



An Overview of NIGMS

Jeremy M. Berg

National Institute of General
Medical Sciences

April 12, 2007





NIGMS Authorization

“The general purpose of the National Institute of General Medical Sciences is the conduct and support of research, training, and as appropriate, health information dissemination, and other programs with respect to **general or basic medical sciences** and related natural or behavioral sciences which have **significance for two or more national research institutes** or are outside the general area of responsibility of any other national research institute.”





NIGMS Organization

Training

Research

Division of Cell Biology and Biophysics
(Cathy Lewis, Ph.D. Director)

Division of Genetics and Developmental Biology
(Judith Greenberg, Ph.D. Director)

Division of Pharmacology, Physiology, and Biological Chemistry
(Michael Rogers, Ph.D. Director)

Division of Minority Opportunities in Research
(Clifton Poodry, Ph.D. Director)

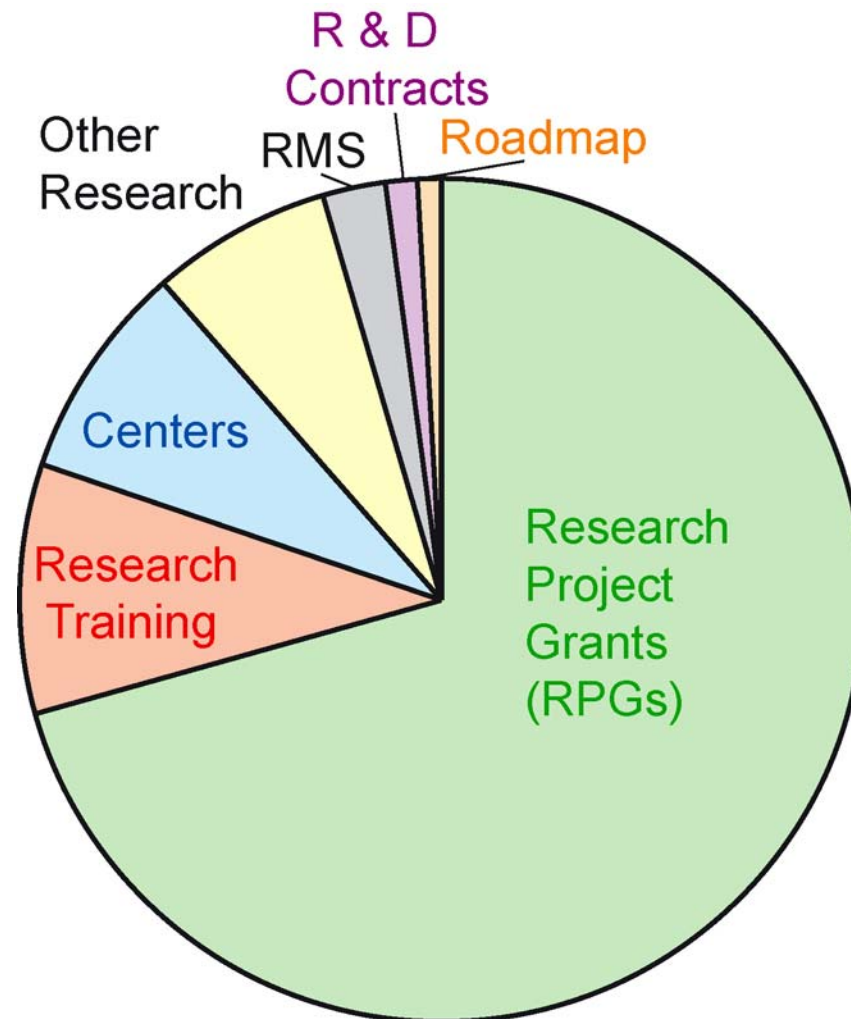
Center for Bioinformatics and Computational Biology
(John Whitmarsh, Ph.D. Acting Director)

