

If I Knew Then What I Know Now.....

**Demystifying Select Aspects of The
NIH Grant Process**

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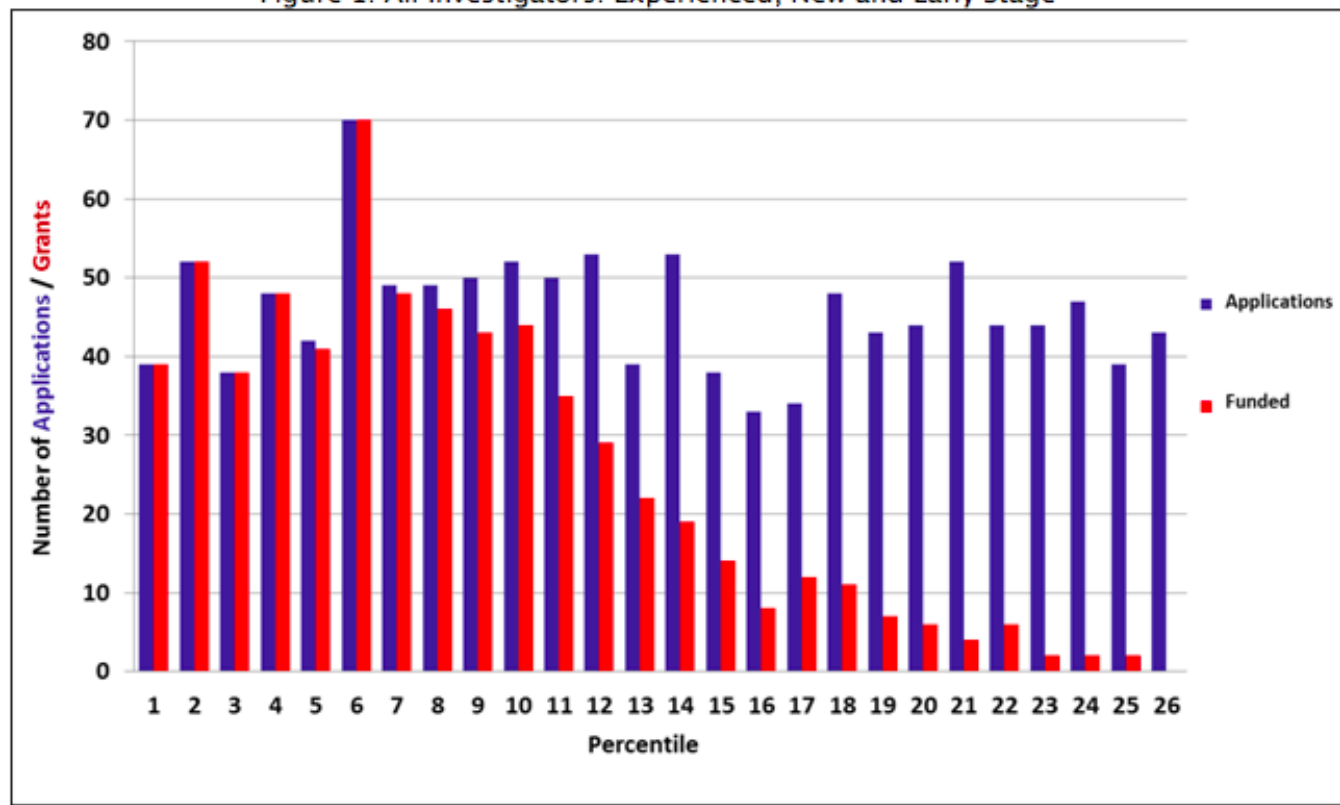
Outline

- **R03 vs R21 vs R01: Which mechanism fits my proposal concept?**
- **Key Grant Writing Considerations**
- **Critical aspects of the NIH review process**
- **Q & A: Fire Away!**

