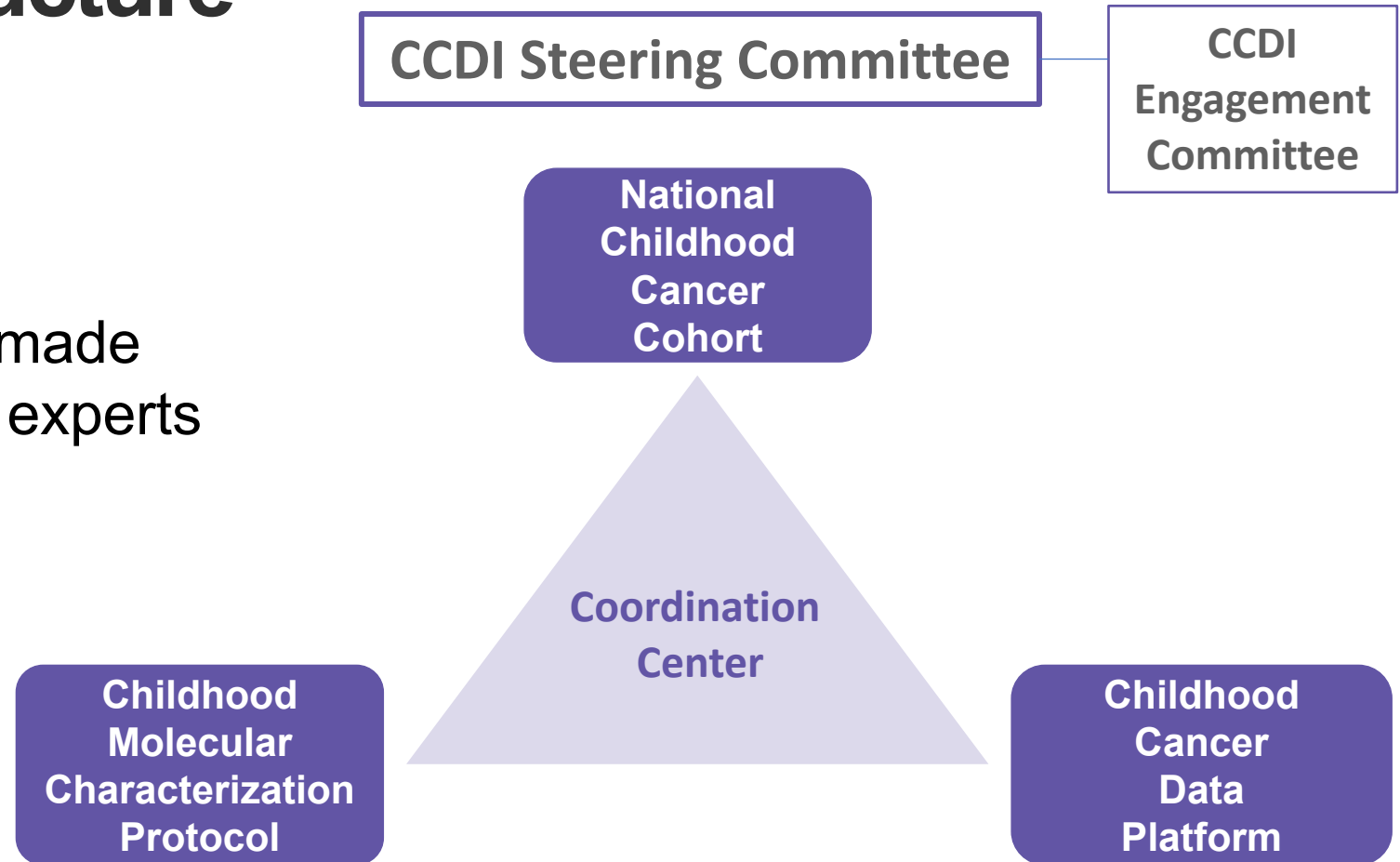
**RFI_NewNationalPrograms
@nih.gov**

*Seeking input from members of the cancer research community on the **most important needs and promising opportunities** in cancer research that are difficult to address on an individual scale or by a research network.*

Childhood Cancer Data Initiative Governance Structure

4 working groups

co-chaired by NCI and extramural experts and made up of NCI staff, external experts and advocates

