## DEPARTMENT OF HEALTH AND HUMAN SERVICES

# **National Institutes of Health**

## **National Cancer Institute**

FY 2007 Pancreatic Cancer Spending Plan

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August 2007

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#### Introduction

In its report on the fiscal year (FY) 2007 budget for the Department of Health and Human Services, the Senate Committee on Appropriations stated the following:

Pancreatic cancer is the country's fourth leading cause of cancer death, yet it remains severely underfunded, as compared to the top five cancers based on mortality. While the Committee notes that the NCI is pursuing major new scientific research initiatives in the areas of nanotechnology and genomics, it urges the Institute to maintain its investments in the primary research areas, including early detection, diagnosis and treatment. The Committee also reminds the NIH that, in last year's Senate report, it requested a professional judgment budget to be submitted by May 1, 2006. The Committee is very disappointed that the Department delayed the release of that budget so that it could not be reviewed by the deadline for producing this year's Senate report, in mid-July. The Committee strongly urges the Department to release the budget as quickly as possible. In addition, the Committee requests detailed fiscal year 2007 spending plans for pancreatic cancer research, as compared with fiscal years 2005 and 2006, within 90 days of the passage of this act. (Senate Report No. 109-287, pages 107-108)

The following report has been prepared by the National Cancer Institute, National Institutes of Health, Department of Health and Human Services in response to this request.

### **Spending Plans**

The National Cancer Institute (NCI) appreciates the Committee's continued support for pancreatic cancer research. Since FY 2001, NCI has increased its investment in pancreatic research from \$21.8 million to \$66.7 million in FY 2005, and to \$74.2 million in FY 2006. This significant increase is allowing NCI to fund the three SPORE grants and fully implement the recommendations of the Pancreatic Cancer Progress Review Group. We expect to maintain this level of support for pancreatic cancer research in FY 2007.

Spending by Program (\$ in thousands)	FY 2005	FY 2006
Understand the Mechanisms of Cancer	\$10,239	\$13,460
Understand the Causes of Cancer	11,048	11,923
Cancer Centers, Specialized Centers and SPOREs	13,162	13,750
Cancer Prevention and Control	5,528	4,929
Improve Early Detection and Diagnosis	5,374	7,992
Develop Effective and Efficient Treatments	21,320	22,154
Tota	l 66,671	74,208

It is important to note, at the same time NCI has made important increases in pancreatic research funding, NCI continues to invest significantly into understanding the biology of cancer, cancer stem cells, angiogenesis pathways, and drug development. Each of these categories significantly impacts the scientific opportunities for specific research areas such as pancreatic cancer research. These broad research investments do much to encourage the innovation needed to achieve the discovery and development of biomarkers for early diagnosis and imaging of early disease, as well as well as for new therapies and targeted treatments.

\$ in thousands	FY 2001	~	FY 2005	FY 2006	FY 2007 (est.)
Pancreatic Cancer Research	\$21,800	~	\$66,671	\$74,208	\$74,208

Compared to FY 2005, the FY 2006 pancreatic research funding supported an increased number of traditional research projects (R01s) as well as exploratory and developmental grants (R21s). R21s are significant because they support the development of pilot projects or feasibility studies into creative, novel, highrisk/high payoff research that may produce innovative advances in science. We anticipate FY 2007 pancreatic grant funding to follow the same trend as FY 2006. Nevertheless NCI, like the rest of NIH, uses scientific peer review panels to competitively determine the merit, technical validity, and ranking of the individual grant applications. The selection of meritorious projects through the peer review process assures that the most scientifically excellent projects are selected, thus assuring that such studies provide an important, productive, and efficient way to exploit the current scientific opportunities and biotechnological knowledge base surrounding pancreatic cancer. Therefore, current year spending (FY 2007) is only an estimate and any spending by program will depend on which applications are ultimately selected for support. Even so, NCI continues to evaluate applications that fall outside the regular payline for exception funding to address important scientific opportunities. In a recent case, NCI approved exception funding for a study that will examine three inter-related pathogenic pathways for pancreatic carcinogenesis: 1) energy balance, insulin and insulinlike growth factor signaling, 2) inflammation, and 3) vitamin D-related pathways. This study will include extensive dietary, body habitus, physical activity, analgesic use and other exposure data; as well as biomarkers and genetic factors.

Another important example of the scientific opportunities NCI is supporting in FY 2007 is the Pancreatic Cancer Cohort Consortium. The Consortium is conducting whole genome scans of common genetic variants in 1,200 pancreatic cancer cases and 1,200 controls from 12 cohorts to identify markers of susceptibility to pancreatic cancer. The promising genetic variants (single

nucleotide polymorphisms (SNPs) identified then will be validated by testing data from participants in a pancreatic cancer case-control consortium. The Whole Genome Scan for Pancreatic Cancer Risk (PanScan) Study began in September 2006. In order to accelerate the pace of discovery and characterization of genetic markers associated with pancreatic cancer risk, the results of the study and the final joint analysis and validation studies will be made available to the research community. The genotyping data will also be posted on a controlled-access web site, available to the biomedical research community.