

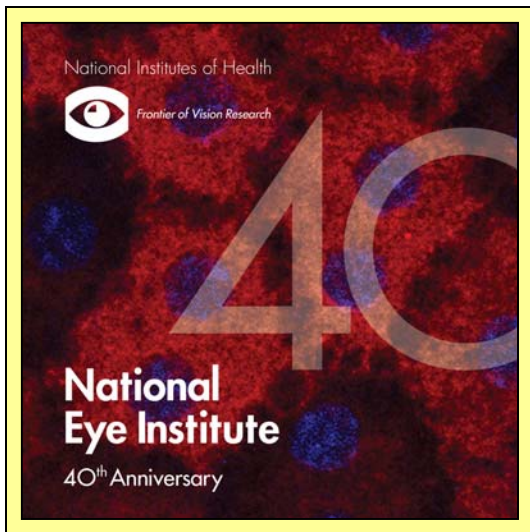
*Update on NEI / NIH Activities &
Budget Overview
ARVO Chairs and Research Directors*

Paul A. Sieving, MD, PhD
National Eye Institute



Department of Health
and Human Services

*ARVO. May 2009.
Ft. Lauderdale, FL*



NEI 40th Anniversary

Events and symposia to highlight NEI vision research portfolio, achievements, and future.

Symposia Series

2009

Vision Rehabilitation: *BLINDSIGHT* documentary, Erik Weihenmayer / April 3

Genetics and Genomics in Vision / April 16 - April 17

Optical Imaging and Biomedical Science / June 1 – 2

The 4th Jane Sayer Vision Research Lecture / October 22

Neuroscience and Vision / November 20

2010

Focus on Glaucoma / February 19

Novel Therapeutic Paradigms and Blindness / May 21

Appropriations History



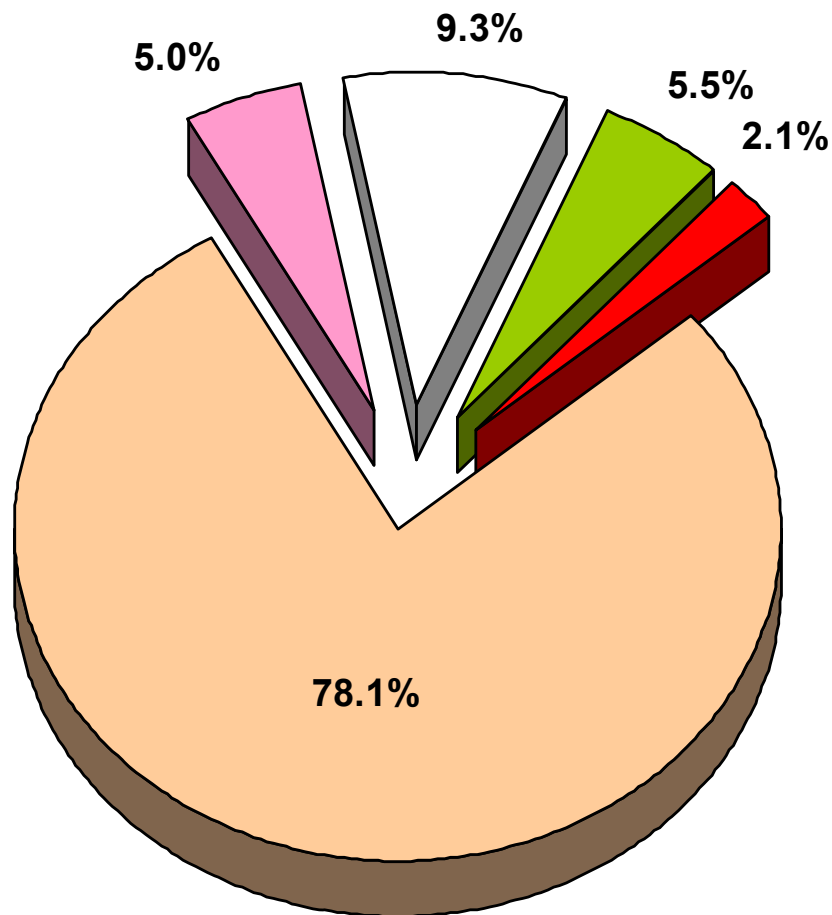
Fiscal Year	Appropriation	% Change
2005	\$664.8	2.1%
2006	\$660.3	-0.7%
2007	\$667.1	1.0%
2008	\$669.5	0.4%
2009 Est.	\$688.5	2.8%