John Norvell, Ph.D., Assistant Director for Training



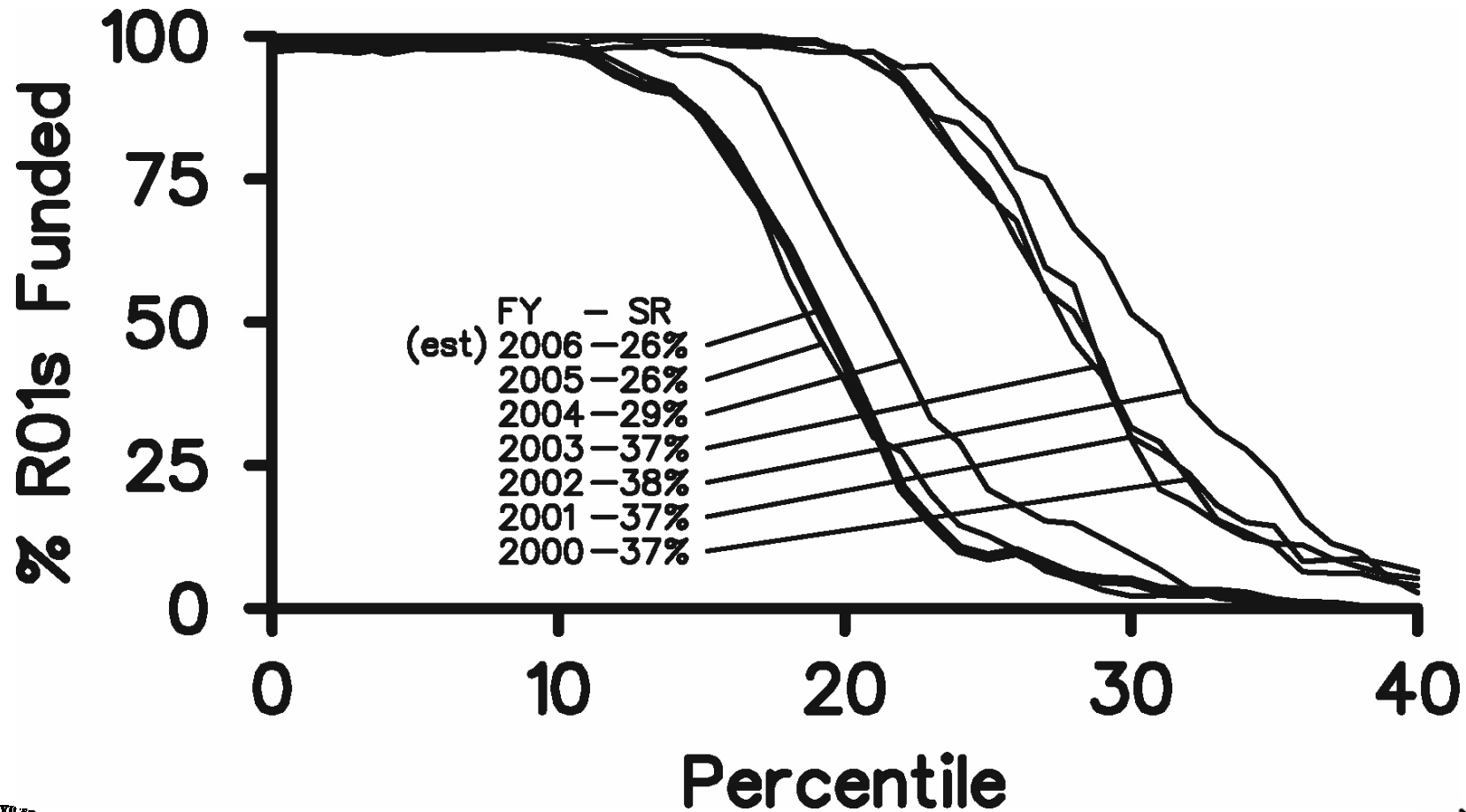


NIGMS Budget Overview



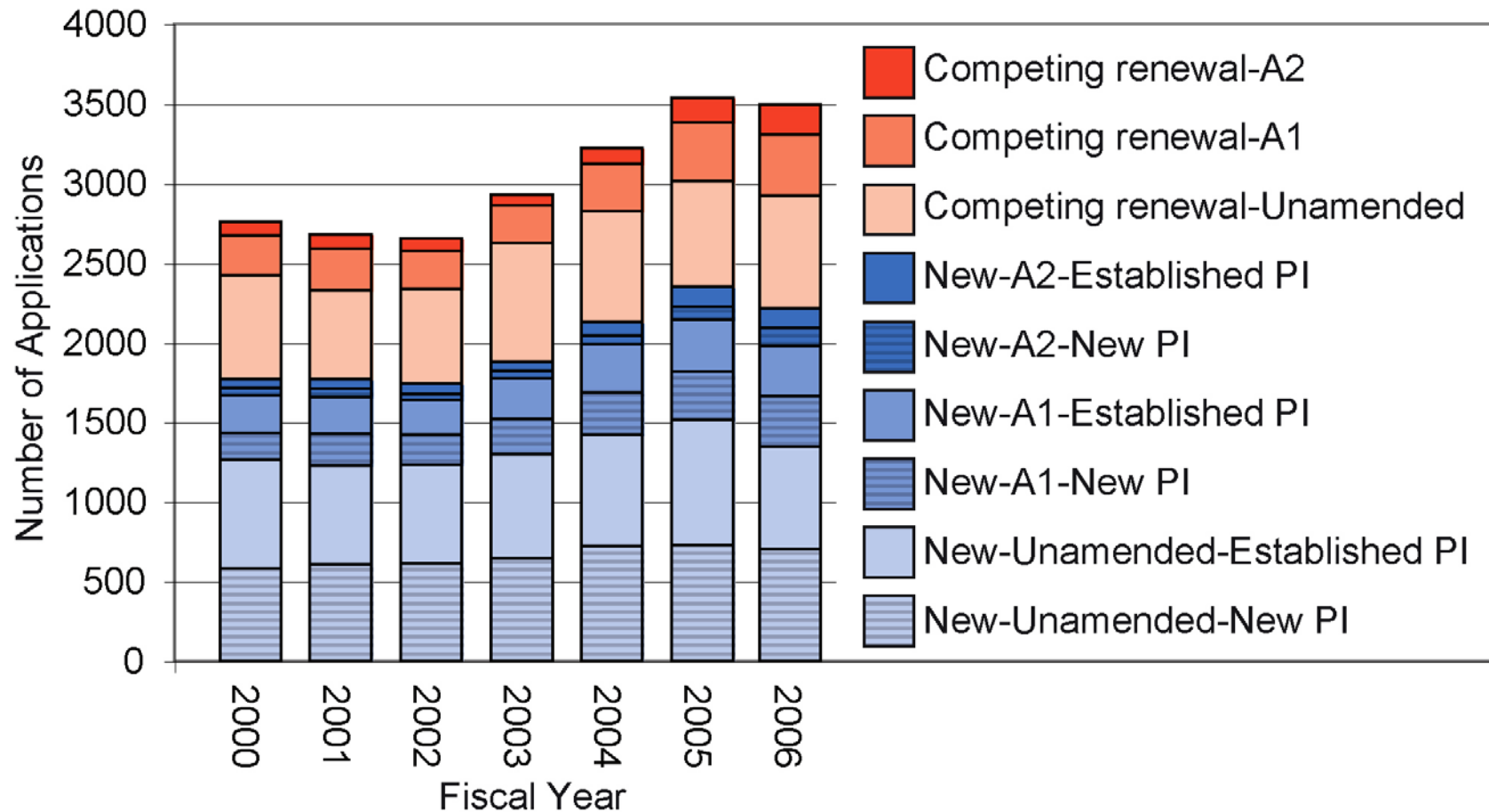


R01 Awards as a Function of Percentile



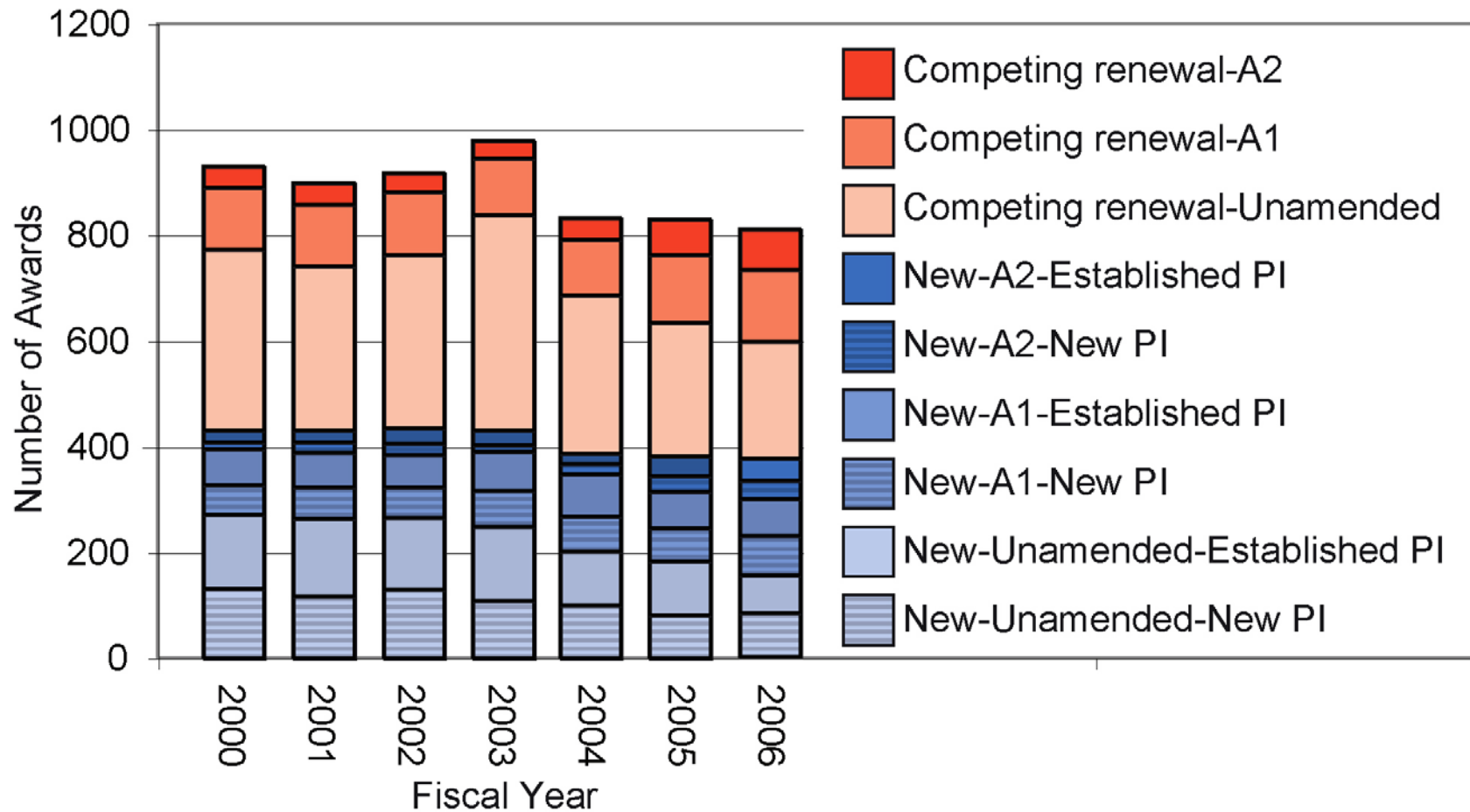


R01 Application Pool





R01 Award Pool





Recent Congressional Action Regarding NIH

■ NIH Reform Act of 2006

- Strong endorsement of NIH
- Institutionalizes the Common Fund (Roadmap Fund) without a formula for growth
- Authorizes (but does not appropriate) substantial budget increases for FY2007-9

