

NIH & NIBIB Overview

National Institute of Biomedical Imaging and Bioengineering



The NIH Mission

NIH is the **steward of medical and behavioral research** for the Nation.

Its mission is science in pursuit of **fundamental knowledge** about the nature and behavior of living systems and the application of that knowledge to **extend healthy life and reduce the burdens of illness and disability**.



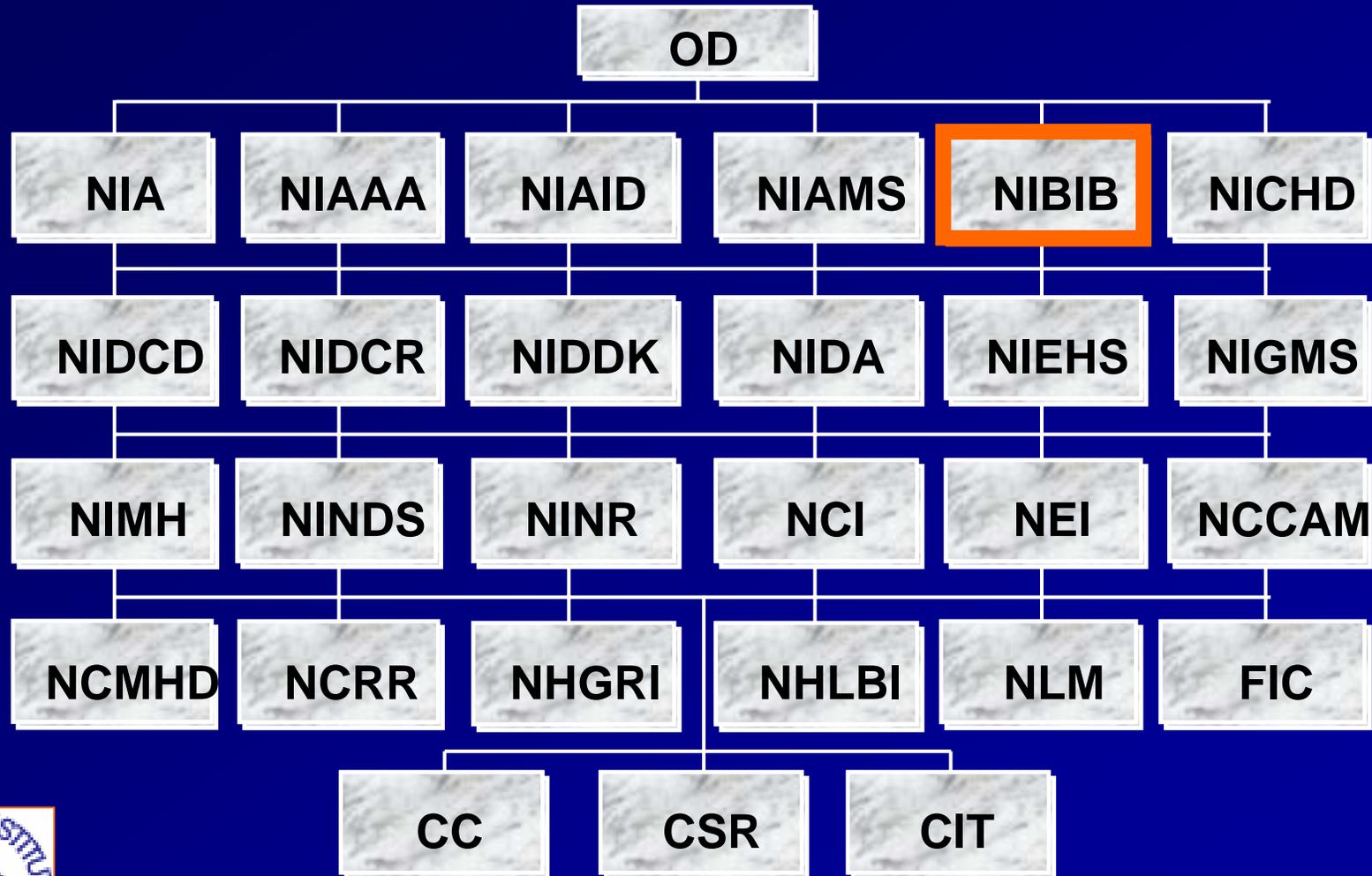
An agency of the Department of Health and Human Services, the NIH is the Federal focal point for health research.



