NCI Director's Update

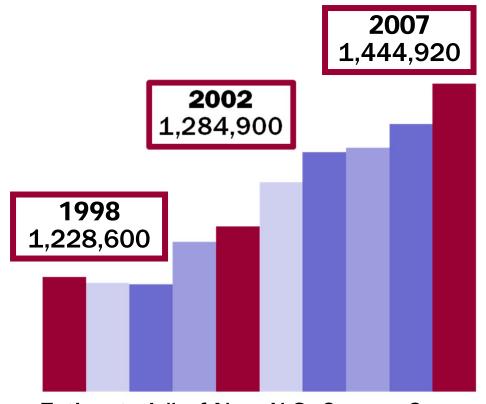
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health Dr. John E. Niederhuber Director, National Cancer Institute

National Cancer Advisory Board February 5, 2008

## Why What We Are Doing is So Important

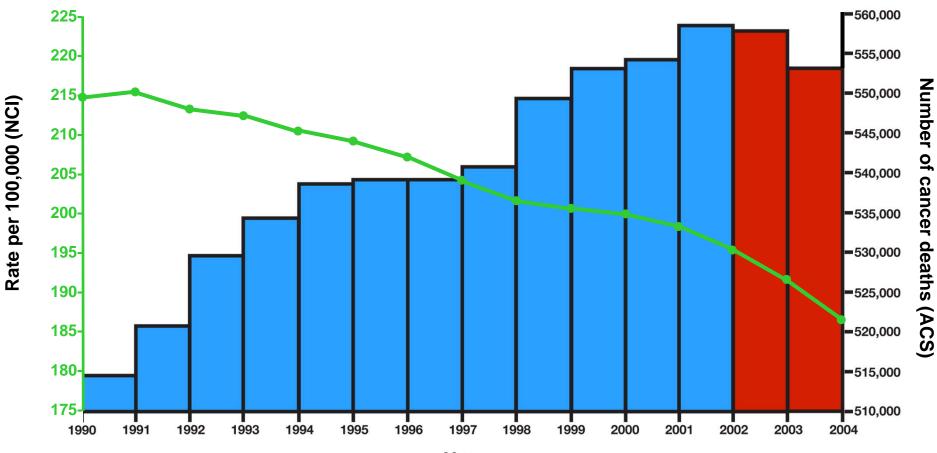
#### **Human and Economic Burden of Cancer**



Estimated # of New U.S. Cancer Cases

- 1,444,920 Americans were diagnosed in 2007
- 559,650 died of cancer in 2007
- \$206.3 billion spent on healthcare costs for cancer in 2006
- 47 million Americans lack health insurance

### Reversing the Curve: Cancer Deaths Decline



Year

#### U.S. Death Trends: Cancer of All Sites, 1975-2004

• 1993-2003: overall decline -1.1%

- 2002-2004: -2.1% per year

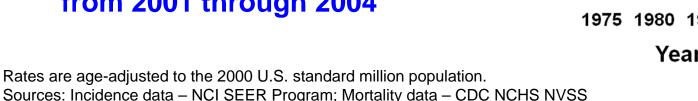
 1993-2002, decline for men -1.6% per year