Impact of Doubling then Flattening of NIH Budget

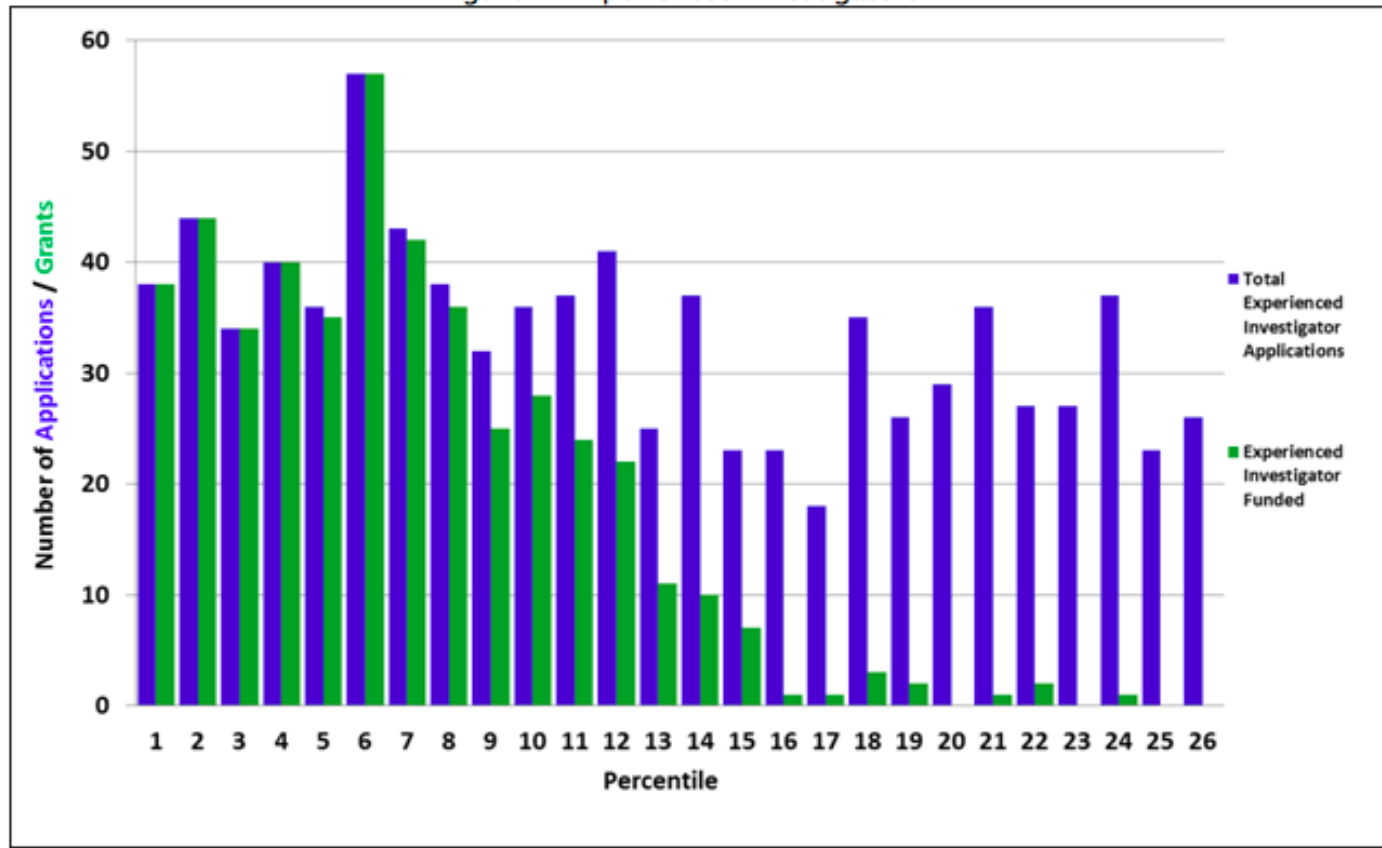
NCI FY2011 Competing R01 Applications and Awards

