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## **Scientific Ideas and Recommendations for Advancing Progress against Cancer: Summary of Public Submissions to the Cancer Moonshot Blue Ribbon Panel, April – July 2016**

### **Idea Submission and Review Process**

In keeping with the Cancer Moonshot's aim of involving as many individuals and organizations as possible to advance progress against cancer, the National Cancer Institute developed a crowd sourcing campaign to collect the best scientific ideas from the cancer community and public for advancing a decade of progress in five years.

In April 2016, NCI launched the website [CancerResearchIdeas.cancer.gov](http://CancerResearchIdeas.cancer.gov), and invited the public to submit ideas to it, or to send ideas through social media, an email inbox, or by phone or LiveHelp to NCI's Cancer Information Service (1-800-4-CANCER). The effort was launched at the annual meeting of the American Association for Cancer Research (AACR) in New Orleans on April 15 and closed on July 1, 2016, to allow time for the Blue Ribbon Panel to deliberate and deliver its report to the National Cancer Advisory Board by the end of the summer.

During this period, the Blue Ribbon Panel held sessions to receive suggestions from AACR and the American Society of Clinical Oncologists (ASCO) members and promoted idea submissions through mainstream and social media. Ideas submitted through this period were collected on a weekly basis and reviewed by members of the Blue Ribbon Panel and its seven working groups to ensure that priorities aligned with those of the broader community.

As of July 1, 2016, NCI received more than 1,600 ideas and comments in eight categories: cancer prevention and early detection, clinical trials, data sharing, pediatric cancer, tumor evolution and progression, implementation science, immunology and prevention, and other exceptional opportunities.

Common themes included:

1. **Invest in “on the cusp” breakthroughs.** Fund the best science in cancer prevention vaccines, immunotherapy, metastasis research, pediatric cancer treatments, non-invasive liquid biopsies, and new imaging technologies that are proving to be effective and could be pushed to the next level.
2. **Share cancer research results broadly.** Require that the entire cancer community provide open, free public access to all research findings, particularly research supported by public funds.
3. **Make it easier to find and enroll in cancer clinical trials.** Strengthen partnerships between the NCI and community oncology practices to make clinical trials available at more community hospitals where the majority of cancer patients are treated.
4. **Focus on survivors.** With the number of cancer survivors growing, improve their quality of life by improving the management of symptoms and side effects, and reducing the long-term effects of cancer treatment, especially in children.
5. **Build on what works.** Make prevention and treatment initiatives that have been proven to work much more broadly available in underserved populations, such as HPV vaccination and colorectal cancer screening.

A sampling of ideas submitted include:

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- [\*Improve the cancer “experience.”\*](#) Introduce the concept of “cancer concierges,” similar to patient navigators, who are highly trained to help patients find treatment options, navigate their choices, understand complex information, and enroll in clinical trials.
- [\*Prevent cancer through healthier living.\*](#) Sponsor clinical trials to evaluate multiple lifestyle behavior coaching strategies to reduce the cancer burden, and expand what has been proven to work in larger populations.
- [\*Improve data sharing tools.\*](#) There is no universal website that hosts or promotes use of existing technologies; introduce a “grand resource in one place... to catalog and direct all storage and query tools, e.g., cancer-scientist.org, LINCS canvas browser, Genomic Data Commons, etc.”
- [\*Create a registry of ALL cancer patients,\*](#) including their diagnosis, treatments, and outcomes, for researchers to learn from and for oncologists to guide future patient care.
- [\*Require papers to be freely available at the time of publication.\*](#) Require that the results of any federally-funded cancer research be available to the public for free at publication for all journals, not 12 months later, because “[t]hat year of delay is one we can't afford.”
- [\*Engage public libraries as health literacy engines.\*](#) Make libraries “teachers” on how to read about cancer and health, with context, to engage caregivers, patients and public.
- [\*Engage Obstetricians/Gynecologists to increase HPV vaccination rates.\*](#) Ob/gyns are uniquely suited to recommend and vaccinate their patients.
- [\*Invest in DNA sequencing and molecular profiling of metastatic cancer.\*](#) Collect metastatic tumor samples, generate data and knowledge needed to discover all driver mutations associated with metastatic disease regardless of tumor of origin, and use that to drive better therapies for people with metastatic cancer.

All ideas can be found on the archived website

<https://cancerresearchideas.cancer.gov/#CancerResearchIdeasArchive>