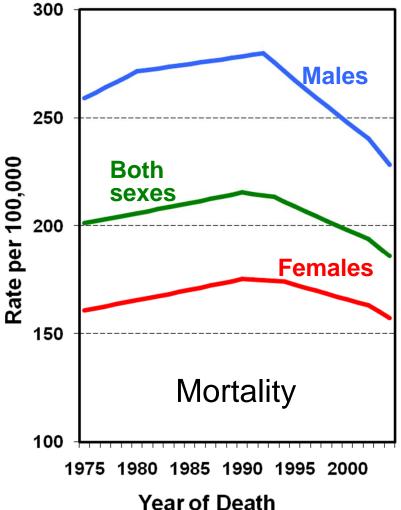
- 2002-2004: -2.6% per year

1992-2002, decline for women
-0.8% per year

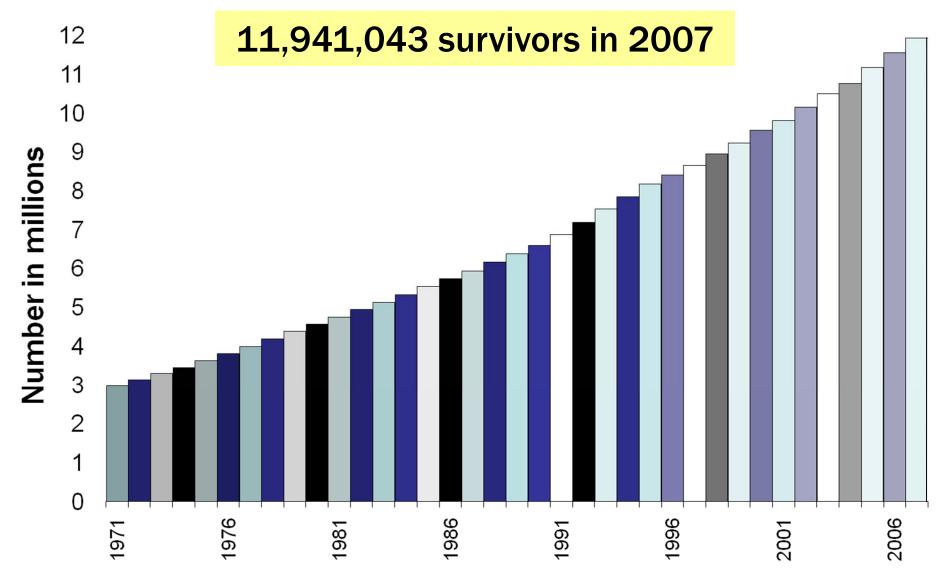
- 2002-2004: -1.8% per year

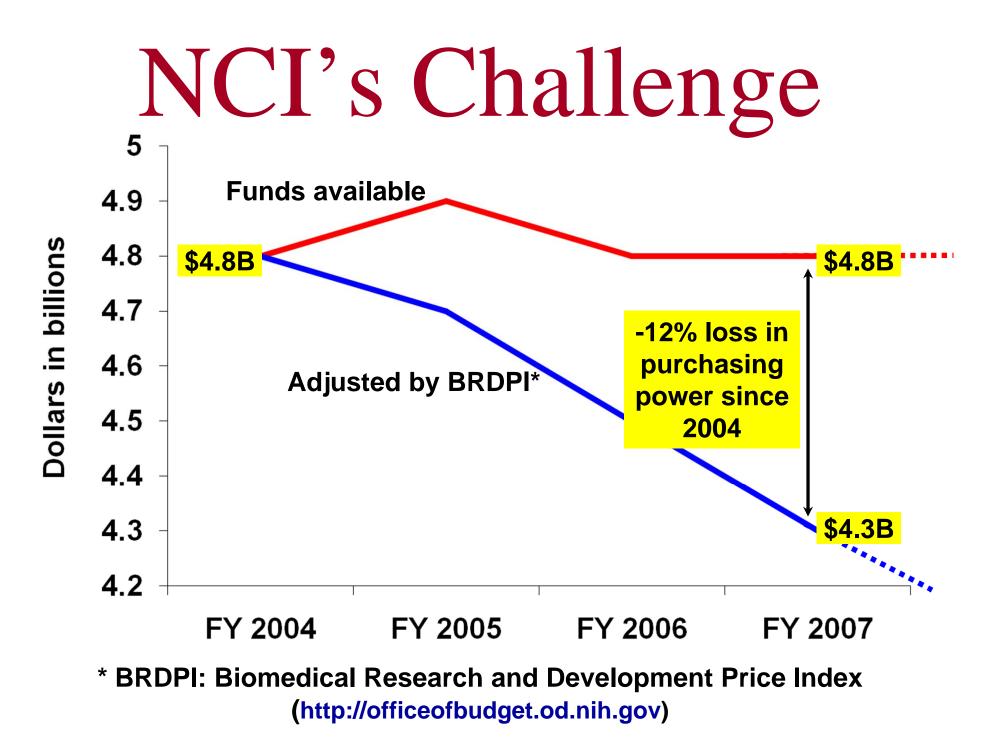
 Incidence rate for female breast cancer dropped 3.4% per year from 2001 through 2004



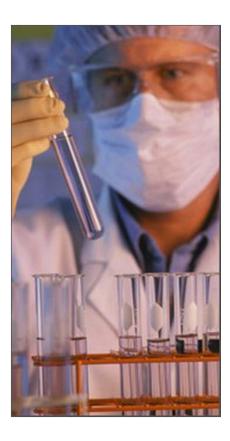


#### Estimated Number of Cancer Survivors in the United States





### Director's Update



- NCI FY08 budget
- President's budget
   FY09
- Some thoughts about the future

FY 2007 operating budget	\$4,797,639
FY 2008 appropriation	\$4,805,088
Difference '07 to '08	\$7,449