U. S. Department of Health and Human Services



The NIH Organization



The NIH ICs

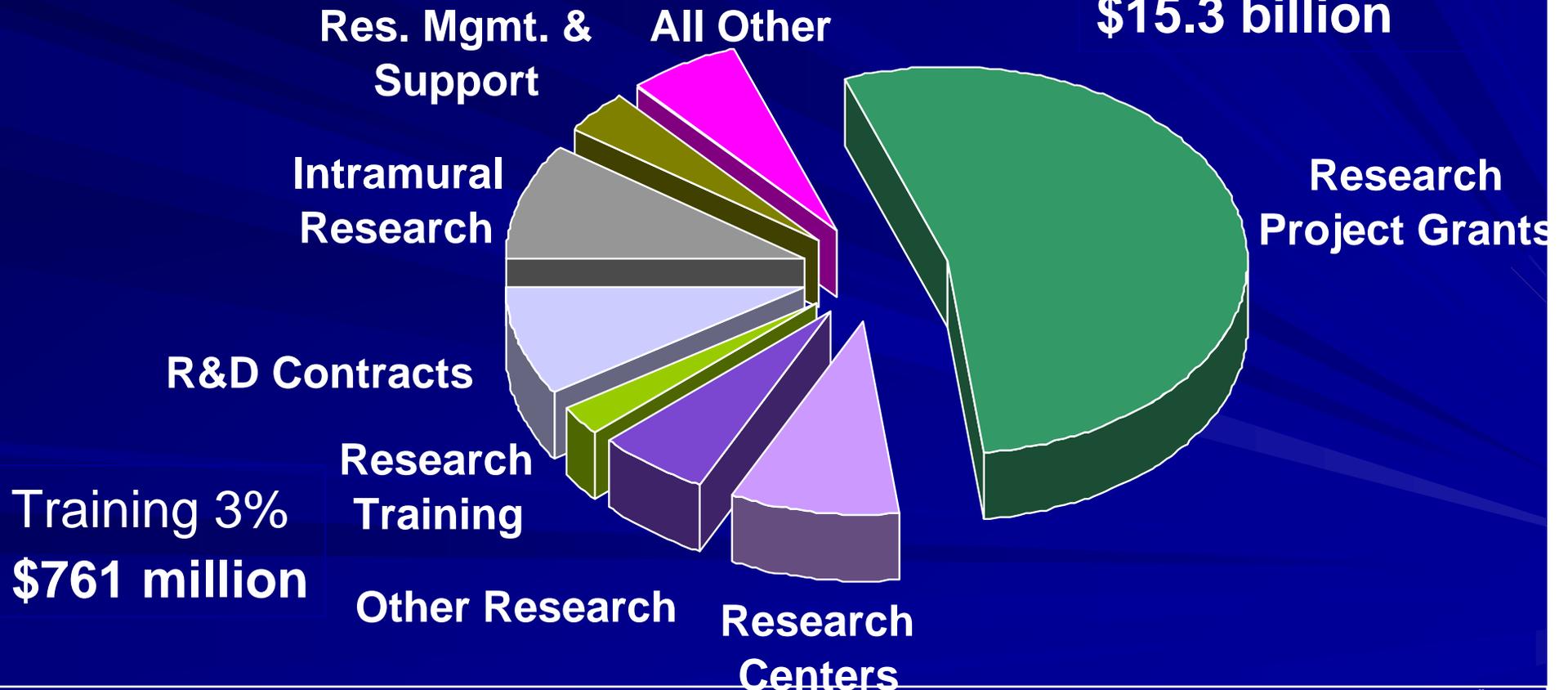
27 Separate Institutes & Centers (IC):

- Different missions & priorities
- Different budgets
- Different ways of deciding which grants to fund