(Dollars in Millions)

FY 2009 Extramural Budget Distribution



NEI Extramural Grants - \$550.4M



■ RPGs - \$430.0 M

■ Core Centers - \$27.6 M

■ Coop. Clinical - \$51.3 M

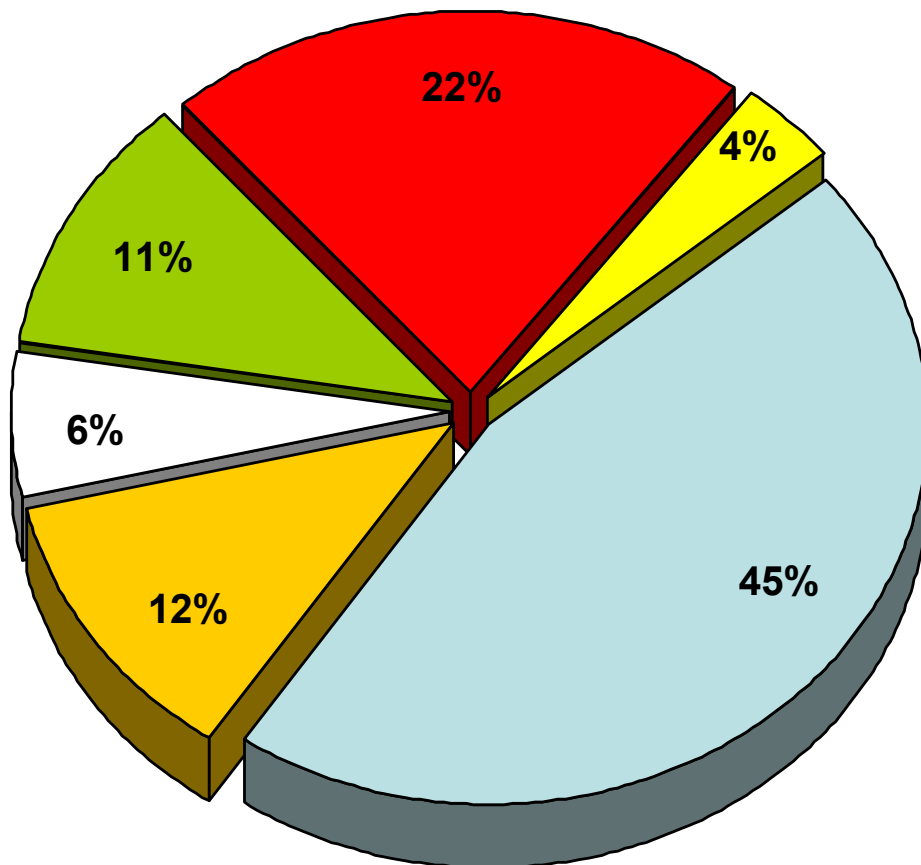
■ Training & Career Dev. - \$30.0 M

■ Other Research - \$11.5 M

FY 2008 Extramural Budget by Program

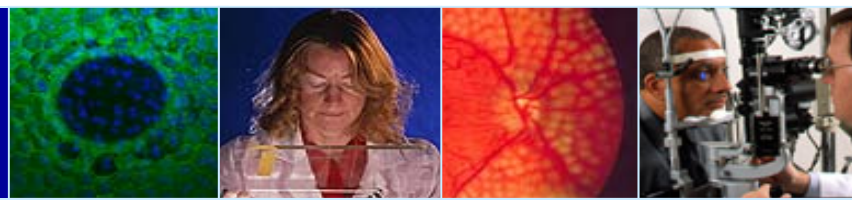


FY 2008 Actual - \$669.5M
Extramural Grants- \$537.3M



- Retinal Diseases Program \$244.8M
- Corneal Diseases Program \$63.5M
- Lens & Cataract Program \$33.9M
- Glaucoma & Optic Neuropathies Program \$59.3M
- Strabismus, Amblyopia, and Visual Processing Program (SAVP) \$116.3M
- Low Vision & Blindness Rehabilitation \$19.5M

