
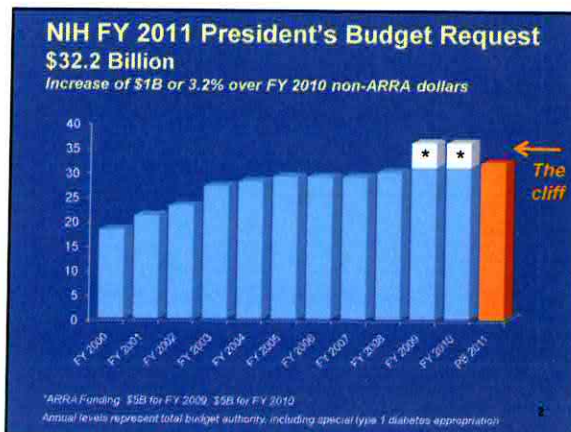


## What's New with New Investigators

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NIH Deputy Director for Extramural Research

### NIH Director's Early Independence Award (EIA)

NIH is finding new methods to encourage funding (and hiring) of early-stage investigators

- Revised New and Early Stage Investigator Policies (NOT-OD-09-013)** → Goal of funding new investigators at same rate as established investigators submitting new projects
- NIH DIRECTOR'S NEW INNOVATOR AWARD** → Support outstanding early-stage investigators as they pursue high risk/high reward research
- Early Independence Award Program** → Support exceptional early career scientists to skip the post-doc



### R01s – The Gold Standard!

- The Research Project Grant (R01) is the original and historically oldest grant mechanism used by NIH.
- The R01 provides support for health-related research and development based on the mission of the NIH.
- R01s can be investigator-initiated or can be in response to a Funding Opportunity Announcement (FOA).
- The R01 is a grant award made to support a discrete, specified, circumscribed project to be performed by the named investigator(s) in an area representing the investigator's specific interest and competencies, based on the mission of the NIH.
- The NIH awards R01 grants to organizations of all types (universities, colleges, small businesses, for-profit, foreign and domestic, faith-based, etc.). Although the Project Director/Principal Investigator writes the grant application and is responsible for conducting the research, the applicant is the research organization.

### New Investigator Definition

A Program Director or Principal Investigator (PD/PI) is considered a New Investigator if he/she has not previously competed successfully as a PD/PI for a "significant independent" NIH research grant (like an R01).

### New Investigator Definition

**Significant independent NIH research grant: Any NIH research project grant other than the following small or early stage research grants:**

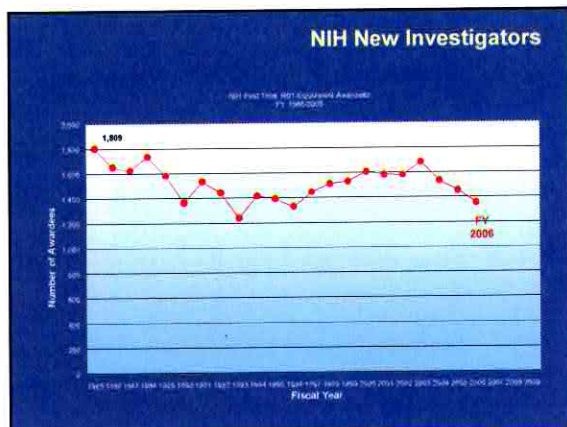
Pathway to Independence Award Research Phase (R03)	Dissertation Award (R36)
Small Grant (R02)	Small Business Technology Transfer Grant-Phase I (R41)
Academic Research Enhancement Award (R15)	Small Business Innovation Research Grant-Phase I (R43)
Exploratory/Developmental Grant (R21)	Shannon Award (R55)
Research Education Grants (R25, R50, R15, R19)	NIH High Priority, Short-Term Project Award (R36)
Grant of Total Planning Grant (R34)	Competitive Research Pilot Projects (SC2, SC3)

**Additionally, the PD/PI is not excluded from consideration as a "New Investigator" if he/she has been the PD/PI of, or received an award from, any of the following classes of awards:**