FY 2005 NIH Budget \$28.59 Billion

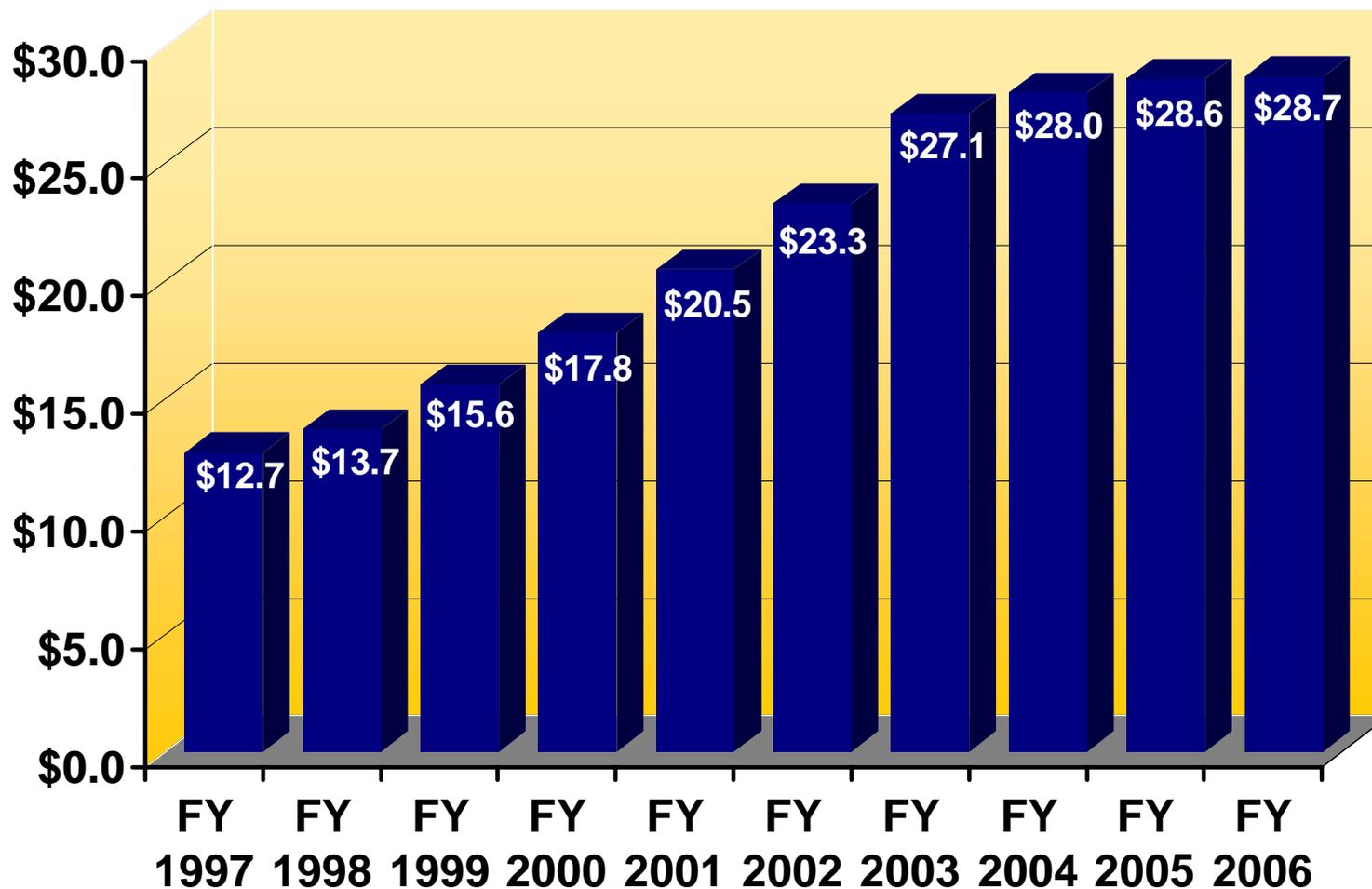
Research Project
Grants 53%
\$15.3 billion