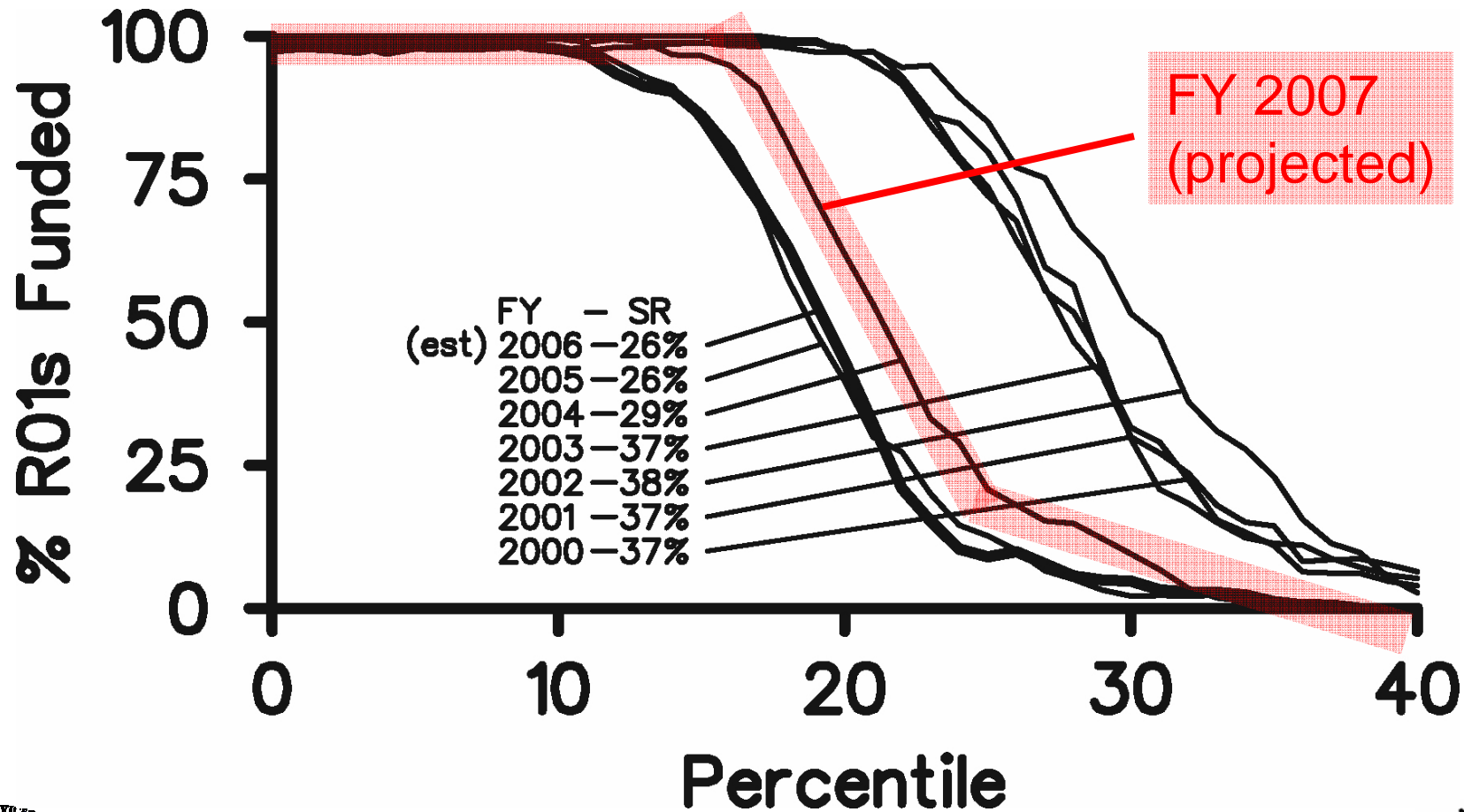
■ Joint Budget Resolution for FY2007

- Provides >\$600M more for NIH than previously anticipated
- Supports Common fund, institutes and centers, new investigators, vulnerable established investigators





