

# P R E S I D E N T ' S C A N C E R P A N E L

NATIONAL CANCER PROGRAM

NATIONAL CANCER INSTITUTE

NATIONAL INSTITUTES OF HEALTH

DEPARTMENT OF HEALTH AND HUMAN SERVICES

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## **The Future of Cancer Research: Accelerating Scientific Innovation February 1, 2011**

The President's Cancer Panel held the fourth meeting of its 2010-2011 series, *The Future of Cancer Research: Accelerating Scientific Innovation*, on February 1, 2011, in Atlanta, Georgia. The meeting included testimony and discussion regarding funding models to promote innovation, public-private partnerships, and the need for a national strategy for the National Cancer Program.

The Panel heard from several representatives of public and private organizations about review and funding models designed to promote innovative ideas. Speakers provided examples of ways to encourage submission of innovative ideas, including prohibiting the inclusion of preliminary data in proposals and instituting an anonymous review process in which reviewers do not know the identity of the applicant, an approach that differs substantially from traditional review processes that take investigator reputation and experience into account. These strategies also tend to encourage submissions from early-career investigators. In addition to involving patient advocates in review, some organizations utilize "champion-based" review in which each reviewer selects one application for funding in addition to making recommendations about other applications. Many organizations also decline to fund projects that are not highly innovative, even if they have scientific merit.

There are several examples in which partnerships have resulted in research progress. The Prostate Cancer Clinical Trials Consortium, a public-private partnership supported by the Department of Defense Congressionally Directed Medical Research Program and the Prostate Cancer Foundation, has expedited clinical trials in the area of prostate cancer, resulting in the movement of eight potential new therapies into Phase III trials. The nonprofit Foundation for the National Institutes of Health also facilitates public-private partnerships, including partnerships with pharmaceutical companies. Advocacy foundations can help engage teams of scientists as well as the private sector to address specific research questions. It was noted that in addition to patients, community doctors should be considered valuable partners, particularly in clinical research.

The research community must keep in mind that benefit to patients is the most important outcome measure for research. Cancer is a complex problem that must be addressed using a systems approach rather than a collection of unrelated individual projects. Technology has the potential to play an important role in facilitating innovation in research and in the clinical care of cancer patients. In many cases, technologies already in use in other fields can be adapted to meet the needs of cancer patients, physicians, and researchers. In order to make an impact, technologies must perform their intended function well and be cost effective.

A national strategy is needed to guide and coordinate the National Cancer Program. A careful analysis of current activities across all sectors would help ensure that efforts are not being unnecessarily duplicated and that critical areas are being addressed. Areas that are currently inadequately addressed include cancer prevention and early detection. A shift in strategy is needed to identify informative markers for early detection of cancer; the current approach of analyzing late-stage tumors is unlikely to yield promising leads. In addition, the cancer community would benefit from expanded access to scientific information. In particular, an effort should be undertaken to make available the negative results of clinical trials and other scientific studies that are not commonly published in mainstream journals.

The Panel will summarize findings and recommendations from this meeting, along with the other meetings in the series, in its 2010-2011 Annual Report to the President of the United States.