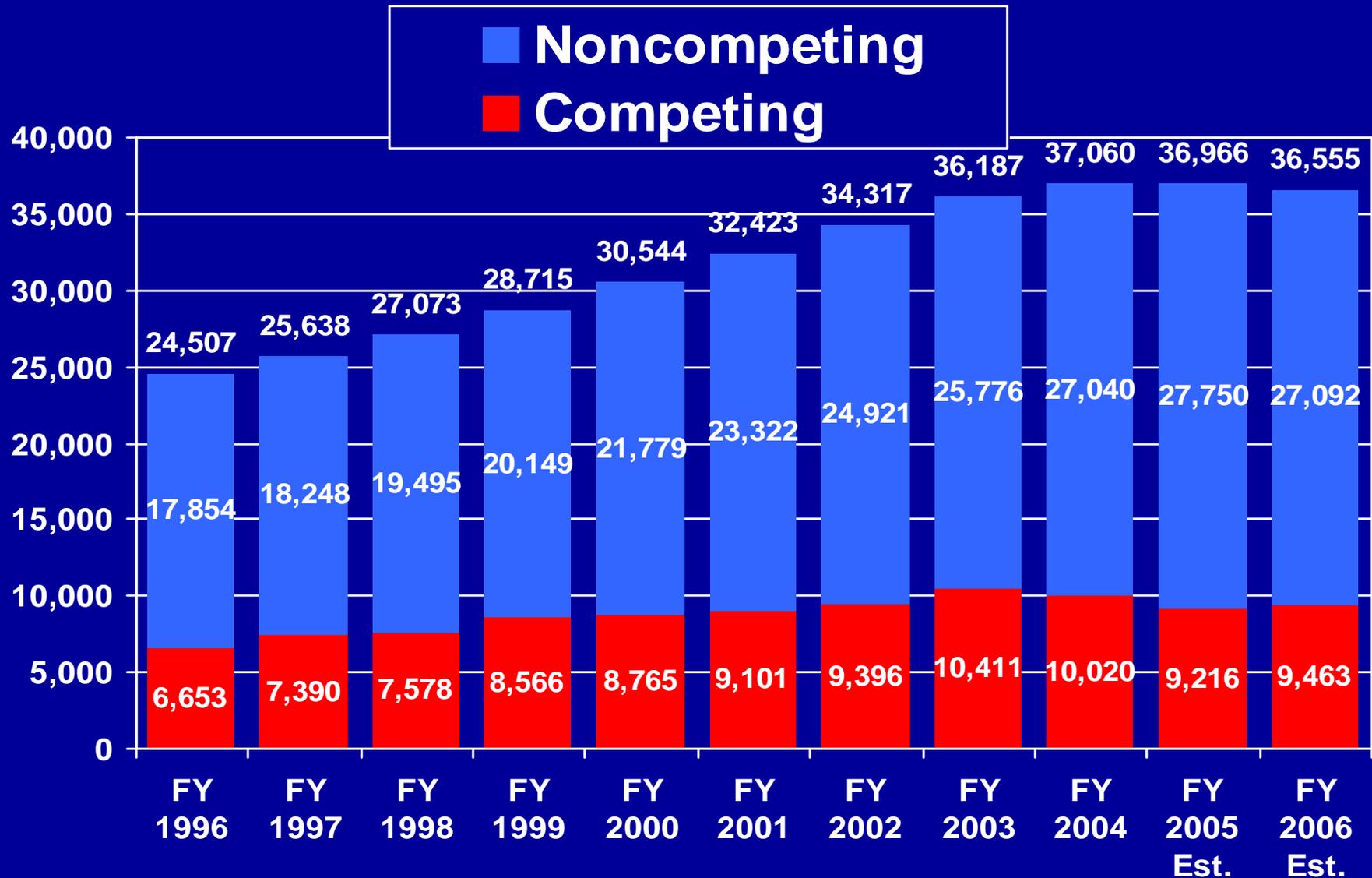
NIH Congressional Appropriations

FY1997- FY2006

(dollars in billions)

