

# Research Grants Transfer to National Institute of Biomedical Imaging and Bioengineering

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Presentation to the  
NCAB  
June 11, 2002



## What is NIBIB?

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- The National Institute of Biomedical Imaging and Bioengineering (NIBIB) is the newest of the NIH research Institutes and Centers
    - Mandated by the National Institute of Biomedical Imaging and Bioengineering Establishment Act (H.R. 1795, P.L. 106-580), which was signed into law by President Clinton on December 29, 2000
  
  - The mission of NIBIB
    - Improve health by promoting fundamental discoveries, design and development, and translation and assessment of technological capabilities in biomedical imaging and bioengineering, enabled by relevant areas of information science, physics, chemistry, mathematics, materials science, and computer science



## Making NIBIB a Reality

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### ➤ Director and staff, research portfolio, funding

- May 8, 2002 Roderic I. Pettigrew, Ph.D., M.D. named first Director of NIBIB
  - Professor of Radiology, Medicine and Bioengineering and Director, Emory Center for MR Research Emory University School of Medicine
  - Acting Director, now the Deputy Director of NIBIB, is Donna Dean, Ph.D.
  - Staff being hired, in the interim NIH staff were on detail to assist



## Making NIBIB a Reality

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### ➤ Research portfolio

- In 2001 a trans-NIH review committee conducted an analysis of bioengineering and biomedical imaging research portfolios across NIH. The committee made recommendations that some current projects and grants funded by NIH ICs be moved to NIBIB
- In 2002, a Task Force with outside experts reviewed research portfolio across NIH and identified those appropriate for transfer to NIBIB



## NCI Impact of Grants Transfer to NIBIB

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➤ NCI was impacted in the following way:

- In 2002, NCI transferred a total of \$21 million dollars in grants from the Biomedical Imaging Program in DCTD to NIBIB. This represented a total of 61 grants
- In 2003, NCI will transfer an additional \$60 million dollars to NIBIB
  - \$35 million tied to 122 grants
  - \$25 million not related to specific grants



## NCI impact of Grants Transfer to NIBIB

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- Of the \$35 million in grants to be transferred in 2003, \$19.6 million, or 56%, will come specifically from the DCTD Biomedical Imaging Program
- Other programs that were affected by the \$35.3 million NIBIB transfer are as follows:
  - Cancer Cell Biology Branch \$1.6 M 5%
  - Cancer Diagnosis Program \$6.7 M 19%
  - Cancer Therapy Evaluation Program \$540 K 2%
  - Developmental Therapeutics Program \$2.4M 7%
  - DNA and Chromosome Aberrations \$94 K <1%
  - Epidemiology and Genetics Program \$434 K 1%
  - Radiation Research Program \$2.8M 8%
  - Training Branch \$1 M 3%



## **NCI impact of Grants Transfer to NIBIB**

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- A total of \$81 million will have been transferred from NCI to NIBIB in FY 2002 and 2003 combined
  - 50% of the \$81 million has come from the Biomedical Imaging Program
  - The Biomedical Imaging Program has transferred approximately 40% of its total portfolio to NIBIB in FY2002 and 2003 combined



## **Impact of NIBIB on NCI**

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- New and enriched focus at NIH for bioengineering and imaging sciences
- NIBIB will coordinate the biomedical imaging and bioengineering programs of other agencies and NIH Institutes to support imaging and engineering research with potential medical applications and facilitate the transfer of such technologies to medical applications



## Background: 1998-2000

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- July 1998: NIH correspondence to Rep. Bilirakis (FL) reported spending in FY 1997 on “biomedical imaging”:
  - 324.6 million for 1564 awards, including
    - \$216.7 million for “bioimaging research” and
    - \$107.9 million for “bioimaging used as a tool”
- 1998-2000: NIH presents case that a new Institute is not needed
- FY 2000: Office of Budget webpage report on “research Initiatives/Programs of Interest”
  - Bioengineering \$633.6 million
  - Diagnostic radiology \$399.2 million



## Background: 2001

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- **December 29, 2000:** President Clinton signs NIBIB establishment act to create “a central focus for imaging and bioengineering research at the NIH”
- **February:** ICs asked to identify grants appropriate for transfer, in accord with NIBIB mission statement
- **March – August:** Iterative steps with ICs to identify grants
- **August 30:** Final confirmation with ICs of funded grants appropriate for transfer (\$66.9 million, approximately 300 grants)



