Update from the Acting NCI Director

Douglas R. Lowy
Acting Director, National Cancer Institute, National Institutes of Health
NCI FY16 Appropriation: A ~5% increase

- ~$265 million total increase
- Where we are spending the increase:
  - the President’s Precision Medicine Initiative in Oncology (PMI-O)
  - Investigator-initiated research (RPG pool)
  - Cancer center support grants
  - Overhead/inflation costs
A positive outlook for cancer research

- Many opportunities to accelerate progress in virtually all areas of cancer research
- Public optimism about the future of cancer treatment: more beneficial for patients and less toxic
- Let’s applaud the optimism, but recognize we must go beyond treatment for maximum progress, and not overpromise
Assessing the achievements of the cancer research community

- Advancing the understanding of cancer, preventing it, screening for it, treating it, and improving quality of life after a cancer diagnosis
  - Importance of continuing to do what has never been done before
- Decreasing cancer mortality rates overall and for specific cancers
- Attract and retain high quality young investigators
To maximize progress, we must support research in many areas.

- They include basic research, etiology, pathogenesis, prevention, screening, treatment, survivorship.
- Importance of implementation research and disseminating what we already know works.
  - To improve cancer health by increasing standard of care uptake and by promoting healthy life styles (behavioral research, education).
Substantial disparities in cancer incidence & mortality

- Especially affects populations that are rural, low socio-economic status (SES), or under-represented minorities
The Vice President’s Cancer Initiative (Moonshot)

- Accelerate progress in cancer, including prevention & screening
  - From cutting edge basic research to wider uptake of standard of care
- Encourage greater cooperation and breaking down silos
  - Within and between academia, government, and private sector
- Importance of data sharing: Genomic Data Commons, annotated patient level clinical data & -omics
The Vice President’s Cancer Initiative

Vice President’s Office

Cancer Moonshot
Federal Task Force

NCI/NIH

NCAB

“Blue Ribbon Panel”

Working Groups
Researchers and other stakeholders
Evaluate the current proposal: science, collaboration, public-private partnerships, etc.
Consider other research opportunities
- Several ways to contribute ideas
Report to NCI’s National Cancer Advisory Board during Summer 2016
Blue Ribbon Panel Goals

- Identify major scientific opportunities that are poised to be accelerated by additional emphasis and funding
- Identify major scientific and regulatory hurdles that can be overcome with additional emphasis and funding
- Suggest mechanisms (broadly) to address research gaps in knowledge, develop key technologies, and/or overcome impediments to progress
- **Develop 5-10 recommendations of opportunities that would be pursued through the Vice President’s Cancer Initiative**
Scientific Outreach

- **Goals:**
  - Provide public and experts beyond the Working Groups opportunities to submit ideas;
  - increase public participation in the Moonshot

- **Approaches:**
  - Online public idea repository
  - one-on-one input
  - professional meetings (AACR, ASCO)
An Opportunity for Focused Research to Accelerate Progress

- Take advantage of current advances in the understanding of cancer and recent technological innovation
- Apply the knowledge and innovation to focus on specific projects that can have a substantial impact on understanding and/or improvement for patients
- Frederick National Laboratory for Cancer Research (FNL) may have a key role in implementation; delay new award until 2018
- NB: NCI will continue to support a great deal of other meritorious research
“Vice President Biden … wants to take steps to ensure that all Americans — even those who have limited resources or live far from major cancer centers — have access to leading-edge cancer treatment, prevention, and screening approaches.”
## BRP Working Groups

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<td>Liz Jaffee, Jim Allison</td>
<td>Toby Hecht, Kevin Howcroft</td>
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<td>Precision Prevention and Early Detection</td>
<td>Mary Bekerle, Jennifer Pietenpol</td>
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<td>Tumor Evolution</td>
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<td>Clinical Trials</td>
<td>Charles Sawyers, Mitch Berger</td>
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<td>Implementation Sciences</td>
<td>Elena Martinez, Augusto Ochoa</td>
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<td>Pediatric Cancer</td>
<td>Peter Adamson, Jim Downing</td>
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<td>Enhanced Data Sharing</td>
<td>Angel Pizarro, Gaddy Getz</td>
<td>Juli Klemm, Betsy Hsu</td>
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Cross-cutting Themes

- Prevention
- Technology and preclinical models
- Data sharing and predictive computational modeling
- Health disparities research
- Tumor heterogeneity
- Biomarkers
Blue Ribbon Panel Timeline

- April 2016: Initial meeting, discussion of charge, and organization of Working Groups
- June/July 2016: Preliminary Working Group recommendations are discussed by BRP and finalized by Working Groups
- July/August 2016: BRP report is circulated, edited, finalized, and sent to NCAB, which discusses the report and makes recommendations to the NCI
- August/October 2016: NCI prepares FOA concepts for approval and publication (opportunities for intramural & extramural investigators)
- January-March 2017: Receipt dates for applications responding to FOAs
- June/July 2017: Review of applications & funding of awards
Where we need to go

- Increase our fundamental understanding of cancer, its causes, and its pathogenesis
- Improve prevention, screening, and treatment to continue to bring down cancer mortality rates, including those cancers for which there has been limited progress
- Redouble our efforts to understand and overcome cancer health disparities
- Take full advantage of the opportunity to accelerate progress by working together on a wide range of projects, from the most basic to the most applied
The goal of the Cancer Moonshot is to make a decade’s worth of progress in five years in the prevention, diagnosis, and treatment of cancer.

“I’m putting Joe in charge of Mission Control”

President Obama
“Together we, the National Cancer Institute (NCI)-designated Cancer Centers, recognize these low rates of HPV vaccination as a serious public health threat. HPV vaccination represents a rare opportunity to prevent many cases of cancer that is tragically underused. As national leaders in cancer research and clinical care, we are compelled to jointly issue this call to action.”