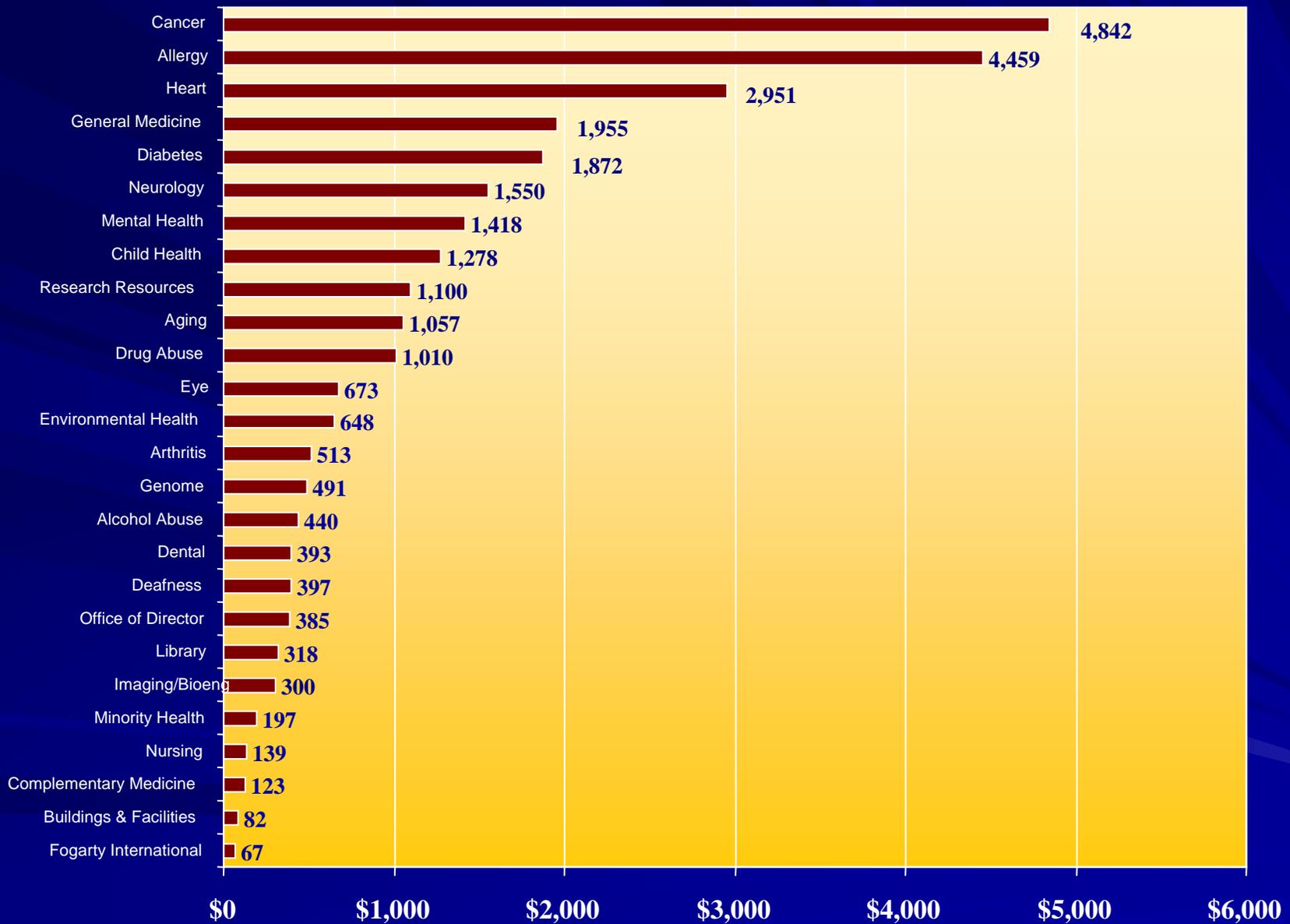


NIH Numbers of Research Project Grants FY 1996 – FY 2006



NIH Funding in FY2006: By Institute/Center

(dollars in millions)



Dual Review System for Grant Applications

First Level of Review

Scientific Review Group (SRG)

- Provides Initial Scientific Merit Review of Grant Applications
- Rates Applications and Makes Recommendations for Appropriate Level of Support and Duration of Award



Second Level of Review

Council

- Assesses Quality of SRG Review of Grant Applications
- Makes Recommendation to Institute Staff on Funding
- Evaluates Program Priorities and Relevance
- Advises on Policy