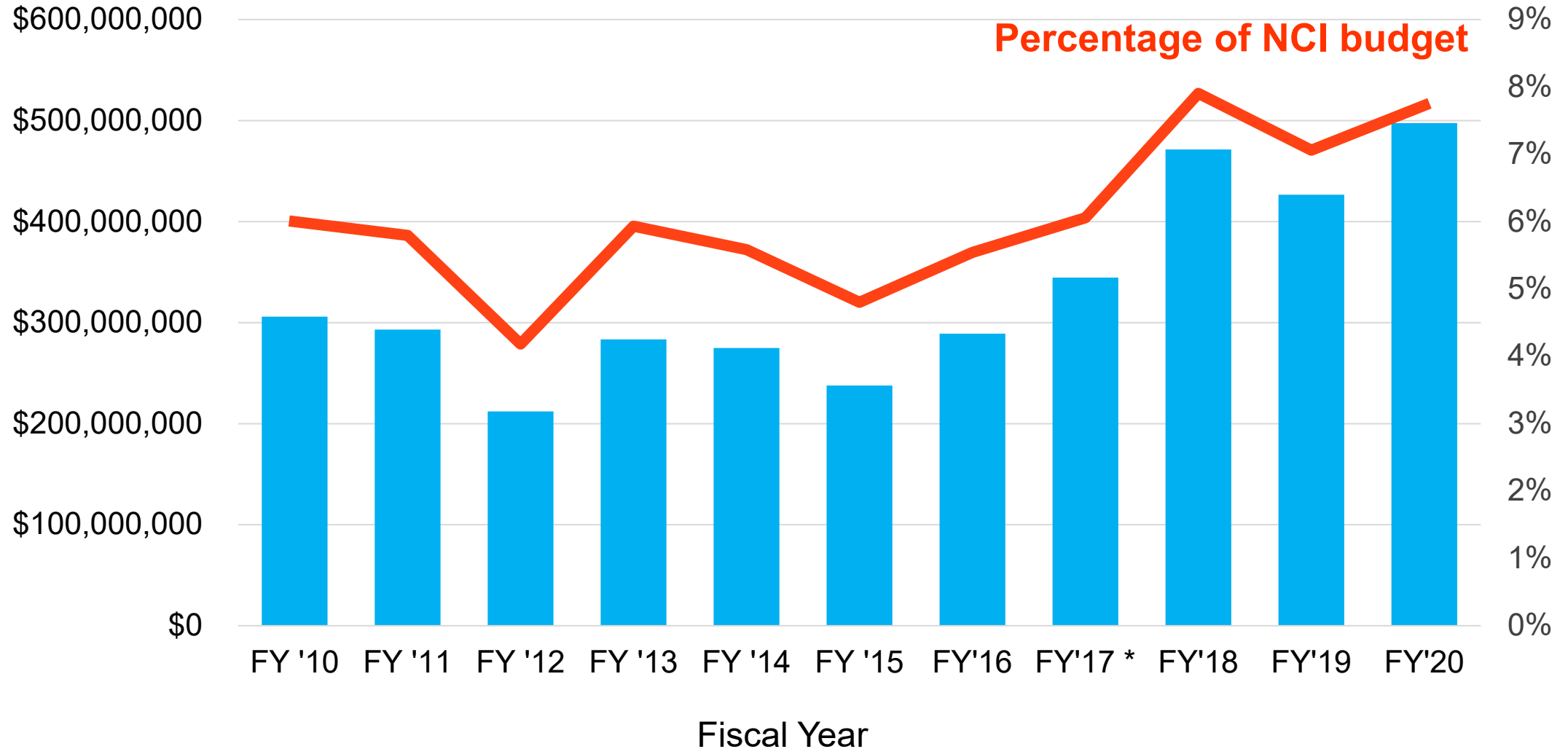


NCI Equity and Inclusion Program

<p>EQUITY COUNCIL</p>	<p>Chair Ned Sharpless</p> <p>Vice Chair 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>WORKING GROUP 1 <i>Enhancing Research to Address Cancer Health Disparities</i></p> <p>CO-CHAIRS</p> <p>Jim Doroshow Worta McCaskill-Stevens Tiffany Wallace</p>	<p>WORKING GROUP 2 <i>Ensuring Diversity of Thought and Background in the Cancer Research Workforce</i></p> <p>CO-CHAIRS</p> <p>LeeAnn Bailey Susan McCarthy Glenn Merlino</p>	<p>WORKING GROUP 3 <i>Promoting an Inclusive and Equitable Community at NCI</i></p> <p>CO-CHAIRS</p> <p>Shannon Bell Paige Green Satish Gopal</p>	<p>WORKING GROUP 4 <i>Systematic Tracking and Evaluation of Equity Activities</i></p> <p>CO-CHAIRS</p> <p>Michelle Bennett Doug Lowy</p>	<p>WORKING GROUP 5 <i>Communications and Outreach for Equity Activities</i></p> <p>CO-CHAIRS</p> <p>Peter Garrett Angela Jones Anita Linde</p>

Cancer health disparities-related research and training

FY 2010-2020



Discussion