2009 Budget Guidance

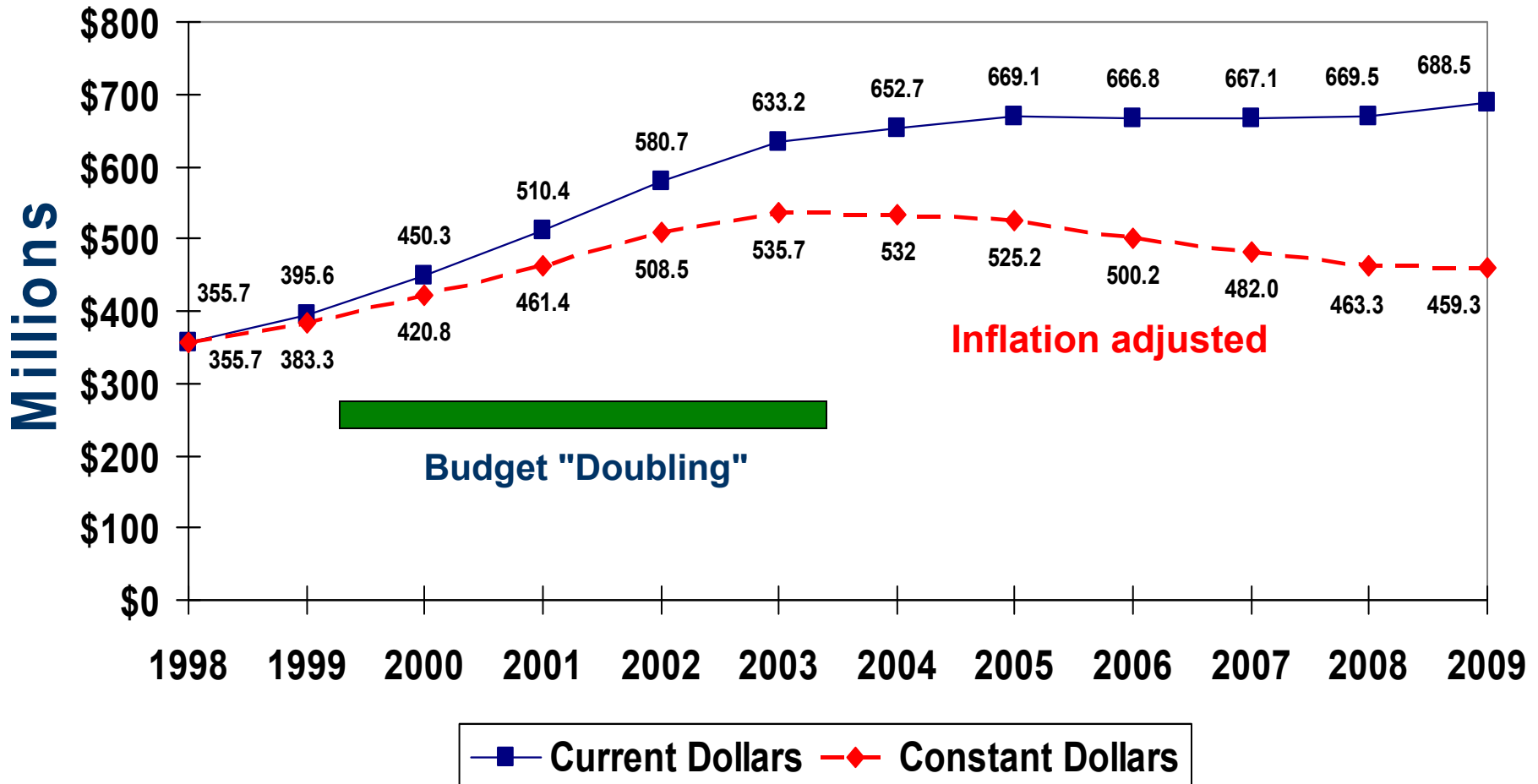


- **Noncompeting awards funded at full committed levels**
- **4 new K99 awards + 4 converting to R00 (“kangaroo”)**
- **PI salary cap increased from \$191,300 to \$196,700**
- **Program Evaluation Tap increased 4.7%**
- **NIH Rare and Neglected Disease Initiative**
 - \$682K from NEI (NIH Total \$24M)
- **41 new R01 grants for first-time PIs**