Who should I contact NIH *before* I submit an application?

- Contact program staff during application development
- Must contact NIH staff to obtain agreement to accept any investigator-initiated competitive applications with \geq \$500,000 direct cost for any single year and request must be six weeks before deadline
- Refer to NIH Guide dated 10/16/2001



How NIH Institutes Adjust Portfolios to Achieve Their Missions

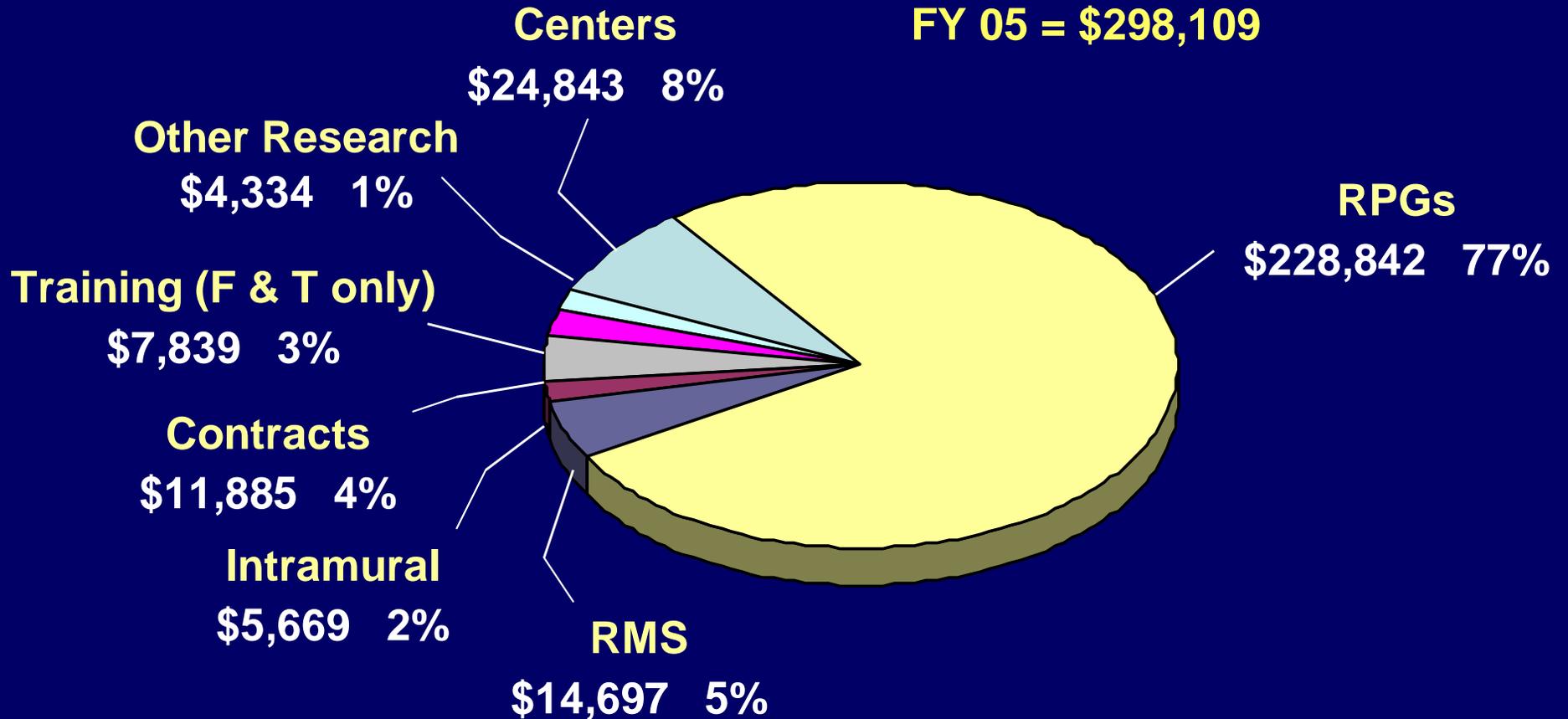
- Balance between “automatic payline” and “programmatically” decisions
- Issue specific solicitations:
 - “Requests for Applications” (RFAs)
 - “Program Announcements” (PA’s)
- Supplements to existing grants
- Use of discretionary funds



