Update from the NCI Deputy Director

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Deputy Director, National Cancer Institute
National Institutes of Health

FNLACI Meeting
October 30, 2017
Dr. Sharpless: On board!
Dave Heimbrook

Thank you!
NCI APPROPRIATIONS 2013-2017 (in billions)

- FY 2013: $4.82
- FY 2014: $4.92
- FY 2015: $4.95
- FY 2016: $5.22
- FY 2017: $5.39

+$300 million for Cancer Moonshot
Continuing Resolution for Start of FY 2018

• Funding: October 1 - December 8
• Includes funding for Cancer Moonshot
NCI/NIH BUDGET PROCESS FOR REGULAR APPROPRIATION

White House OMB coordinates with federal agencies to formulate the President’s budget proposal.

Congressional appropriations committees consider President’s proposal & prepare legislation.

Congress reconciles & finalizes appropriations legislation & sends to the President.

President signs the appropriations bill into law making funds available for NIH & NCI.

FY 2017

FY 2018
Appropriations Committee Activities – FY18

House bill – July 2017

- NIH = + $1.1 billion over FY17 enacted level
- NCI = + $82 million over FY17 enacted level
- Additional $300 million - 21st Century Cures Cancer Moonshot Funding

Senate bill – September 2017

- NIH = + $2.0 billion over FY17 enacted level
- NCI = + $169 million over FY17 enacted level
- Additional $300 million - 21st Century Cures Cancer Moonshot Funding
National Cancer Institute
Appropriations History
(Dollars in Millions)

FY 2017 Enacted Appropriation: $5,689
  Base Appropriation: $5,389
  21st Century Cures Cancer Moonshot: $300

FY 2018 President's Budget: $4,474
  Base Appropriation: $4,174
  21st Century Cures Cancer Moonshot: $300
-22.5% Decrease From FY 17*

FY 2018 House Appropriation: $5,771
  Base Appropriation: $5,471
  21st Century Cures Cancer Moonshot: $300
1.5% Increase Over FY 17*

FY 2018 Senate Appropriation: $5,858
  Base Appropriation: $5,558
  21st Century Cures Cancer Moonshot: $300
3.1% Increase Over FY 17*

*Percent changes do not include 21st Century Cures funding
Importance of Research Supported by NCI’s Regular Appropriation (1)

• Largely non-overlapping with Cancer Moonshot research activities

• A few ongoing examples:
  • Training the next generation of investigators
  • Investigator-initiated research
  • Most clinical trials and cancer cohorts
  • PMI Oncology
  • RAS initiative
Importance of Research Supported by NCI’s Regular Appropriation (2)

• Some new initiatives:
  • National Cryo-Electron Microscopy Facility, FNLCR
    • FNLCR = Frederick National Laboratory for Cancer Research
    • https://www.cancer.gov/research/resources/cryoem
  • TMIST breast cancer screening trial
    • TMIST = Tomosynthesis Mammographic Imaging Screening Trial
TMIST Breast Cancer Screening Trial

• Collaboration with ECOG-ACRIN

• Primary goal: Determine if cumulative rate of advanced breast cancer in women undergoing screening with tomosynthesis plus digital mammography is reduced compared to digital mammography alone

• RCT, 165,000 women 45-74

• Menopausal normal risk: biennial screens: 0, 24, 48 months

• Menopausal increased risk: annual screens: 0, 12, 24, 36, 48 months

• Biorepository
Blue Ribbon Panel Recommendations

A. Network for direct patient engagement
B. Cancer immunotherapy translational science network
C. Therapeutic target identification to overcome drug resistance
D. Creation of a national cancer data ecosystem
E. Fusion oncoproteins in pediatric cancer
F. Symptom management research
G. Precision prevention and early detection
H. Retrospective analysis of biospecimens from patients treated with standard of care
I. Creation of human tumor atlas
J. Development of new enabling technologies

available at:
cancer.gov/brp
FY17 Cancer Moonshot funding: Initial Implementation of Blue Ribbon Panel Recommendations

