NCI Director’s Report

Norman E. Sharpless, M.D.

4th Virtual Meeting of the Board of Scientific Advisors and National Cancer Advisory Board
June 14, 2021

@NCIDirector
@TheNCI
NCI Appropriations
FY 2015 – 2022 (in millions)

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

FY 2015: $4,950
FY 2016: $5,215
FY 2017: $5,689
FY 2018: $5,965
FY 2019: $6,144
FY 2020: $6,440
FY 2021: $6,559
FY 2022: $6,733

+ $306M COVID-19 serology (April 2020)
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

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

Launched May 21, 2020
Conception to Launch in 6 weeks

As of June 8, 2021.

ASCO 21 ABSTRACTS
#6565
#6566
COVID-19 SeroHub: US seroprevalence trends
April 2020 – February 2021

covid19serohub.nih.gov

- Illinois
- Ohio
- Maryland
- Maine
- Vermont
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

## EQUITY COUNCIL

<table>
<thead>
<tr>
<th>Chair</th>
<th>Co-Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ned Sharpless</td>
<td>Paulette Gray</td>
</tr>
</tbody>
</table>

## WORKING GROUP 1
**Enhancing Research to Address Cancer Health Disparities**

**CO-CHAIRS**
- Jim Doroshow
- Worta McCaskill-Stevens
- Tiffany Wallace

## WORKING GROUP 2
**Ensuring Diversity of Thought and Background in the Cancer Research Workforce**

**CO-CHAIRS**
- LeeAnn Bailey
- Susan McCarthy
- Glenn Merlino

## WORKING GROUP 3
**Promoting an Inclusive and Equitable Community at NCI**

**CO-CHAIRS**
- Shannon Bell
- Satish Gopal
- Paige Green

## WORKING GROUP 4
**Systematic Tracking and Evaluation of Equity Activities**

**CO-CHAIRS**
- Michelle Bennett
- Doug Lowy

## WORKING GROUP 5
**Communications and Outreach for Equity Activities**

**CO-CHAIRS**
- Peter Garrett
- Angela Jones
- Anita Linde
SEER Coverage
As of June 2021

Core Registries
- Alaska Natives*
- Arizona Indians*
- Cherokee Nation*
- Greater California**
- Greater Bay**
- Los Angeles**
- Seattle/Puget Sound

Research Support Registries
- Core Registries
- Alaska Natives*
- Arizona Indians*
- Cherokee Nation*
- Greater California**
- Greater Bay**
- Los Angeles**
- Seattle/Puget Sound
Cancer MoonshotSM

Cancer Moonshot 2017 – 2023
Millions of Dollars

$400M

$300M

$216M


[Graph showing funding distribution over the years]

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 MoonshotSM 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

<table>
<thead>
<tr>
<th>9</th>
<th>8</th>
<th>509</th>
<th>1260</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlases</td>
<td>Organs</td>
<td>Cases</td>
<td>Biospecimens</td>
</tr>
</tbody>
</table>
Over 50,000 oncology patients reached by an NCI Cancer Center Cessation Initiative (C3I) tobacco treatment program since 2018

Cumulative patients reached
New patients reached during prior 6-month reporting period
Patients reached during all prior reporting periods

June 2018: 3,601
Dec 2018: 8,596
June 2019: 19,940
Dec 2019: 32,122
June 2020: 41,376
Dec 2020: 50,127

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 Fumagalli, M.D., Ph.D., Priya Rastogi, M.D., Richard D. Gelber, Ph.D., Evandro de Azambuja, M.D., Ph.D., Anita 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 OlympA Clinical Trial Steering Committee and Investigators

<table>
<thead>
<tr>
<th></th>
<th>Placebo</th>
<th>Olaparib</th>
<th>Placebo</th>
<th>Olaparib</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-year invasive</td>
<td>77.1%</td>
<td>85.9%</td>
<td>80.4%</td>
<td>87.5%</td>
</tr>
<tr>
<td>disease-free survival</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-year distant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>disease-free survival</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Difference: 8.8 percentage points 95% CI: 4.5 to 13.0.

Difference: 7.1 percentage points 95% CI: 3.0 to 11.1.
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
U.S.-U.K. Bilateral Cancer Summit

“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
National Cancer Act of 1971 50th Anniversary
Discussion