FY 2005 NIBIB Budget

(Dollars in Thousands)

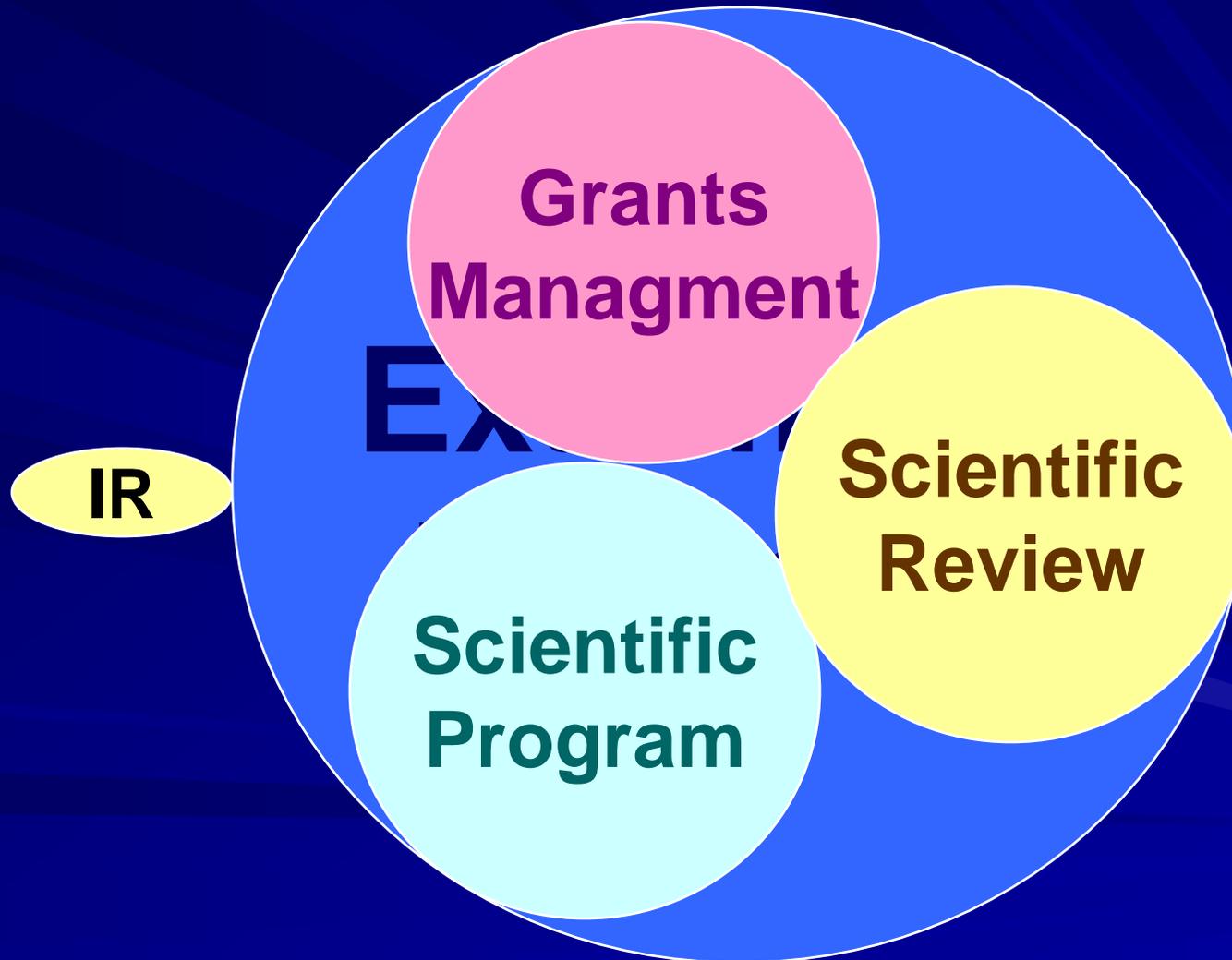
FY 05 = \$298,109



RPG = Research Project Grant
RMS = Research Management Support



A simple View of the NIH



The NIBIB Mission

Improving human health by leading the **development and** accelerating the **application of biomedical technologies**.

The Institute is committed to **integrating the physical and engineering sciences with the life sciences** to advance basic research and medical care.

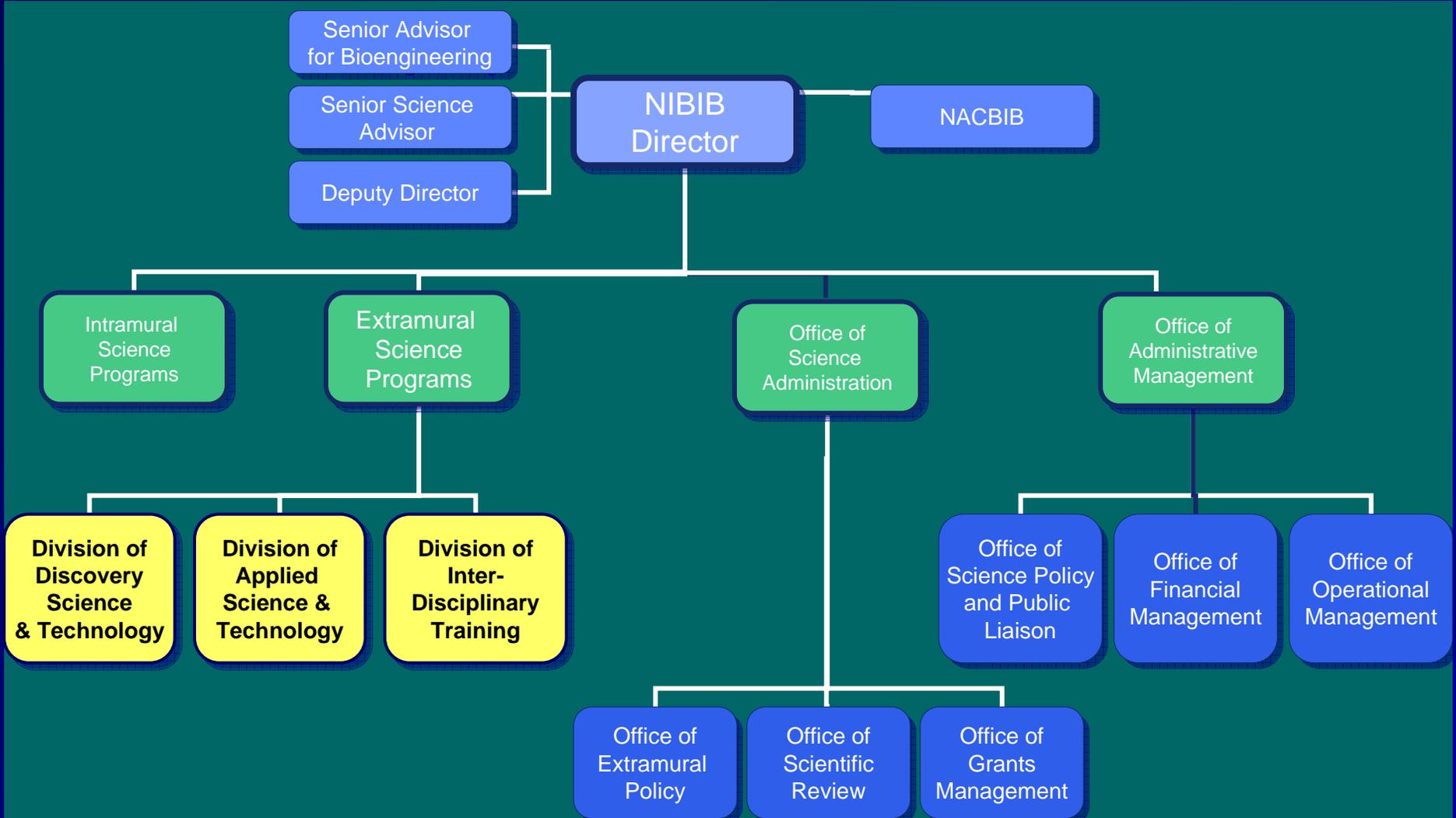


The NIBIB Vision

We will profoundly change health care. NIBIB will push the frontiers of technology to make the possible a reality.