R01 Awards as a Function of Percentile





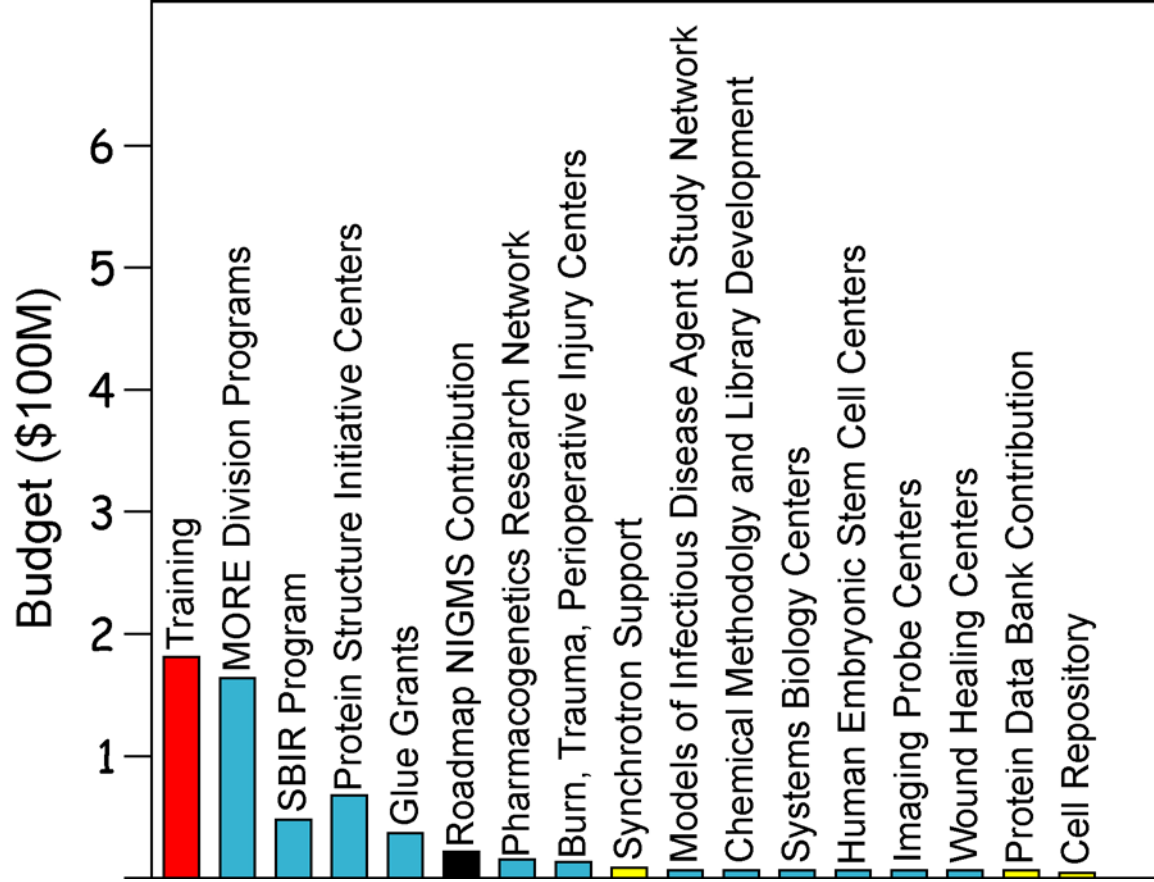
NIGMS Initiative Development

- **Concept Development**
 - Scientific community
 - NIGMS staff
 - Trans-NIH discussions
 - Planning meetings
- **Concept Approval**
 - NIGMS Senior staff
 - NAGMS Council