## Background: 2001

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- **November 15:** Acting NIH Director and Acting NIBIB Director meet with Rep. Tauzin (LA) and Rep. Burr (NC)
- **November 21:** Acting NIH Director notes at IC Directors' meeting that a 9 member task force of outside experts is to be convened to review the NIH portfolio
- **December:** Conference language



## Conference language

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- **Conference report for FY 2002 appropriations directs NIBIB to establish task force to:**
  - "Review all current imaging and bioengineering grants and identify those that are appropriate for transfer to NIBIB"
  - NIH Director submit report on findings of task force to House and Senate Appropriations Committees by March 31, 2002



## Conference language

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- “research projects with applications to multiple disease processes or organ systems should generally reside in NIBIB in accordance with the intent of Congress in creating the new Institute”
- Congress is “concerned that the amount of research grants proposed by the NIH for transfer to the new Institute falls far short of previous assessments of NIH support for basic biomedical imaging and bioengineering as expressed in NIH statements to the Congress”



## Conference language

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- **9 member working group to be convened by NIBIB with representatives designated by:**
  - American Institute for Medical and Biological Engineering (AIMBE)
  - Academy of Radiology Research (ARR)
  - NIH
- **Group submits findings to NIH Director, who then transmits a report to Congress**



## Working Group Membership

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### ➤ AIMBE:

- Don P. Giddens, Ph.D.  
Professor and Chair  
Biomedical Engineering Department  
Georgia Institute of Technology
- Peer M. Portner, Ph.D.  
Consulting Professor, Cardiothoracic Surgery  
Stanford University School of Medicine
- Matthew Tirrell, Ph.D.  
Richard A. Auhill Professor and Dean  
College of Engineering  
University of California, Santa Barbara



## Working Group Membership

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### ➤ ARR:

- Stanley Baum, M.D.  
Professor  
Department of Radiology  
University of Pennsylvania School of Medicine
- Reid Dunnick, M.D.  
Professor and Chair  
Radiology Department  
University of Michigan Medical School
- Etta Pisano, M.D., F.A.C.R.  
Professor of Radiology and Biomedical  
Engineering  
University of North Carolina Medical School



## Working Group Membership

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### ➤ NIH:

- Robert Balaban, Ph.D.  
Scientific Director and Chief  
Laboratory of Cardiac Energetics, NHLBI
- Suzanne Fisher, Ph.D.  
Director, Division of Receipt and Referral  
Center of Scientific Review
- King C. P. Li, M.D., M.B. A.  
Associate Director for Imaging Sciences  
Clinical Center



## Working Group Membership

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### ➤ Ex Officio:

- Donna J. Dean, Ph.D.  
Acting Director, NIBIB
- Edward C. Nagy  
Executive Director, ARR
- Kevin W. O'Connor  
Executive Director, AIMBE



## Provided to Working Group

- All funded grants in bioengineering and biomedical imaging from FY 2000 CRISP database (title, PI, grant ID number, institution)
- CRISP search terms used to identify above two lists
- List of funded grants currently being transferred from ICs to NIBIB



NIBIB mission statement

### NIH FY 2002 and 2003 Transfers to NIBIB (\$ 000)

IC	2002 Transfers	2002 Appropriation	2003 Transfers	2003 PB (before 2003 Transfers)
NCI	21,153	4,188,351	60,000	4,702,394
NHLBI	11,649	2,575,197	~	2,791,411
NIGMS	8,915	1,725,139	~	1,879,984
NCRR	5,861	1,011,505	~	1,090,272
NINDS	4,665	1,327,780	~	1,439,405
NIMH	3,457	1,248,093	~	1,353,088
NEI	2,683	581,191		
Rest of NIH	8,465			
Total to NIBIB	66,848	112,000	~150,000	

## What are the next steps?

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- Work together with NIBIB and other NIH Institutes to ensure complementary and enhanced role for bioengineering and biomedical imaging:
  - Meet with new Director, Dr. Pettigrew, to begin discussing his plans, and opportunities to work together on areas of mutual interest
  - Biomedical imaging program staff has been assisting staff at NIBIB during the transition period
  - Interdivisional group from NCI will meet on June 17<sup>th</sup> to discuss referral guidelines
  - CSR plans to hold meetings with relevant other ICs to discuss areas of shared interest with NIBIB