Training, Related and Mentored Career Awards	Loan Repayment contracts (L30, L32, L40, L50, L60)
All fellowships (F awards)	All training grants (T32, T34, T35, T60, T43)
All individual and institutional career awards (K awards)	

**Instrumentation, Construction, Education, Health Disparity Endowment Grants, or Meeting Awards**  
(G07, G08, G11, G13, G20-S10, S16, S21, S22-R13)

*Note regarding grants with multiple PD/PIs: In the case of a grant application that survives more than one (1) to (4) PD/PIs must meet the definition of New Investigator to this "Yes" or the "New Investigator" box.*



- ### Setting New Investigator Goals
- Goals based on rolling average for previous 5 years
  - Numeric Goal for FY 2007 and 2008
  - For 2009 and 2010 ICs were/directed to maintain comparable success rates for:
    - Established Investigators submitting new (Type 1) grant applications and New Investigators
  - In addition, a majority of New Investigators will be Early Stage Investigators (ESIs)

### Early Stage Investigators

NIH created a new 'Early Stage Investigator' (ESI) category designed to accelerate the early transition of new scientists to research independence by receiving their first R01 earlier.

A Program Director/Principal Investigator who qualifies as a New Investigator is considered an Early Stage Investigator (ESI) if he/she is within 10 years of completing his/her terminal research degree or is within 10 years of completing medical residency (or the equivalent).

- ### Implementation of ESI Definition
- The NIH modified the collection of information on degree dates and medical residency within the personal profile of the eRA Commons.
  - PD/PIs must update their personal profile in the eRA Commons in order to be considered for the ESI classification. Investigators who enter degree and residency completion dates will be notified of their ESI status by email.
  - A procedure and guidelines for requesting an extension of the period of ESI eligibility is in place to accommodate individuals with various medical concerns, disability, pressing family care responsibilities, or active duty military service (instructions in Commons).

- ### Implementation of ESI definition
- Applications from ESIs and New Investigators are identified to reviewers so that appropriate consideration of their career stage can be applied during review.
  - Applications from ESIs and New Investigators are "clustered" during review to enable evaluation as a group and distinguish from Established Investigators.
  - An application with more than one Principal Investigator is identified for consideration of ESI/NI by reviewers only if ALL of the listed Principal Investigators qualify as New Investigators.
  - Staff in the NIH institutes and centers are apprised of ESI and New Investigator status and this factor is considered when applications are selected for award.
  - New Investigators are eligible for the "Full Implementation to Shorten the Review Cycle for New Investigator R01 Applications Reviewed in Center for Scientific Review (CSR) Recurring Study Sections".



### NIH Director's Early Independence Award (EIA)

A new program to allow exceptional young investigators to "skip" the post-doc

*For the most creative of young scientists, nothing can equal the chance to have a lab of one's own.*

Francis Collins, *Nature*, 2010

- Inspired in some respects by programs at Carnegie, Whitehead, UCSF, and other institutions show exceptional individuals do not require a post-doc to undertake pioneering research
- Solicited and incorporated input from research community
- Current year is a pilot (~10 awards) to test ideas and process, but may be scaled up in subsequent years




### NIH Director's Early Independence Award (EIA) What's Novel?



New PhD or MD locates an institution willing to host them for an EIA



Institution may actively recruit eligible EIA candidates

- Must be within 12 months before or after graduation
- Must demonstrate exceptional creativity, maturity, management skills
- Research relevant to NIH mission
- Strong letters of recommendation
- Institution ensures independent lab space/supplies/staff space/staff/equipment
- Appointment up to 5 years
- Protected research time for development as researcher
- Proposed research complements and enhances institution's programs
- Institution may choose to retain candidate



### NIH Director's New Innovator Award

- Seeking exceptionally creative early career stage individuals who propose bold, risky ideas
- Early-stage investigators defined as those who have not received an NIH R01 or similar grant and are within 10 years of completing their terminal research degree or medical residency
- Unusual flexibility in pursuing research objectives



- Generous funding levels – up to \$1.5M for 5 years.