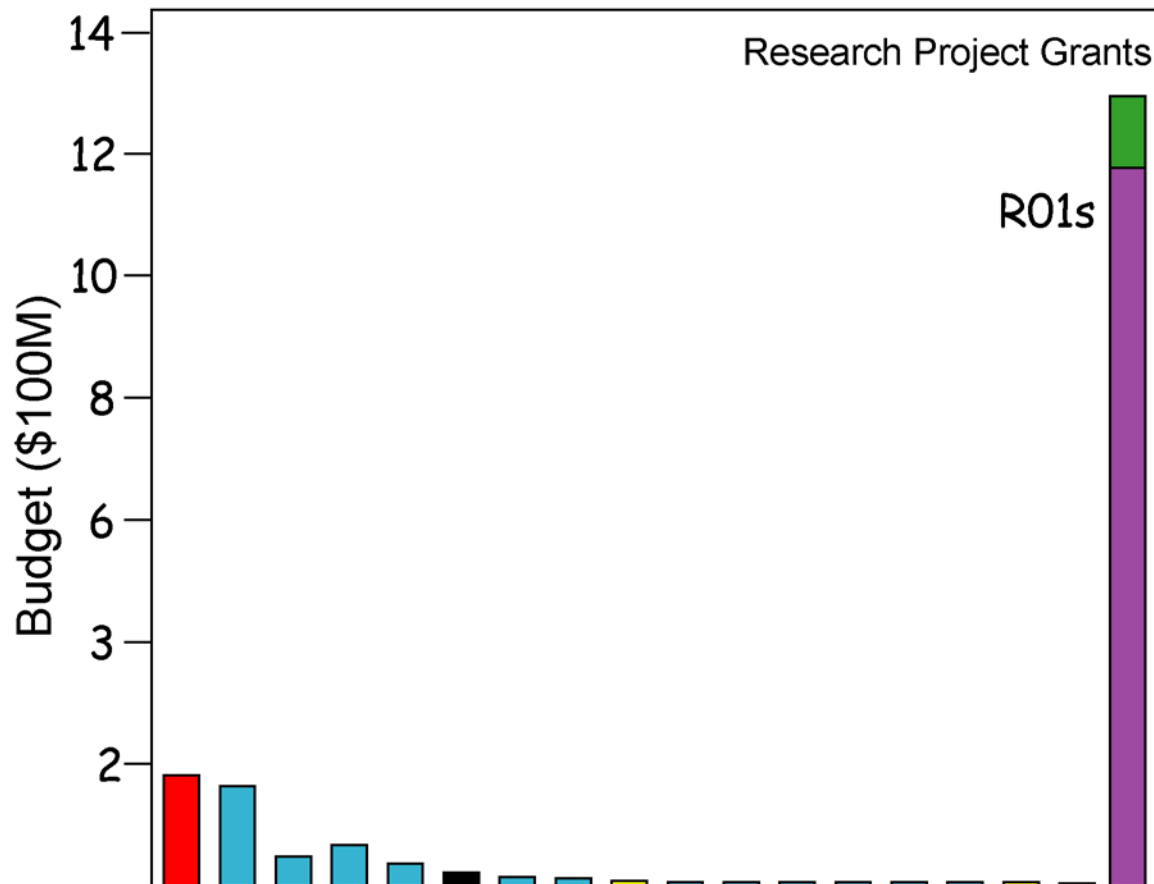


NIGMS Initiatives



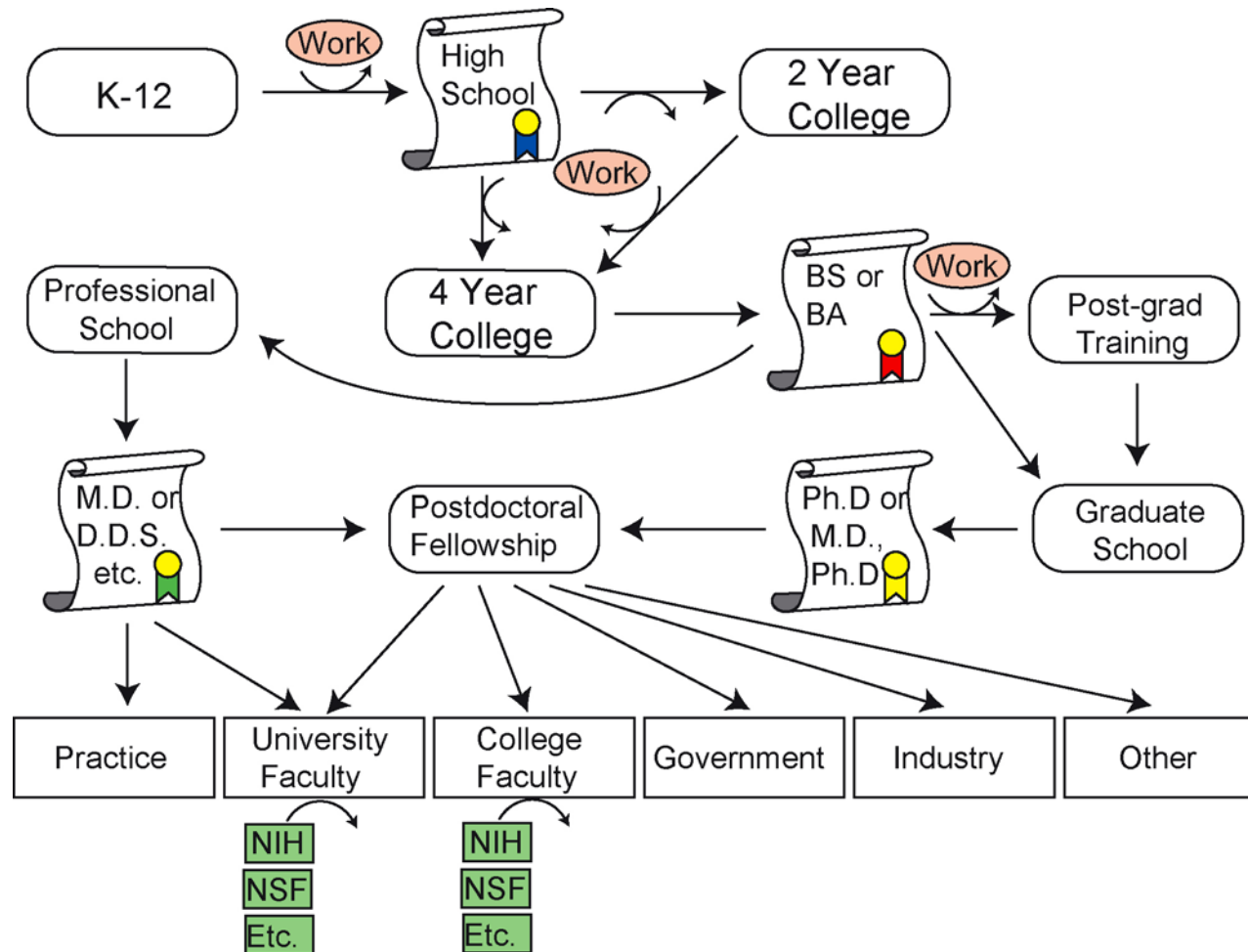


NIGMS Initiatives





The Biomedical Workforce





Training

- Interdisciplinary/Interdepartmental training programs strongly favored
 - Medical Scientist Training Program (MSTP)
 - Cellular, Biochemical, and Molecular Sciences
 - Systems and Integrative Biology
 - Pharmacological Sciences
 - Genetics
 - Molecular Biophysics (1986)
 - Biotechnology (1988)
 - Chemistry-Biology Interface (1992)
 - Bioinformatics and Computational Biology (1999)
 - Interface of Behavioral and Biomedical Sciences (2007)
- One grant per program per university





Exceptional, Unconventional Research Enabling Knowledge Acceleration (EUREKA) Awards

- Replacement for NIGMS R21 program
- Specialized R01 mechanism
- Up to 4 years of support
- Up to \$800K direct costs over 4 years