Decline of Buying Power



NEI

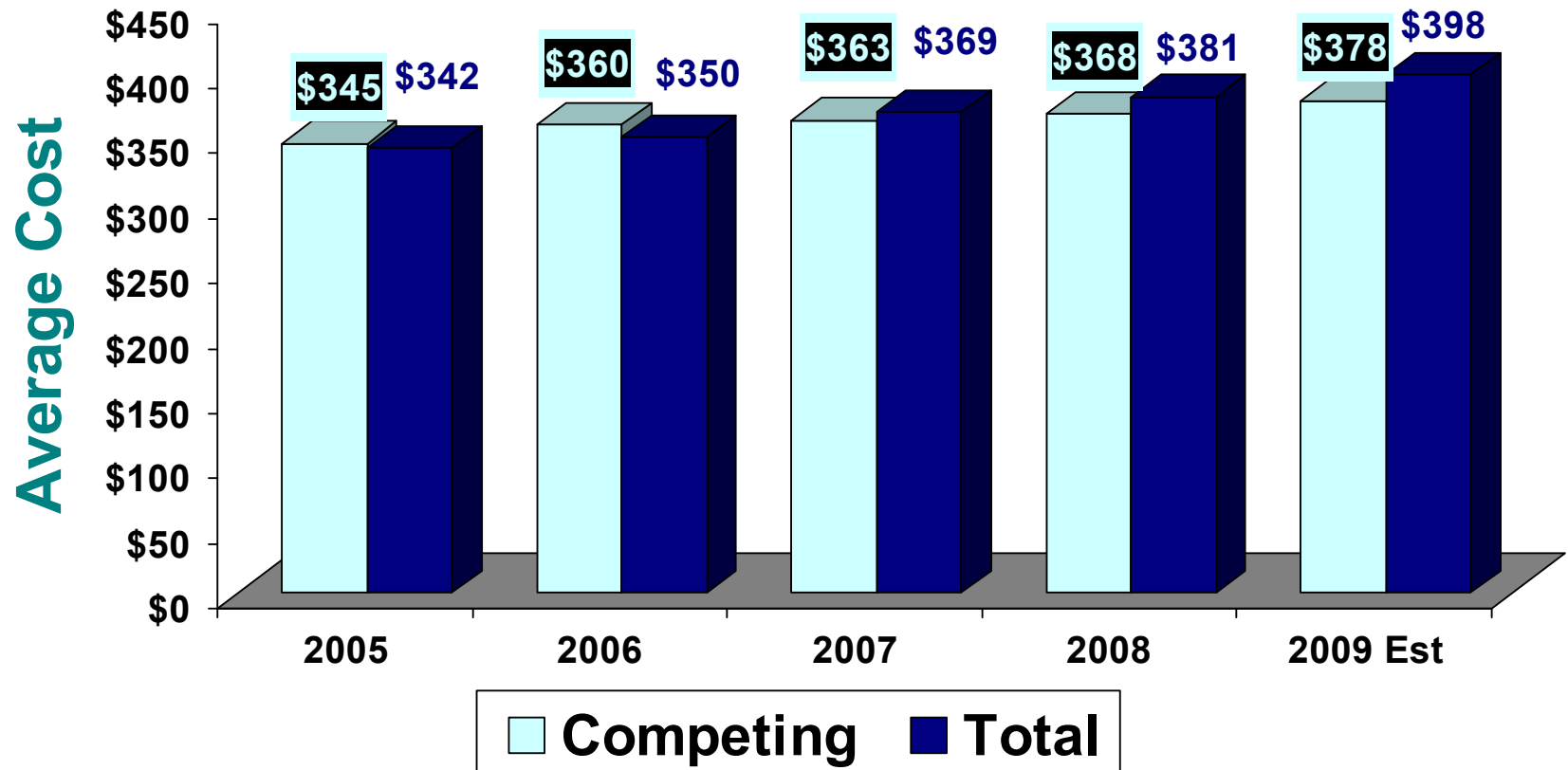


RPG Average Total Costs