Percent Change '07 to'08 +0.16%

(dollars in thousands)

	Amount (in thousands)	Percent change
Subtotal Available	\$7,449	0.16%
Less Est. NIH Taps/Assessments	-20,000	
<ul> <li>Potential NIH Director's 1% Transfer</li> </ul>	?	
<ul> <li>Potential DHHS Secretary's Transfer</li> </ul>	?	
Subtotal Available	-12,551	-0.26%

	Amount (in thousands)	Percent change
Subtotal Available	- \$12,551	-0.26%
NCI-wide Requirements:		
<ul> <li>Mandated Salary Increases</li> </ul>	- 21,500	
<ul> <li>Rent/Lease/Utilities/Renovations Incr</li> </ul>	- 10,000	
<ul> <li>Small Business Program Increase</li> </ul>	0	
NCI Director's Reserve	- 25,000	
Subtotal Available	- 69,051	-1.44%

	Amount (in thousands)	Percent change
Subtotal Available	- \$69,051	- 1.44%
Partial Restoration of Cuts		
Centers	- 7,855	
• SPORES	-3,588	
<ul> <li>Coop Groups/CCOPs</li> </ul>	-8,504	
<ul> <li>Infrastructure Restorations/Increases</li> </ul>	-6,000	
Subtotal Available	-94,998	- 1.98%

- NCI leaders evaluated programs with an eye toward reduced or flat budgets ahead
  - FY08 operating budget target for each Division, Office and Center (DOC) is based on a 3% reduction
- Created a pool of funds for NCI-wide mandatory increases and reallocation for specific initiatives

	Amount (in thousands)	Percent change
Subtotal Available	- \$94,998	- 1.98%
Potential Recoveries/Redeployments:		
<ul> <li>Phaseouts/Reductions Res DOCs</li> </ul>	49,382	
Phaseouts/Reductions Infrastructure	6,778	
<ul> <li>Noncompeting RPGs</li> </ul>	46,228	
<ul> <li>Competing RPGs</li> </ul>	8,136	
<ul> <li>NCI-Frederick Redeployment</li> </ul>	40,000	
Available for New Initiatives/	\$55,526	
Expansions/Restorations		

NCI FY 2008 Operating Budget: NCI Operating Policies

#### **NCI operating policies**

- 1% inflationary adjustments on noncompeting grants
  - ~2% decrease from commitment for nonmodular grants
- No cut to modular non-competing grants
- NCI to award fewer competing RPGs than FY 2007 (1,312 to 1,283)
- Average cost of competing RPGs 3% above FY 2007

NCI FY 2008 Operating Budget: NCI RPG Policies

**NCI RPG policies** 

- Type-2 (competing continuing grants) will receive 3% above current levels
- Type-2 modular grants recommended for 7 modules or fewer will receive 5% above current levels
- Type-1 (new competing grants) will be cut ~17%

NCI FY 2008 Operating Budget: NCI RPG Paylines

**NCI RPG Paylines** 

- R01: 12<sup>th</sup> percentile
- \*R01s: 19<sup>th</sup> percentile (will hit NIH target)
- Large R01s (over \$700K):
  - -14<sup>th</sup> percentile for  $1^{st}$  and  $2^{nd}$  rounds
  - -TBD for 3<sup>rd</sup> round
- P01: Selected on a case-by-case basis

**Office of Centers, Training, and Resources** 

 Integrating Aging and Cancer Research (co-funded with NIA)

-NCI funding of \$4M-\$5M will not be renewed

Supplements for Imaging Response
 Assessment Teams in Cancer Centers

-NCI funding of \$2M will not be renewed

**Div. of Cancer Control & Population Sciences** 

- Transdisciplinary Tobacco Use Research Centers
  - -FY2008 is final year of RFA, funded at \$7.2M. No proposed RFA renewal
  - NCI is joining a NIDA PA; For TTURC program, anticipate spending \$2M-4M, rather than \$7.2M/yr
- Long Term Cancer Survivors research RFA
   –FY2008 funding reduced by \$1.7M