- Pediatric Fusion Proteins
  - APRC supplement program
  - core resources
- Technology
  - APRC supplement program
  - IMAT RFA
  - PDX development centers
- Immunotherapy
  - biomarker development labs RFA for adult and pediatric; PACT
  - canine immunotherapy
  - expand CITN to include pediatrics
  - Clinical center lab
  - Autoimmune sequelae – collaboration with NIAID
- Therapeutic resistance RFA
- Retrospective risk stratification – resource development
- Human tumor atlas
  - Pilot projects
- Prevention and Early Detection
  - HPV vaccine trial
- Implementation Science
  - Symptom management (oral cancer agents)
  - Reduce over-screening
  - Tobacco control supplements
For new awards in FY18 – FY23: Cancer Moonshot Implementation Teams

• Implementation Teams aligned with BRP recommendations
• Composition: Staff from NCI & other Institutes
• Charge to each Implementation Team:
  • Develops and proposes initiatives for FY18 and beyond to help achieve a specific BRP Recommendation
  • Seeks input from cancer research community, including organizing workshops, etc.
  • Provides oversight and coordination of funded initiatives, including organizing meetings, providing supplements, etc.
## Status of FY18 Moonshot RFAs

<table>
<thead>
<tr>
<th>Moonshot Implementation Team</th>
<th>RFA</th>
<th>RFA Published</th>
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<tr>
<td>Network for Patient Engagement</td>
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<tr>
<td>Pediatric Immunotherapy Network</td>
<td>1) Pediatric Immunotherapy Discovery and Development Network (PI-DDN): Specialized Centers (U54)</td>
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<td>2) Pediatric Immunotherapy Discovery and Development Network (PI-DDN)(U01)</td>
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<td>Adult Immunotherapy Network</td>
<td>1) Immuno-Oncology Translation Network (IOTN): Cancer Immunotherapy Research Projects (U01)</td>
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<td>2) Immuno-Oncology Translation Network (IOTN): Cancer Immunoprevention Research Projects (U01)</td>
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<td>3) Immuno-Oncology Translation Network (IOTN): Data Management and Resource-Sharing Center (DMRC) (U24)</td>
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<td>4) Immuno-Oncology Translation Network (IOTN): Cellular Immunotherapy Data Resource (CIDR) (U24)</td>
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<td>Target ID to Overcome Drug Resistance</td>
<td>1) Mechanisms of Cancer Drug Resistance and Sensitivity Coordinating Center (U24)</td>
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<td>National Cancer Data Ecosystem</td>
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<td>Fusion Oncoproteins</td>
<td>1) Fusion Oncoproteins in Childhood Cancers (FusOnC2) Consortium (U54)</td>
<td>RFA-CA-17-049</td>
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<td>Symptom Management</td>
<td>1) Analyzing and Interpreting Clinician and Patient Adverse Event Data to Better Understand Tolerability (U01)</td>
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<td><strong>High Risk Cancers</strong></td>
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<td>1) Approaches to Identify and Care for Individuals with Inherited Cancer Syndromes (U01)</td>
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<td>Prevention and Screening</td>
<td>1) Accelerating Colorectal Cancer Screening and follow-up through Implementation Science (ACCSIS)(UG3/UH3)</td>
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<td></td>
<td>2) Accelerating Colorectal Cancer Screening and follow-up through Implementation Science (ACCSIS) (U24)</td>
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<td>Retrospective Analysis of Biospecimens</td>
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<td>Generation of Human Tumor Atlases</td>
<td>1) Human Tumor Atlas Research Centers (U2C)</td>
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<td></td>
<td>2) Pre-Cancer Atlas (PCA) Research Centers (U2C)</td>
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<td>3) Human Tumor Atlas Network Data Coordinating Center (U24)</td>
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<td>Development of New Technologies</td>
<td>1) Integration and Validation of Emerging Technologies to Accelerate Cancer Research (R33)</td>
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