The NIBIB Organization



How is NIBIB different?

- Design- and needs-driven research, as well as hypothesis-driven
- Focus on enabling technologies with broad applications to multiple diseases or biological processes
- Multi-disciplinary and collaborative research
- Inter-agency and inter-institute activities



NIBIB Milestones

- **December 29, 2000** Authorizing Legislation Signed into Law
- **April 20, 2001** Establishment Plan Approved by DHHS Secretary
- **January 10, 2002** First Budget Appropriation Passed (FY2002)
- **February 21, 2002** First RFAs Released
- **April 8, 2002** First Research Grants Awarded
- **May 7, 2002** First Director Named - Roderic Pettigrew, PhD, MD
- **January 16, 2003** First Meeting of the NACBIB
- **February 20, 2003** FY2003 Budget Appropriation Passed
- **January 23, 2004** FY2004 Budget Appropriation Passed
- **January 26-27, 2005** 5-Year Strategic Plan Released



Current NIBIB Grant Portfolio

- Biosensors
- Biomaterials
- Biomechanics
- Bioinformatics
- Computational Biology
- Drug & Gene Delivery
- Image Guided Therapies
- Medical Devices/Implants
- Nanotechnology
- Nuclear Medicine
- Optical Imaging
- Platform Technologies
- Rehabilitation Engineering
- Surgical Tools & Techniques
- Tissue Engineering
- Ultrasonics
- X ray, EM, Ion Beam
- MRI / MRS



NIBIB Scientific Program

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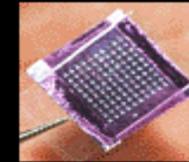
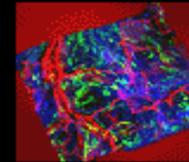
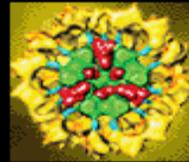
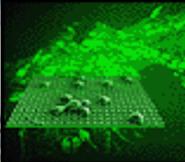
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National Institute of Biomedical Imaging and Bioengineering

NATIONAL INSTITUTES OF HEALTH
U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES



www.nibib.nih.gov

Research

Funding

Training

Health & Education

News & Events

About NIBIB

En Español

Pictures & Videos

▶ Research

- ▶ Labs at NIBIB (Intramural)
- ▶ Research Programs (Extramural)
- ▶ Biotechnology Resource Centers

▶ Funding

- ▶ Funding Opportunities
- ▶ Grant Application Process
- ▶ Policies For Researchers
- ▶ NIBIB FY 2005 Funding Strategy

▶ Training

- ▶ Undergraduate/Graduate
- ▶ Predoctoral
- ▶ Postdoctoral
- ▶ Career-Level
- ▶ Special Populations

▶ Health & Education

- ▶ Publications and Features
- ▶ Health Information
- ▶ Science Education

▶ News & Events

- ▶ Calendar of Events

What's New

October 17, 2005

Registration Open for NIBIB Regional Grantsmanship Seminar

August 15-16, 2005

BECON Conducts Fifth BRP Grantee Meeting

August 16, 2005

NIBIB Seeks Director, Division of Applied Science and Technology

Quick Links

- ▶ Advisory Council (NACBIB)
- ▶ BECON, BISTI
- ▶ NIH Neurosciences Blueprint
- ▶ NIH Roadmap
- ▶ Policies for Researchers

Types of NIH Announcements

RFA = Request for Applications

- Special Review
- Set Aside Funds

PA = Program Announcement

- **PAR** = with Special Review
- **PAS** = with Set Aside Funds



Types of Awarded Grants

R = Research

T = Training (Institutional)

F = Fellowship (Individual)

K = Career Development



Examples of Research Grants

R01

- Basic NIH research grant mechanism
- Biomedical research project with high probability of success, preliminary data
- Average award = \$ 300k / year, 4-5 years

R21

- Exploratory/Developmental Grant; High-risk research
- Little to no preliminary data; fund to proof-of-principle
- \$275k total, 2 years

R03

- Small Research Grant
- Little to no preliminary data; fund to proof-of-principle
- \$50k / year, 1-2 years max



The NIBIB Staff