* Excludes SBIR/STTR

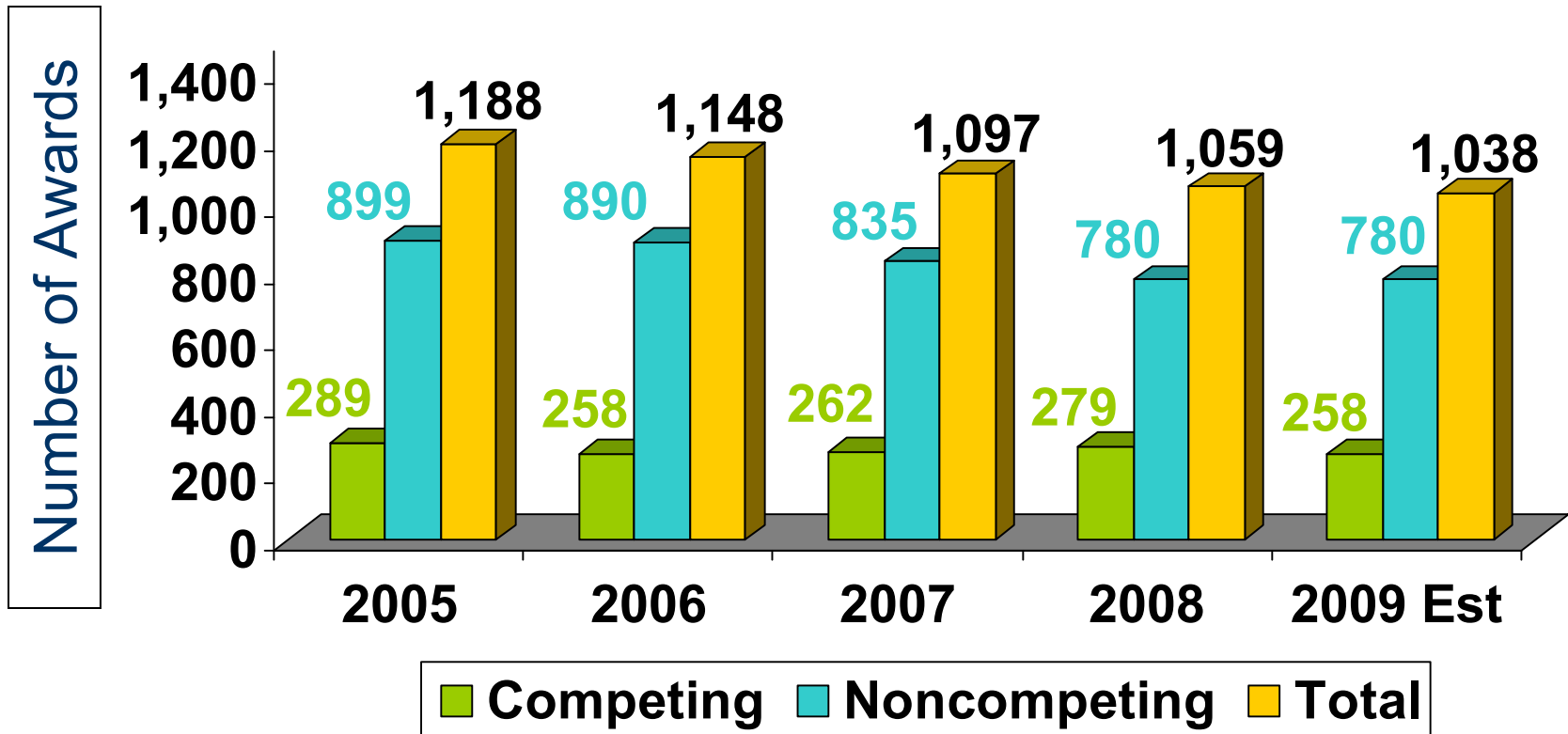
(Dollars in Thousands)