Figure 1: All Investigators: Experienced, New and Early Stage



Senior Investigators: Challenging Funding Environment

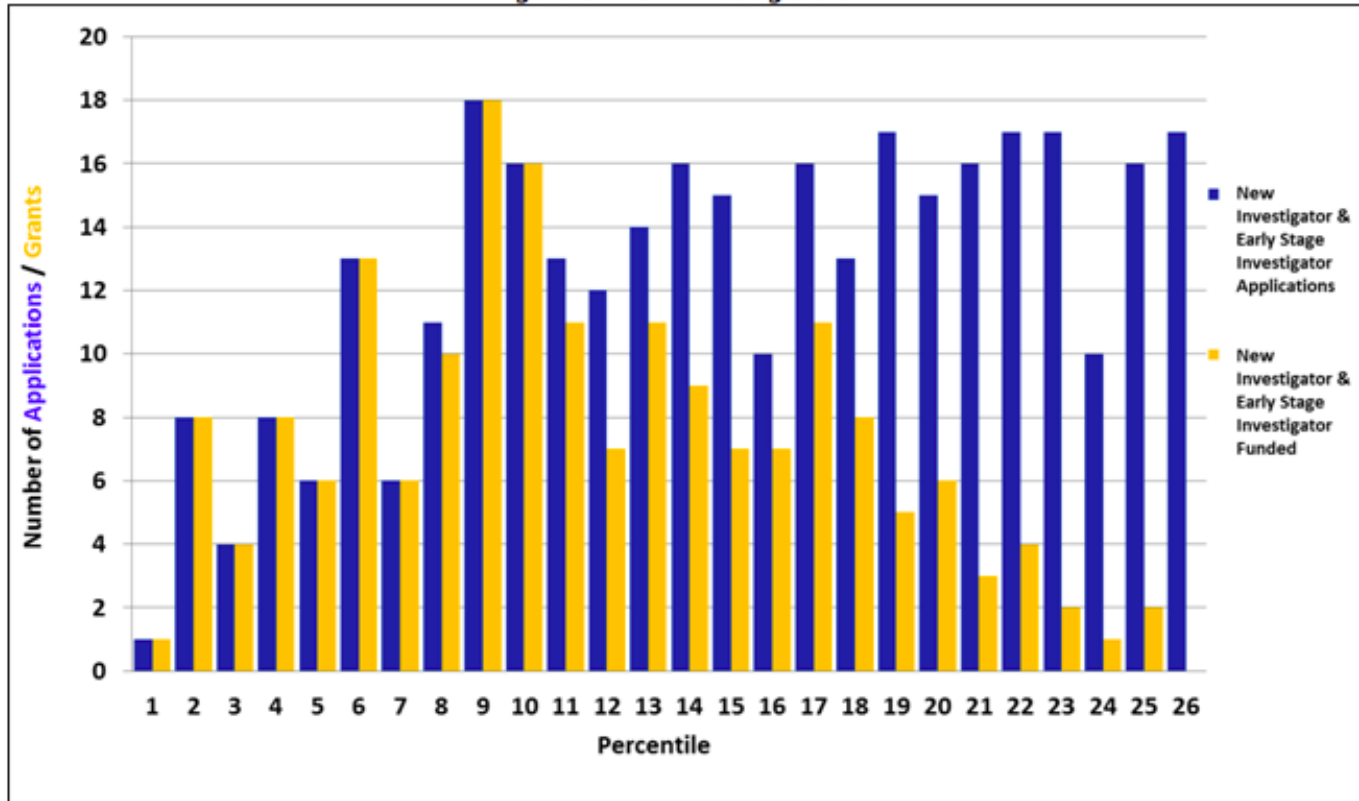
Figure 2: Experienced Investigators



New Investigators: Still Prioritized

NCI FY2011 Competing R01 Applications and Awards

Figure 3: New Investigators



Some Institutes now prioritize ESI over NI: Check with your PO/Institute

Research Grants: R03

- ▶ **Small grants – Scope includes:**
 - ▶ **Pilot/feasibility studies**
 - ▶ **Secondary analyses**
 - ▶ **Development of research methodology or technology**
- ▶ **Maximum time = 2 years**
- ▶ **Maximum budget = \$100,000 (\$50K/yr)**

Research Grants: R21

- ▶ **Focus on exploratory/developmental work: (High Risk/High Reward Projects)**
 - ▶ **Novel/innovative/riskier ideas**
 - ▶ **Extend previous work in new directions**
- ▶ **Maximum time = 2 years**
- ▶ **Maximum budget = \$275,000 (no more than \$200K in a single yr)**
- ▶ **R21s are Not Targeted New Investigator Awards**

Research Grants: R01

- ▶ **Research project grant**
 - ▶ **Broad range of projects**
- ▶ **Maximum time = 5 years, some eligible for competitive renewal**
- ▶ **Maximum budget = no specified limit**
 - ▶ **Best to aim for <\$500K/yr to start**

The New Investigator's Dilemma:


Should I Submit an R21 or R01?