### NIH Director's Early Independence Award

For more information:  
RFA-RM-10-019  
[www.nih.gov/grants/earlyindependence](http://www.nih.gov/grants/earlyindependence)  
[earlyindependence@nih.gov](mailto:earlyindependence@nih.gov)

Join the discussion on the EIA blog site:  
[www.nih.gov/grants/earlyindependence/blog](http://www.nih.gov/grants/earlyindependence/blog)

### NIH Director's New Innovator Award

For more information:  
RFA-RM-10-005  
[www.nih.gov/grants/newinnovator](http://www.nih.gov/grants/newinnovator)  
[newinnovator@nih.gov](mailto:newinnovator@nih.gov)

Send questions to [newinnovator@nih.gov](mailto:newinnovator@nih.gov)



### Urban Myth of Grantsmanship




*It is not a process by which bad ideas get transformed into good ones ...*



*... rather, it is more often the case of a good idea disguised as a bad one.*



### Grant Writing for Success

#### Writing the Application

- Start early
- Seek advice from colleagues
- Start with a good idea
- Talk to your NIH Program Official(s)
- Use the NIH webpage ([www.nih.gov](http://www.nih.gov))
- Remember review criteria
- Follow instructions carefully

### The Formula for Writing a Successful Grant Application

### What Determines Which Grants Are Funded?

- Scientific merit
- Institute/Center Priorities
- Program considerations
- Availability of funds

### Components of a Successful Grant Application – Bottom Line!

- Strong Idea
- Strong Science
- Strong Application

### Principles of Success

- ◆ Understand the peer review process
- ◆ Understand the agency mission – *Every IC is different!*
- ◆ Secure collaborators (mentors) to complement your expertise and experience – *Don't compete ... collaborate!*
- ◆ Learn and practice the skills of writing applications for grant funds

### Understanding the Mission

- ◆ Mission of each NIH IC is based and defined in law
  - Authorizations (periodic)
  - Appropriations (annual)
- ◆ ICs establish specific research emphases
  - Legislative mission
  - Current state of science
- ◆ *Use the Web to find out!*



## Identifying NIH Initiatives

- ◆ Most NIH Institutes establish specific research Initiatives and Priorities
- ◆ Funding Opportunity Announcements (FOAs)
  - Program Announcements (PA)
  - Request for Applications (RFA)

## NIH Guide for Grants and Contracts

- ◆ Official publication listing NIH funding opportunities and policy notices
- ◆ Published weekly
- ◆ List grants and contracts
  - Request for Applications (RFA)
  - Program Announcements (PA, PAR, PAS)
  - Request for Proposals (RFP)

<http://grants.nih.gov/grants/guide/index.html>

## Remember ... Before you start

- ◆ Talk to Program Staff at appropriate IC
- ◆ Read instructions for application form
  - SF 424 R & R or PHS 398
- ◆ Know your audience
  - Which review committee is most likely to get your application?
- ◆ *Propose research about which you are **passionate** and totally committed to doing*



## Review System for Grants



**DO NOT** write the application for yourself  
Unless you are going to fund it yourself


You **MUST** convince the entire review committee and the funding agency



**Reviewers are never wrong,  
Reviewers are never right:**

*they simply provide an assessment  
of material that you provided  
in your application*

**Don't Take It Personally!**



**Common Criticisms of New Investigator Applications**

**The Proposal is OVERLY AMBITIOUS**

- Set realistic goals for the budget and project period you propose

**Preliminary Data is lacking**

- Include preliminary data for all aims
- Use preliminary data to show knowledge of methods and data analyses
- But DO propose more than just confirming preliminary results

**I'm not sure that the Investigator can do the PROPOSED EXPERIMENTS**

- Don't propose what you can't do
- Include Collaborators and Consultants on your project
- Describe the value of datasets and experimental models

**Take Home Messages**

**Lots of directions and opportunities at the NIH**

- Monitor Institute websites and the NIH Guide (<http://www.nih.gov/grants>)
- Get to know the Program Director for your scientific area
- Contact them about your research ideas
  - Fit with institute mission and priorities
  - Best grant mechanism or program
  - Best study section for review
- Participate in workshops and symposia
- Participate in review of grant applications (study sections)