RPG Number of Awards

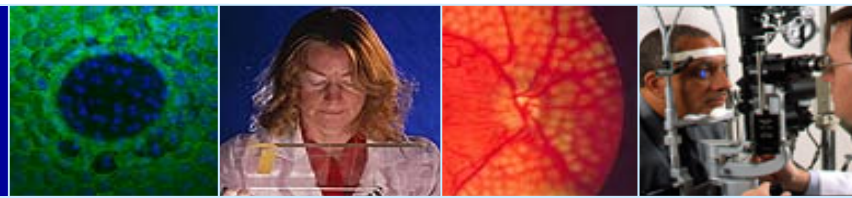


NEI



* Excludes SBIR/STTR

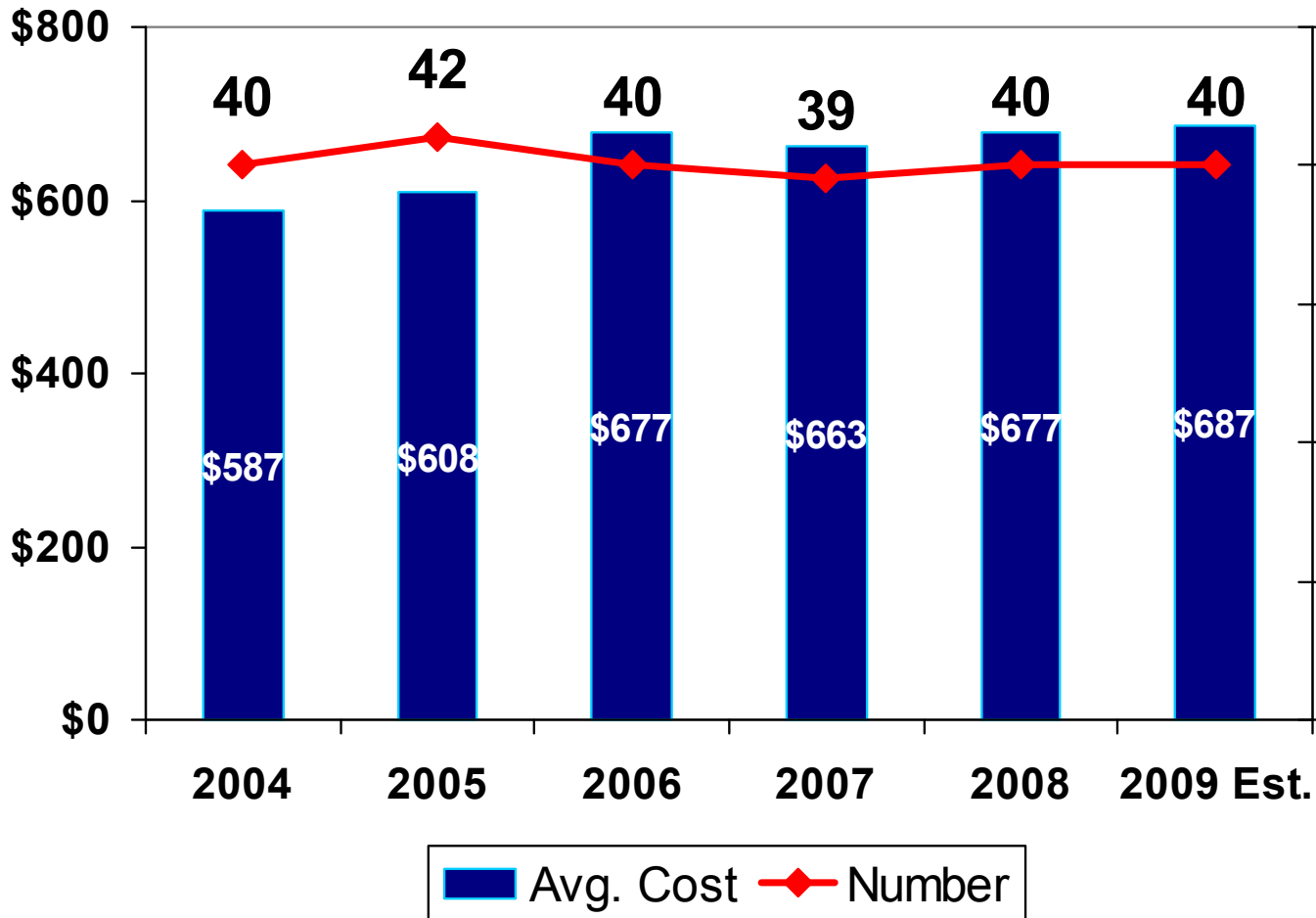
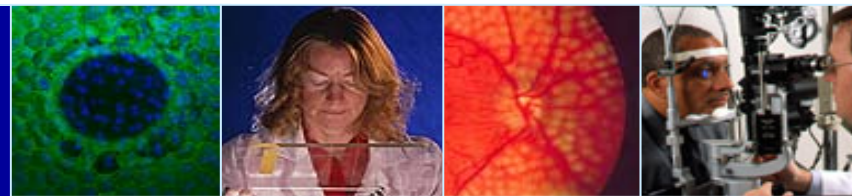
RPG Success Rate History



