

NIMH Intramural Research Program Blue Ribbon Panel Recommendations

Michael Gottesman, M.D.

David Botstein, Ph.D.

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Review Process

- Each Intramural Program undergoes a Blue Ribbon Panel Review every 10 years
- Panel members drawn from ACD, the Institute's Council, Institute's Board of Scientific Counselors, outside experts
- Prior review of NIMH IRP was in 1997, chaired by Herbert Pardes

Panel Members - 2008

- **Solomon Snyder, Hopkins, Chair**
- **Carol Tamminga, UT-Southwestern, Co-Chair**
- Huda Akil, U. Mich
- David Botstein, Princeton, ACD
- Roberta Diaz Brinton, USC
- Paul Greengard, Rockefeller
- John Krystal, Yale, former NIMH BSC chair
- Pat Levitt, Vanderbilt, NAMHC, former NIMH BSC chair
- Peter MacLeish, Morehouse
- John March, Duke, NAMHC
- Eric Nestler, UT-Southwestern, former NAMHC
- Marcus Raichle, Wash. U.
- Bruce Rosen, Harvard/MGH, NIMH BSC
- Edward Scolnick, MIT/Broad

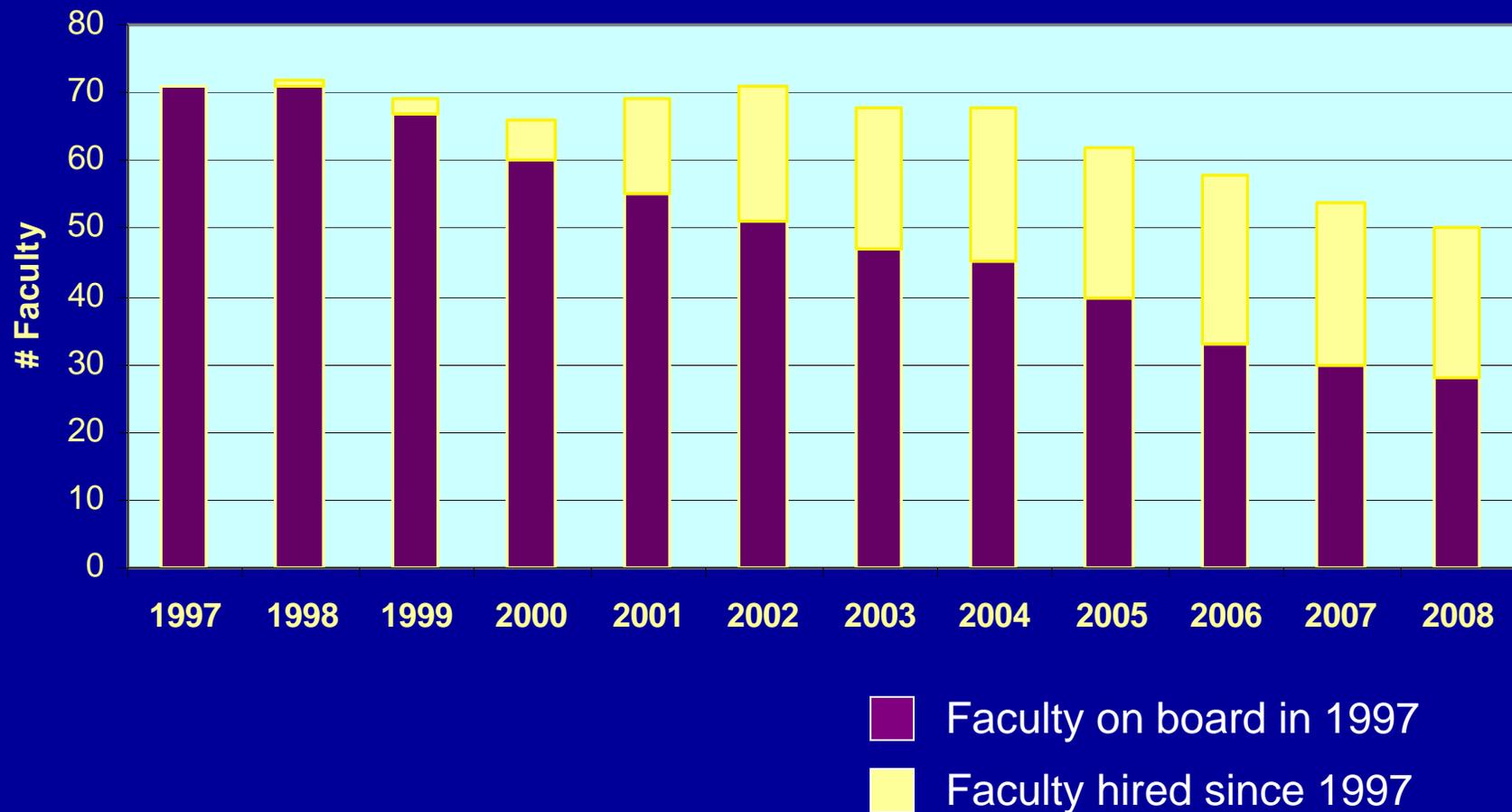
Charge to the Panel

- How can NIMH IRP become more innovative and adaptable?
- Are the current NIMH intramural research efforts effective? How could they be improved?
- What is the appropriate scientific balance between NIMH's IRP and other intramural programs at NIH? Is anything underrepresented or overrepresented in NIMH's IRP?
- Are there ways to strengthen collaborative efforts between IRP scientists and extramural researchers, particularly in the clinical arena?
- Identify characteristics to seek in a Scientific Director

Report: “Laudable Changes” Since the Prior Blue Ribbon Review

- Recruited a cadre of experienced, talented physician scientists
- Enhanced brain imaging and nuclear medicine
- Strengthened response to Board of Scientific Counselors (BSC) recommendations
- Recruited excellent junior faculty to PNRRC phase 1
- Launched major public health initiative in autism
- Effectively used BSC review process as a “guardian of quality” for intramural science

Faculty Turnover Since 1997 Panel - Driven by a Strengthened Review Process



Report: Recent Research Highlights from NIMH IRP

These changes have supported “numerous vital contributions to mental health research” including:

- The 2007 report showing that attention deficit hyperactivity disorder (ADHD) is characterized by a delay in development of critical brain regions, which ultimately follow a normal pattern
- The pioneering of “imaging genomics”, which brings together *in vivo* brain imaging and family genetic studies to elucidate patterns of brain function and their genetic determinants
- The interdisciplinary research that links depressed affect to a specific brain region (area 25) and a specific regulator of brain chemistry (the serotonin transporter)

Report: Recent Research

Highlights from NIMH IRP, cont.