**Division of Cancer Prevention** 

- CCOP cancer treatment trial accrual
  - FY05: 7,948 patients
  - FY06: 6,402 patients
  - FY07: 6,100 patients (estimate)
- CCOP cancer prevention & control trials:
  - FY05: 5,211 patients
  - FY06: 4,994 patients
  - FY07: 4,500 patients (estimate)

**Division of Cancer Treatment and Diagnosis** 

 CTEP Interdisciplinary Research Teams for Molecular Target Assessment

-Eliminated in FY07; \$1.4M

 Cancer Imaging Program's Development of Contract Imaging Drugs and Enhancers

-Eliminated in FY07; \$1.6M

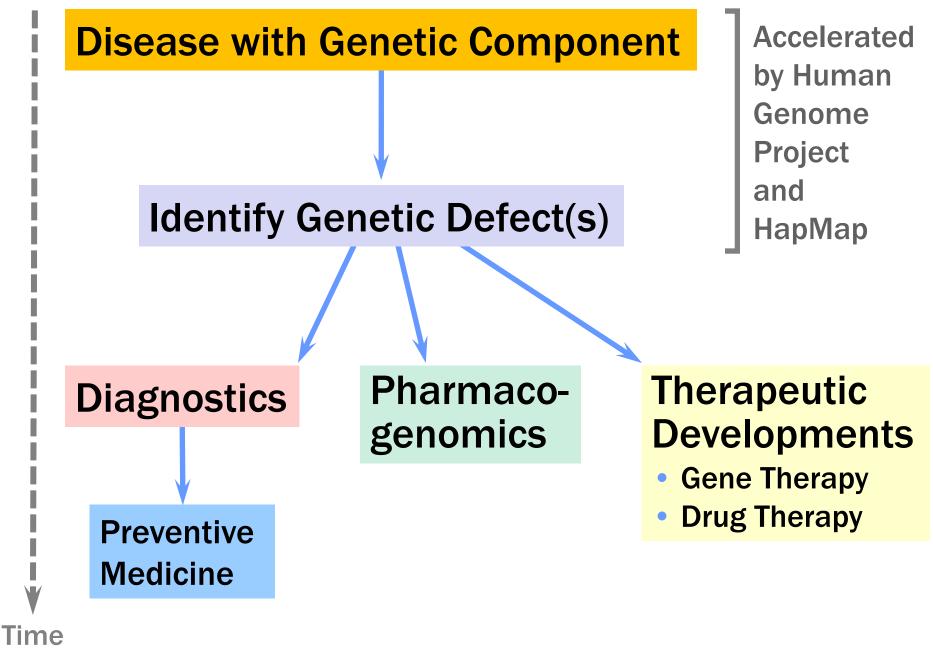
• Cancer Diagnosis Program: breast and prostate cancer tissue resources unfunded or eliminated

# FY 2009 President's Budget

FY08 NCI appropriation	\$4,805,088
FY 2009 PB for NCI	\$4,809,088
Difference '08 to '09	\$4,000

Percent Change '08 to'09 +0.1%

(dollars in thousands)



#### **Functional Genomics**

Alterations in cellular function

Therapy Prevention Cell biology and protein carbohydrate chemistry

Behavioral science

Regulation of gene expression

Populations w/ disease (environmental risk exposure)

> Large populations Longitudinal history

Whole genome sequencing

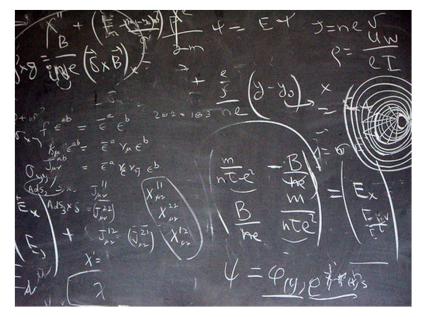
Genomewide association studies Normal vs. abnormal phenotype

Genes and environment

Somatic mutations

Germline markers of risk

### **Theoretical Physics**



- Feb. 25-27, 2008
- "Integrating and Leveraging the Physical Sciences to Open New Frontiers in Oncology"
- Workshop to explore opportunities to incentivize collaborations
- Leaders in physics, chemistry, mathematics and cancer research

#### AACR/NCI Cancer Prevention Think Tank

- Bring together scientists and clinicians from basic, translational, and behavioral research areas, to think broadly about molecular prevention
- Develop a comprehensive cancer prevention strategy
  - -Bring technology into prevention program
  - -Emphasize translational science in prevention
  - -Enhance behavioral science program
- Co-chairs: Raymond DuBois, John Niederhuber

### Annual Translational Research Meeting



- Replace the summer SPORE meeting with an annual meeting
- Co-Chaired by Drs. Sheila
   Prindiville and Lynn Matrisian
- Planned for the Fall 2008 in Washington, D.C.