	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Est.
Competing RPGs	323	289	258	262	279	258
Applications	1,083	1,102	1,104	984	965	868
Success Rate	29.8%	26.2%	23.4%	26.6%	28.9%	29.7%

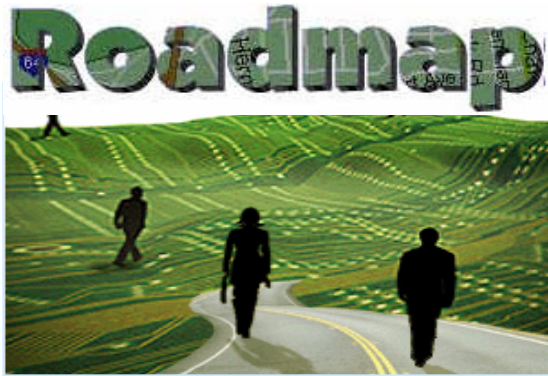
- **“Success Rate” (grants paid / applications) ≠ “Pay Line”**
- FY 2008 competing RPGs - average cost \$368K per award.
- FY 2009 competing RPGs – average cost increased 3%.

Core Center Grants



**Can new Cores be awarded? Yes – but “zero sum budget.”
Awarded competitively.**

FY 08 Trans-NIH Initiatives



- New Pathways of Discovery *
- Research Teams of the Future
- Re-engineering the Clinical Research Enterprise

Funded through NIH Common Fund		
FY 2007	FY 2008	FY 2009
\$483.0M	\$498.2M	\$541.1

New Pathways of Discovery *

(Continuing and New Programs)

- ◆ Building Blocks, Biological Pathways, and Networks
- ◆ Molecular Libraries and Imaging
- ◆ Structural Biology
- ◆ Bioinformatics and Computational Biology
- ◆ Nanomedicine
- ◆ Human Microbiome Project
- ◆ Epigenomics
- ◆ Science of Behavior Change **NEW**
- ◆ New Protein Capture Technologies **NEW**
- ◆ Connectivity Map **NEW**

The logo features a dark blue background with a grid of lighter blue vertical and horizontal lines. A white rectangular box is positioned in the upper left, containing the text 'NIH Blueprint' in bold black font. Below this box, the text 'for Neuroscience Research' is written in white font on a black background.