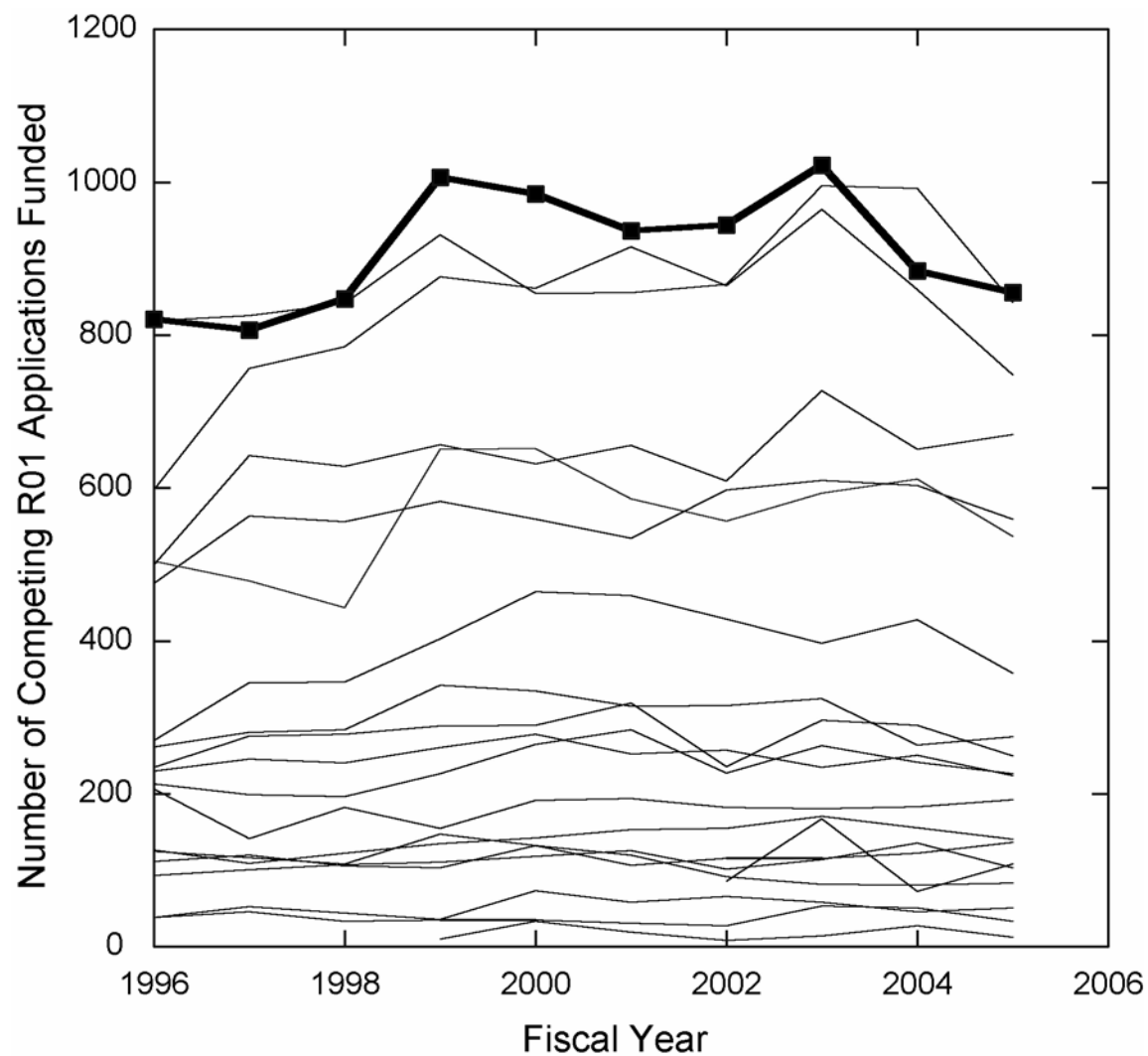
Exceptional, Unconventional Research Enabling Knowledge Acceleration (EUREKA) Awards

- Short application: 8 pages
 - template to address explicitly
 - the importance of the problem
 - novelty of the hypothesis or methodology
 - the magnitude of the potential impact
 - the size of the community affected
- Limited biographical sketch
 - publications: list 5 most relevant, 5 most significant, 5 most recent
 - paragraph describing qualifications for proposed research
- Preliminary data – allowed, but not required



