



# Ending Cancer As We Know It

Danielle Carnival, Ph.D.

Senior Advisor to the Director, White House Office of Science and Technology Policy  
September 2021

# White House Office of Science and Technology Policy



*“Science and technology—when applied with vision and optimism, with wisdom and humility, with rigor and integrity, and with a commitment to engage and serve everyone—are among the most powerful forces ever devised to better the human condition.”*

– Eric Lander, President Biden’s Science Advisor and Director of the Office of Science and Technology Policy



A bold vision for enhancing the federal government's capabilities to make progress to promote human health

# President Biden's Joint Address to Congress

April 28, 2021



*“We will see more technological change in the next 10 years – than we saw in the last 50 years. And we’re falling behind in that competition. ... The National Institutes of Health, the NIH – should create an ... **Advanced Research Projects Agency for health**. To develop breakthroughs – to prevent, detect, and treat diseases like Alzheimer’s, diabetes and cancer. ... I can think of no more worthy investment. And I know of nothing more bipartisan.”*



FY22 budget request: **\$6.5B** available over three years



# ARPA-H Structural Elements

## **Centered around ensuring risk tolerance, urgency, nimbleness, and innovation**

- Flat, dynamic organization
- Term-limited director with technical and leadership skills
- Creative, diverse cohort of program managers recruited for short terms with broad autonomy to drive transformational change
- Distinct project review and selection processes
- Convergence of scientific disciplines
- Collaborations across academia, industry, government



# Draft Goals for an ARPA for Health

## Support transformative research to:

- Speed application and implementation of **health breakthroughs** to serve all patients
- Foster breakthroughs across various levels – from **the molecular to the societal**
- Build **capabilities and platforms** to revolutionize prevention, diagnosis, treatment, and cures in a **range of diseases**
- Convert **use-driven ideas** into tangible solutions for patients far more rapidly than previously believed possible
- Overcome market failures through **critical solutions or incentives**



An urgent focus on making patient-driven progress toward ending cancer as we know it

# Principles of Approach



- inject urgency to our collective approach to end cancer as we know it
- bring all possible solutions and partners to the table with ideas and action
- provide an avenue to hear and prioritize what patients and caregivers identify as being the most important
- change the systems and culture to meet this moment
- deliver on the hope felt by millions of families facing a devastating diagnosis





How do we know cancer?

What are the most important challenges?

What issue areas are the most poised for progress?