- The validation of the rapid antidepressant effects of the anesthetic ketamine in humans, supporting the development of NMDA glutamate receptor antagonists as novel treatments for depression
- The refinement of BOLD (blood oxygen level detection) functional magnetic resonance imaging (fMRI), which enhances both spatial and temporal resolution of fMRIs, and the application of BOLD fMRI in studies such as those on adolescent mental disorders

Report: Recommendations for the next 10 years

- **Appoint a Scientific Director (SD) of World-Class Stature as a Scientist and Administrator**
- **Initiate the SD Search Process Now**
 - NIMH opened a national search in April 2008. Applications are under review by the search committee, chaired by Dr. James Battey, Director, NIDCD.

Report: Recommendations for the next 10 years, cont.

Foster innovation and adaptability in IRP:

- **NIMH IRP as an Incubator:** recruit junior scientists for 5-7 year terms with the expectation that they would move to an extramural setting following their intramural appointment.
- **Exit Strategy Facilitated by a Reverse Dowry:** provide **substantial** support to investigators leaving IRP, to encourage transition to extramural research laboratories.

Report: Recommendations for the next 10 years, cont.

- **Structure and Linkage of IRP Basic and Clinical Neuroscience – Importance of Investigator Independence**
 - Collaboration of independent teams is generally preferable to large groups with a single leader
 - IRP clinical and basic researchers should be linked more closely than typical in a university setting
 - NIMH needs to continue to foster its own intramural basic neuroscience research program, building stronger molecular/cellular and developmental neuroscience research efforts.
- **The Need for Additional Laboratory Research Space – completion of PNRC phase 2 is critical**

Report: Recommendations for the next 10 years, cont.

Modulate the balance between research programs in IRP by managing:

- **The Fluidity of IRP Funding**
 - The SD should reserve a larger discretionary fund to facilitate nimble responses to new research opportunities
- **BRP Recommendations and NIMH Strategic Plan – Future recruiting should be driven by the research needs identified in the NIMH Strategic Plan, with particular focus on:**
 - Genetics, epigenetics, bioinformatics, developmental neurobiology, biomarker development, therapeutics development

Summary

- NIMH was remarkably responsive to 1997 Blue Ribbon Panel Report, instituting several key management changes.
- These changes enabled groundbreaking research at IRP.
- Further fine-tuning will allow IRP to serve as an example of innovation in mental health research and training, ensuring that the IRP will remain “***something special***”.