

NIH Director's Pioneer and New Innovator Awards

Jeremy M. Berg

National Institute of General
Medical Sciences

October 26, 2007



NIH Director's Pioneer Award

- A component of the NIH Roadmap focused on “High-Risk Research”
- Intended to fund particularly innovative scientists to work on potentially high-impact projects
- \$2.5 million in direct costs per year for five years, >50% effort required
- Simplified application process
 - Five-page essay describing project, significance, applicant, rationale for use of Pioneer Award mechanism
 - 3 letters of reference
 - Description of most important research accomplishment



NIH Director's Pioneer Award 2004

- Multi-tiered review process
 - Applications reviewed by outside reviewers
 - ~ 20 finalists interviewed at NIH for final review
 - Final review by Advisory Committee to the Director, NIH
- >1,300 applications received
- **Nine awards made in September 2004**



2004 NIH Director's Pioneer Awardees

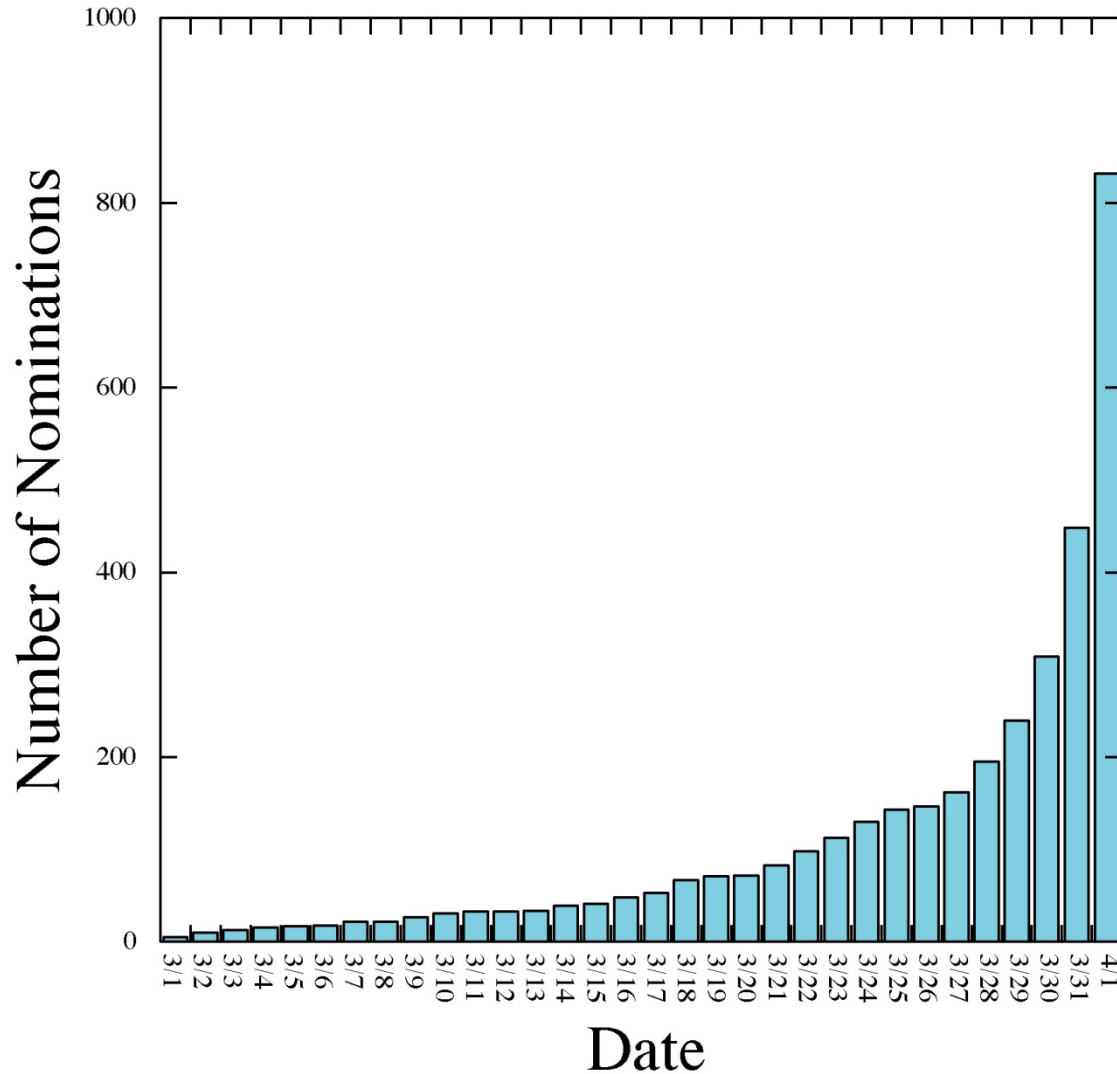


NIH Director's Pioneer Award 2005

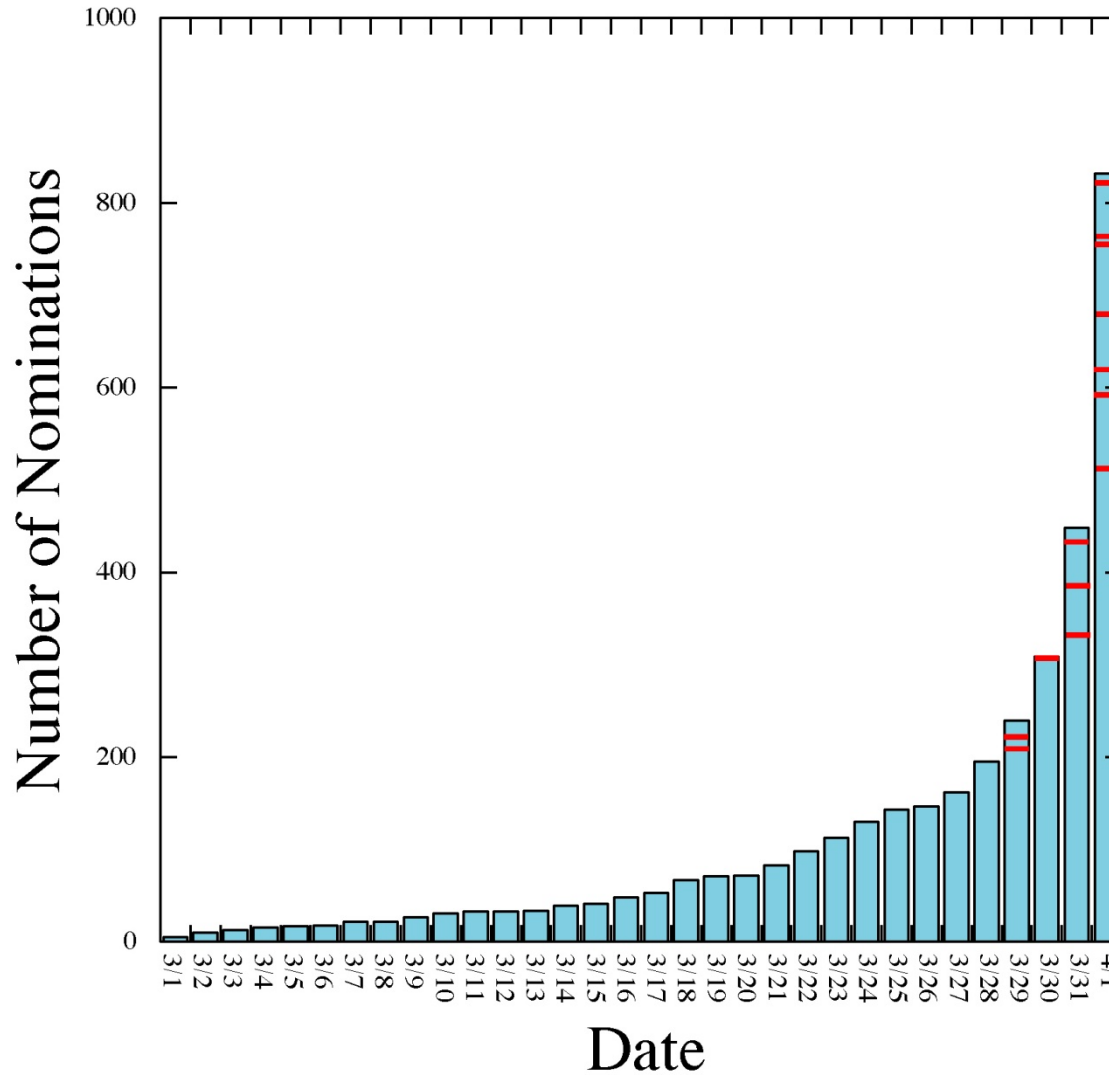
- Minor adjustments made to program and process to prepare for large number of applications and to be sensitive to diversity issues
- >800 applications received
- **13 awards made in September 2005**
- Applications submitted electronically through Grants.gov



Electronic Submission of Applications



Electronic Submission of Applications



2005 NIH Director's Pioneer Awardees



■ 2006

- > 400 Applications received
- 13 Awards made September 2006

■ 2007

- > 400 Applications received
- 12 Awards announced September 2007



Selected Pioneer Projects

- Nanotechnology-based diagnostics (Chad Mirkin, 2004)
- Surveillance of African bush hunters for potentially emerging viruses (Nathan Wolfe, 2005)
- Protein folding studies in living cells (Lila Gierasch, 2006)
- Social and environmental factors in autism (Peter Bearman, 2007)





NIH DIRECTOR'S
NEW INNOVATOR
AWARD

- Launched in February 2007 with resources provided in the 2007 Joint Resolution
- Open to **new investigators**