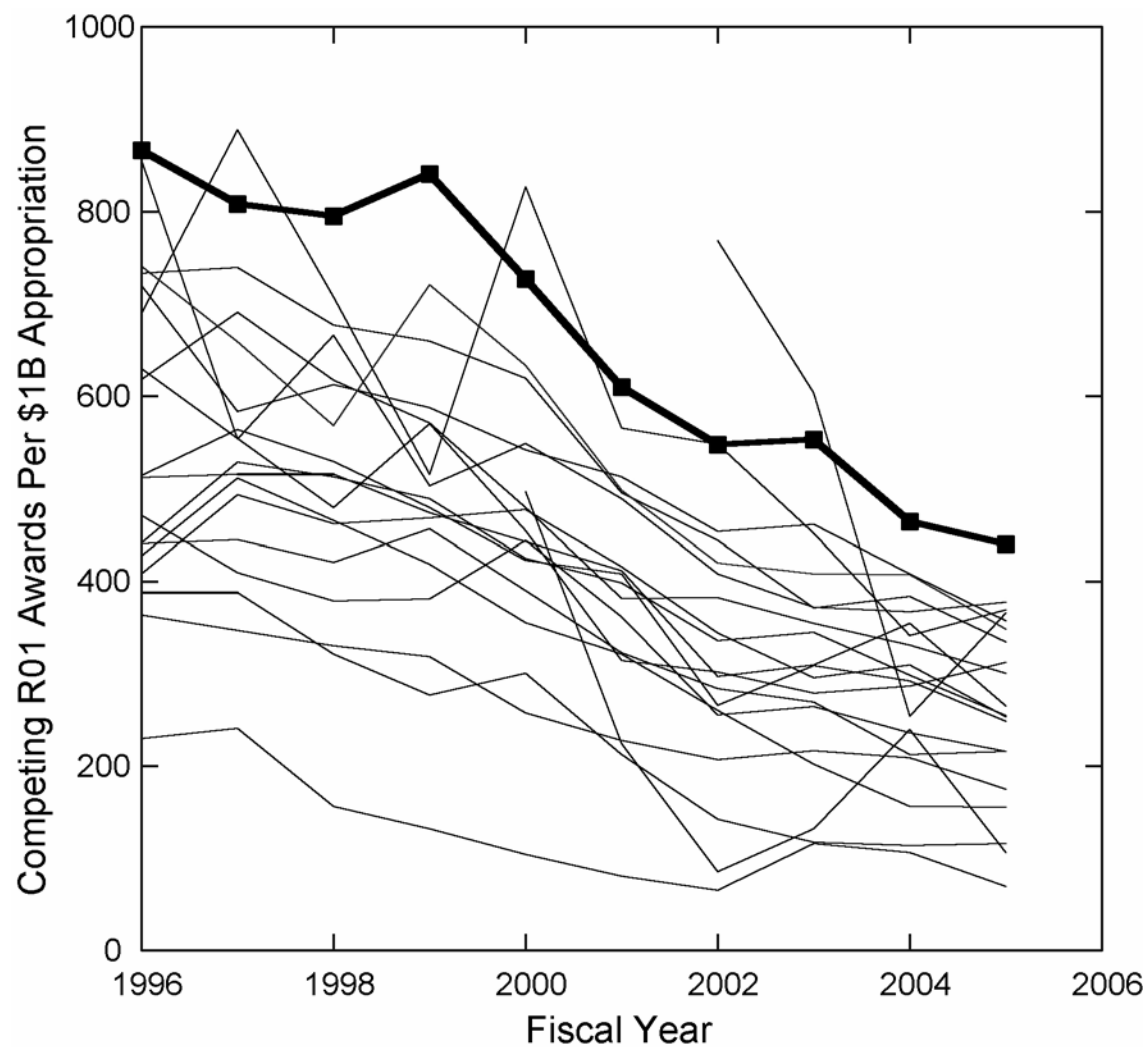


R01 Equivalent Awards Across NIH



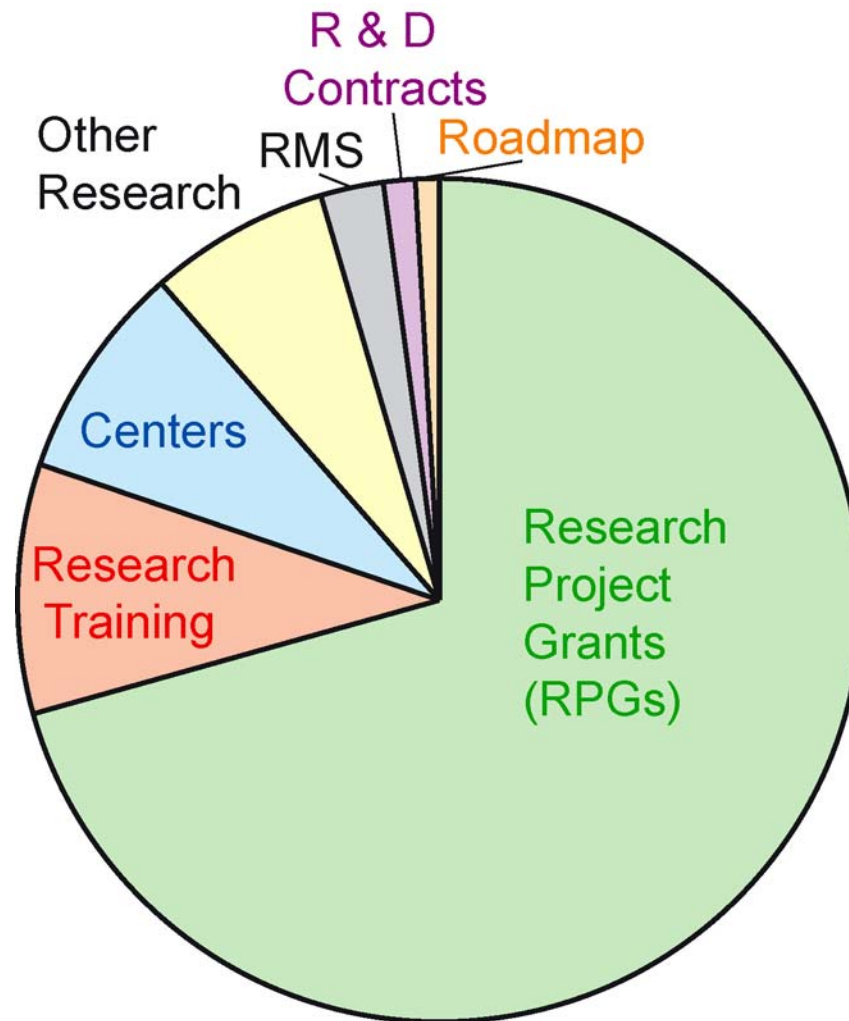


R01 Equivalent Awards Normalized for Budget





NIGMS Budget Overview



NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

Partners in Discovery



October 2006