Grant Cycles – Standard Dates

<http://grants.nih.gov/grants/funding/submissionschedule.htm>

Activity	Cycle I-Winter	Cycle II-Spring	Cycle III-Fall
Due Dates:			
R01	February 5	June 5	October 5
K	February 12	June 12	October 12
R03/R21	February 16	June 16	October 16
Scientific Merit Review	June – July	October – November	February - March
Advisory Council Round	August or October	January	May
Earliest Start Date	September or December	April	July

The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the frame, creating a modern, dynamic feel.

Writing the NIH Grant:
It's All About Overall Impact

Specific Aims

- ▶ Some propose **it is the most critical page** in the application (only page other SS members read in many cases)
- ▶ SA is a one page summary of the application
 - ▶ Describe Overall Impact (Primary evaluation aspect)
 - ▶ Why is this problem significant?
 - ▶ Why is it innovative?
 - ▶ What are the hypotheses?
- ▶ Goal: Provide a clear & specific description of project Aims
 - ▶ Avoid long (laundry) list of things you are going to do
 - ▶ 2-3 Specific Aims is sufficient (Focus/synergy: must fit together)

Writing the Specific Aims (1 page)

■ Content

- ▶ **Brief narrative intro (1-2 brief paragraphs)**
- ▶ **Critical need statement**
- ▶ **Broad overall objective/long-term goal**
- ▶ **Specific objective of present application**
- ▶ **Central Hypothesis**
- ▶ **Rationale for the investigation**
- ▶ **Specific Aims/Hypotheses**
- ▶ **Expected outcomes**
- ▶ **Positive impact/public health implications**
- ▶ **Responsive to PA/RFA/RFP**

Writing the Significance Section

- ▶ Section replaces the prior BG+Significance and should address:
 - ▶ State of existing knowledge including key lit citations & highlights of key studies/relevant findings
 - ▶ Rationale for the proposed project (IMPACT)
 - ▶ Strong justification for the rationale (IMPACT)
 - ▶ Explicitly identify the pressing gaps the proposed project findings will fill (IMPACT)
 - ▶ Clearly identify the potential contribution to the field, public health, etc (IMPACT)

Writing the Innovation Section

- ▶ Newest section that should address:
 - ▶ All aspects of the proposal that are novel and cutting edge
 - ▶ Strong justification for why the novel features advance science, practice, implementation (IMPACT)
 - ▶ Symmetry: Emphasize and re-emphasize how these innovations influence Significance and Overall Impact (IMPACT)
 - ▶ Clearly identify how innovative aspects will make a potential contribution to the field, public health, etc (IMPACT)

The Review Process

- ▶ 3 Total Reviewers: 2 reviewers assigned to provide detailed comments in each section; 1 tertiary reviewer provides overall impact review; other SS members often only read abstract and aims page
- ▶ Each assigned reviewer is required to score each of the 5 core review criteria on 1-9 Scale
- ▶ Encouraged to start reviewing each application as if it were a 5 and calibrate up or down from there; also must now comment on Premise and Rigor
- ▶ Each assigned reviewer gives a preliminary overall impact score on 1-9 scale (not an average or addition)
- ▶ Discussed applications are then assigned a final impact score by each member of the panel and averaged:
Bottom ½: ND

What do the 1-9 scores mean?

Impact	Score	Descriptor	Additional Guidance
High	1	Exceptional	Exceptionally strong with essentially no weaknesses
	2	Outstanding	Extremely strong with negligible weaknesses
	3	Excellent	Very strong with only some minor weaknesses
Medium	4	Very Good	Strong but with numerous minor weaknesses
	5	Good	Strong but with at least one moderate weakness
	6	Satisfactory	Some strengths but also some moderate weaknesses
Low	7	Fair	Some strengths but with at least one major weakness
	8	Marginal	A few strengths and a few major weaknesses
	9	Poor	Very few strengths and numerous major weaknesses

A Final Word: Don't give up!!

- ▶ Initial failure is common
- ▶ Understand which parts of the application process are under your control
- ▶ Learn from unfunded submissions to promote future progress and success
 - ▶ Study criticisms in Summary Statement
 - ▶ Discuss with program officer to decide if problems can be addressed via revision
 - ▶ Attend diligently & clearly to each criticism
 - ▶ Keep a positive tone and attitude

Thank You!!!!!!



National Institutes
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