### The SBIR Bridge Award in Drug Development

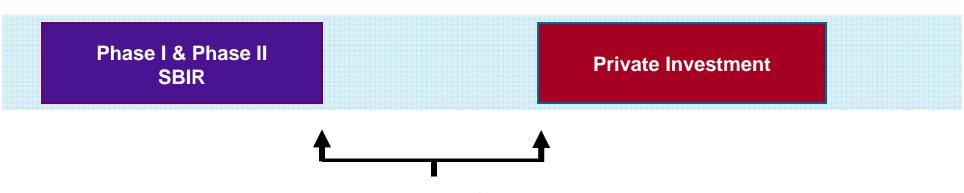
Target Identification & Validation

**Preclinical Development** (Lead Development, Animal Studies, File IND)

Safety Clinical **Review** Trials

NDA Review

**Commercialization** 



The "Valley of Death" is the problem

### **TRWG** Implementation



- Dr. Lynn Matrisian (co-chair of the TRWG) now at NCI on an IPA
- Integrating with the CCCT
- Translational Research
   Operation Committee planned
  - Established under the Clinical Trials Advisory Committee (a Federal Advisory Board)

Translational Research Working Group Goals

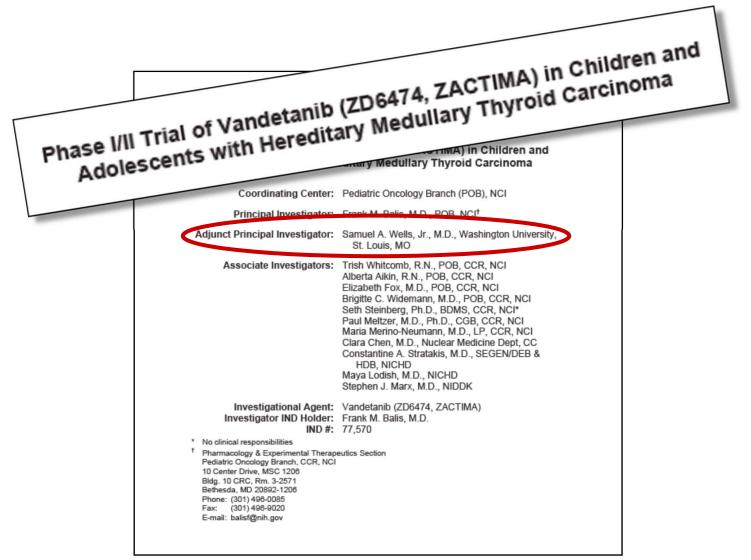
- Improve coordination and collaboration and instill a culture of active, goal-oriented management
- Improve identification of the most promising early translation research opportunities
- Tailor new and existing programs to facilitate early translational research progress
- Enhance operation al efficiency and effectiveness

#### Role of Clinical Research Center

#### **NCI Initiatives**

- Continue to strengthen Medical Oncology
- Recruiting new chief of Laboratory of Pathology
- Pathology space renovations in Bldg 10
- Developing an Oncology Imaging Center
- Exploration of a Satellite Center at Suburban Hospital
- Strengthening fellowship training
- Participation in rare diseases clinic

## The Clinical Research Center as a National Resource



### 2009 Professional Judgment Budget

	<b>* 1 005 710</b>
Fiscal Year 2008 estimate	\$4,925,740
Current services increase	\$334,638
Subtotal	\$5,260,378
Fiscal Year 2009 professional judgment	
<ul> <li>Increase success rate for RPGs</li> </ul>	65,000
<ul> <li>Basic and translational science for personalized medicine</li> </ul>	289,902
<ul> <li>Linking science and technology</li> </ul>	209,600
<ul> <li>Reaching all communities</li> </ul>	72,100
<ul> <li>Prevention and early detection</li> </ul>	131,406
Subtotal	768,008
Total, NCI	\$6,028,386