- Goal is to fund **exceptionally innovative research with potential for significant impact**
- Up to \$1.5 million direct costs over 5 years, >30% research effort required



Application Structure

- Abstract
- Ten-page essay, which includes
 - Scientific problem, significance, and potential impact; suitability for New Innovator Award mechanism
 - Innovativeness of project; alternatives if approaches not successful
 - Qualifications of investigator; evidence for creativity and innovativeness
- Two-page biographical sketch
- List of current and pending research support



What Is a New Investigator?

- Must have received most recent doctoral degree or completed medical internship and residency in 1997 or later
- Must never have been PI on an R01 or equivalent NIH grant
- Must hold independent research position at a U.S. institution as of September 20, 2007



Review Criteria

- **The scientific problem to be addressed:** The biomedical or behavioral significance/importance of the problem; the likelihood that, if successful, the project will have a truly significant impact on this problem.
- **Innovativeness of the research proposed:** Evidence that the proposed approaches are significantly more innovative and creative than would normally be expected, especially for a new investigator, and evidence that the investigator has considered and addressed the potential risks and challenges.
- **Investigator qualifications:** Evidence of the investigator's creativity and potential for innovation, and the commitment of the investigator to devote 30% or more of his/her research effort on the New Innovator Award project.



NIH Director's New Innovator Award 2007

- Applications accepted April 25-May 22
- More than 2,100 applications received!
- Applications reviewed electronically by 3 independent reviewers, broadly matched for expertise
- Each reviewer reviewed 30-35 applications by three criteria and also indicated their top 4 applications
- **30 awards announced, September 2007**



Thanks!

- Judith Greenberg
- Shan McCollough
- Faye Austin
- OER Staff