NIH Blueprint

for Neuroscience Research

Current Funding Opportunities

NIH \$38.6M

Neuroscience Grand Challenges

Specific Challenge Topic: Development of **non-invasive imaging** approaches of technologies that directly assess neural activity

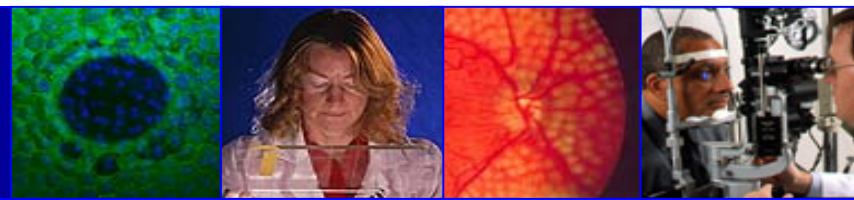
Other Current Blueprint Funding Opportunities

dissemination, creation of monoclonal antibodies for **neurodevelopment research**

improved **neuroimaging tools** and resources

biological assays for automated **high throughput screening**

Examples: NEI Neuroscience



NEI Clinical Interventions

- Pediatric Eye Disease Investigator Group
 - ◆ Focus on strabismus and amblyopia - Treatment network, simple protocols, both university- and community-based investigators
 - ◆ Plasticity of brain long after traditional wisdom
- Amblyopia in Astigmatic Children
 - ◆ Partnership with the Tohono O'odham Nation - Epidemiology, treatment trial of spectacles for astigmatism-related amblyopia
- Gene therapy for *RPE65* Leber Congenital Amaurosis
- Ciliary Neurotrophic Factor clinical trials in RP patients
- Pre-clinical Gene Therapy for Leber Hereditary Optic Neuropathy

ARRA – American Recovery and Reinvestment Act

www.nei.nih.gov/recovery



National Eye Institute
National Institutes of Health *Research Today...Vision Tomorrow*

[s](#) [M](#) [L](#) Text size

- ▶ [About NEI](#)
- ▶ [Health Information](#)
- ▶ [News and Events](#)
- ▶ [Research Funding](#)
- ▶ [Research at NEI](#)
- ▶ [Education Programs](#)
- ▶ [Jobs](#)
- ▶ [Training](#)
- ▶ [Resources](#)

[E-mail to a friend](#) 



Home » [The Role for Vision Research within the American Recovery and Reinvestment Act \(ARRA\)](#)

The Role for Vision Research within the American Recovery and Reinvestment Act (ARRA)

The American Recovery and Reinvestment Act of 2009 (Recovery Act) was signed into law by President Obama on February 17th, 2009. It is an unprecedented effort to jumpstart our economy, create or save millions of jobs, and put a down payment on addressing long-neglected challenges so our country can thrive in the 21st century. The Act is an extraordinary response to a crisis unlike any since the Great Depression, and includes measures to modernize our nation's infrastructure, enhance energy independence, expand educational opportunities, preserve and improve affordable health care, provide tax relief, and protect those in greatest need." Read the [full text](#) (PDF*) of the American Recovery and Reinvestment Act of 2009





Funding Impact

- Stimulate the economy
- Create and preserve jobs
- Expend over 2 years
- Advance biomedical research
- Improve national health

\$10B - NIH

\$174M - NEI



Scientific Research Approach

Stimulate and accelerate biomedical research with existing mechanisms

- **NEI Research Project Grants (RPGs)**
 - R01 Research Project Grant Program
 - R01 Revisions
 - R01 Administrative Supplements
 - R21 Exploratory/Developmental Research Grant Award
 - RC1 Challenge Grants – up to \$500K total costs / yr for 2 yr
 - R15 AREA (Academic Research Enhancement Award)
 - Conducted by students and faculty in health professional schools and other academic components
- **Signature (U01)** (Exceptionally creative projects to address major challenges)
- **Cooperative Clinical Research (U10)**
- **Research & Development Contracts**
- **Research Management and Support**
- **Intramural Research Program (Equipment)**