NATIONAL CANCER INSTITUTE

Address:

National Cancer Institute National Institutes of Health Building 31, Room 11A48 31 Center Drive Bethesda, MD 20892-2590 Web site: www.cancer.gov

Director:

Andrew C. von Eschenbach, M.D. (301) 496-5615 (phone) (301) 402-0338 (fax) Email: avonesch@mail.nih.gov

Legislative Contact:

Susan Erickson (301) 496-5217 (phone) (301) 402-1225 (fax) Email: ericksos@mail.nih.gov

Mission:

The mission and goal of the National Cancer Institute (NCI) is to lead the National Cancer Program and the Nation to eliminate the suffering and death due to cancer. NCI provides vision and leadership for research at NIH, across the United States, and around the world to enhance our understanding of cancer and develop, test, and disseminate interventions for the prevention, detection, diagnosis, and treatment of cancer; rehabilitation from cancer; and the continuing care of cancer patients, survivors, and their families. NCI conducts and supports research, training, and information dissemination and works with others to ensure application of these interventions in public health programs and medical practice.

Selected Achievements and Initiatives:

Cancer Trends: NCI monitors trends in cancer incidence, mortality, and related risk factors, and this analysis plays a major role in setting NCI's research priorities. Cancer survival rates have improved substantially in the past few years for most of the 15 most common cancers in both men and women and the ten most common cancers in children. In addition, overall observed cancer incidence rates dropped 0.5 percent per year from 1991 to 2001, while death rates from all cancers combined dropped 1.1 percent per year from 1993 to 2001. The rates of incidence and death decreased for the majority of the 15 most common cancers in both men and women. Of special note, lung cancer death rates among women recently leveled off for the first time and lung cancer incidence rates among women have shown a first ever decline.

Disparities: Not all segments of the U.S. population have benefited equally from advances against cancer. Reaching all segments of the population with high quality services is essential to reducing cancer incidence and mortality even further. This is critical among underserved populations those who experience health disparities based on race/ethnicity, gender, age, socioeconomic status, geographic location, occupation, and education. We must expedite the translation of research discoveries to widespread and equitable delivery of preventive and clinical services.

Cancer Centers: The NCI Cancer Centers Program supports major academic and research institutions throughout the United States to sustain broad based, coordinated, interdisciplinary programs in cancer research. Cancer Centers provide scientists with the most advanced technologies and promote new research opportunities; work collaboratively with industry; perform state-of-the-art translational research; conduct education, outreach, and information programs; and leverage additional resources for cancer research and education from organizations in the public as well as private sectors.

Clinical Trials: NCI supports clinical trials at the NIH Clinical Center and at close to 3,000 other sites across the United States. Outreach programs, education, cancer communications, and a national clinical trials information

The National Institutes of Health

NATIONAL CANCER INSTITUTE

NCI

network are increasing accrual to clinical studies, with an emphasis on recruitment of minority and underserved populations. NCI is taking critical steps to make our clinical trials system even more robust in order to anticipate scientific and technological advancements, enhance partnerships and collaborations with an interdisciplinary and translational focus, prioritize and accelerate the development of interventions, and ensure that effective new interventions are efficiently and seamlessly incorporated into medical practice to benefit all populations.

Understanding the Causes and Mechanisms of Cancer: A more complete understanding of cancer is required to create new and more rationally designed cancer interventions for prevention, detection, diagnosis, and treatment. Research in molecular epidemiology improves our understanding of the behavioral, environmental, genetic, and epigenetic causes of cancers. Large scale international collaborations of investigators who pool resources for molecular epidemiology research are especially effective in studying highly lethal cancers. NCI's Integrative Cancer Biology Program focuses on creating computational models of the complex networks within and among cancer cells, building our understanding of the tumor microenvironment, and studying the role of the tumor macroenvironment in cancer development.

Prevention, Early Detection, and Prediction: NCI is supporting research to improve cancer prevention and early detection as well as prediction of cancer risk and prognosis. Researchers are developing new medications and behavioral approaches to help smokers quit, and NCI is helping to establish a national system of quit lines. Other research is enhancing our understanding of the association between energy balance and cancer. Prevention vaccines and drugs are designed to suppress the carcinogenic process either at its inception or in pre-invasive stages. Researchers are improving on the success of early detection techniques, such as colorectal cancer screening, to make them more effective and less invasive and are developing non-invasive, proteomic based tests for insidious cancers such as ovarian and pancreatic. Investigators are also developing proteomic and gene expression array tests to predict individualized cancer risk and guide treatment choices.

Targeted Diagnostics and Therapeutics: One of NCI's key strategies against cancer is to optimize the development and speed the delivery to patients of new targeted cancer diagnostics, therapies, and preventives. This effort will require a seamless national system supported by bioinformatics platforms and other advanced technologies and by collaborations with the FDA and academic and private sector partners to take new cancer drugs and diagnostics from preclinical development through commercialization. Researchers must have access to high quality biospecimens; tools for cancer genome analysis, biomarker discovery, and molecular target validation; and resources for preclinical development of experimental drugs and diagnostics.

Appropriations History

(\$ in thousands)	
FY 2001	\$3,754,456 (+13.3%)
FY 2002	\$4,181,233 (+11.4%)
FY 2003	\$4,592,348 (9.8%)
FY 2004	\$4,739,255 (+3.2%)
FY 2005	\$4,825,258 (+1.8%)

Extramural Research Project Grants

(Includes SBIR/STTRs)	
FY 2001	

FY 2002	4,986
FY 2003	5,146
FY 2004	5,479
FY 2005	5,757

4,738

Success Rate — Research Project Grants		
FY 2001	27%	
FY 2002	26%	
FY 2003	27%	
FY 2004	24%	
FY 2005	20%	

Research Training Positions Supported

FY 2001		1,592
FY 2002		1,566
FY 2003		1,520
FY 2004		1,508
FY 2005		1,567

Research Centers

3
7
2
4
8