Stimulus Bill & NIH overview

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American Recovery and Reinvestment Act of 2009 (Stimulus Bill)

◆ $789 Billion in total stimulus funds
◆ Funds for infrastructure, health, education and training, energy, science, student aid
◆ No earmarks
◆ Money to flow through competitive federal agency processes and through states
$10.4 Billion to NIH – most to award grants that were skipped this year.

- $8.2 B to Office of Director
- Challenge grants just published: due 4/27. Short proposals, complete-able within 2 years
- AREA (R15) award program (for universities that normally can’t compete for NIH funding) will be expanded – PA in the spring. All but College Sci & Eng are eligible !!!
- $400 M for comparative effectiveness research
- Supplements to components of SCORE
$3 B overall to NSF – most $ will go toward unfunded proposals

- $2.5 B for research and related activities – includes $300 M for major research instrumentation and $200 M for academic research facilities modernization
- $100 M – education and human resources
- $25 M – Math and Science Partnerships
- $15 M – Professional Science Master’s Programs
- $400 M – Major equipment research and facilities construction
- $60M Noyce Teacher Scholarship Program
$1 B overall to NASA

- $400 M -- acceleration of tier 1 science climate research missions recommended by National Academies Decadal Survey
- $150 M – system level research development and demonstration activities related to aviation safety, environmental impact mitigation, and Next Generation Air Transportation System
- $400 M – Exploration
- $50 M – to restore NASA facilities
$1.6 B for Office of Science

- Funds research in areas such as climate science, biofuels, high energy physics, nuclear physics, fusion energy sciences
- $400 M for Advanced Research Projects Agency – Energy (ARPA-E) – supports high risk, high payoff research into energy sources and energy efficiency
- Funding in the behavioral and social sciences of energy use was emphasized at the GRC meeting in Wash DC
National Institute of Science and Technology

$600 M overall for NIST

- $360 -- construction of research buildings -- $180 M of that amount is for competitive construction grant program for research science buildings
- $220 M – scientific and technical research and services
$50M in stimulus monies – to support community arts programs and non profits in the arts.
What should you be doing?

- Your Dept chair will be getting a notice about Stimulus funding opportunities every week. Hopefully he/she will disseminate.
- Or, go here: http://www.sfsu.edu/~orspwww/_preaward/_find/recovery.html and click on the grants.gov link. Automated updates on stimulus opportunities.
Also…

- If you failed to get awarded this year either NSF or NIH, email your program officer. There may be hope.
- There is supplement money for awarded grants – stay tuned for next presentation.
The NIH Challenge grants
NIH Supplements
NIH “101”

- What is it? A $30 Billion agency that funds health-related research from cells to society
- Faculty like you serve as reviewers and determine the quality of work that is funded
- Taxpayers like you provide the funding
- Things to think about before you submit
  - Career prep
  - Homework
DHHS STRUCTURE

Dept of Health and Human Services

FDA

CDC

NIH

Etc…
NIH Structure: Institutes and Centers (I/Cs) develop scientific directions and fund research. CSR reviews proposals.
I/Cs behave proactively and solicit proposals in areas needing development

- **RFA**: request for applications. Now termed Funding Opportunity Announcement (FOA). One receipt date with set-aside of $.
- **PA**: Program Announcement – indication of I/C interest in an area. No set-aside.
- **PAS**: Prog Announcement with $ set aside.
- **PAR**: Prog announcement reviewed by the I/Cs themselves, instead of CSR. Unique Institute interest such as tx or rx research.
Granting mechanisms

- Training grants (T)
- Fellowships – (F)
- Career Development (K)
- Research grant (R)
  - Small (R03)
  - Usual, typical (R01)
  - Exploratory (R21)
  - AREA (R15)
  - Small biz (R41-R44)
- Centers (P) & Cooperative Agreements (U)
You are ready to write an NIH proposal if you…

- have a good idea …PLUS
- have data that proves it’s a good idea …PLUS
- have published the findings in a peer reviewed journal or presented at a national mtg with published abstract…PLUS
- are approaching the proposal from a theory-based or model-based perspective (unless it’s exploratory/feasibility testing)

At this point, you should call the NIH.
WHO to call at the NIH

- Two key people:
  - Program officers in the Institutes – “does this application belong in your program?” Pitch it.
  - Scientific Review Officer (SRO, formerly SRA) – will this application be correctly reviewed in your committee? No pitch.

- but, do your homework first!
Overarching Considerations
Before Starting the Application

- Review Group Considerations
  - Find out idiosyncrasies of targeted review group
For example: BIOBEHAVIORAL AND BEHAVIORAL PROCESSES INTEGRATED REVIEW GROUP (IRG) COMMITTEES

APDA  Adult Psychopathology and Disorders of Aging Study Section
BRLE  Biobehavioral Regulation, Learning and Ethology Study Section
CP    Cognition and Perception Study Section
CPDD  Child Psychopathology and Developmental Disabilities Study Section
*LCOM Language and Communication Study Section
MESH  Biobehavioral Mechanisms of Emotion, Stress and Health Study Section
MFCS  Motor Function, Cognitive Control, and Speech Study Section
MFSR  Motor Function, Speech and Rehabilitation Study Section

Read the descriptions of these IRGs and study their membership. Be tasteful about citing the members’ papers in your proposal.
Committee Membership Roster - LCOM
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LANGUAGE AND COMMUNICATION STUDY SECTION
ROSTER

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PRESIDENT AND DIRECTOR OF RESEARCH
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...etc (16 “standing” members, in all)

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Call this person
A Video on Peer Review at NIH
The Center for Scientific Review has produced a video of a mock study section meeting to provide an inside look at how NIH grant applications are reviewed for scientific and technical merit. The video shows how outside experts assess applications and how review meetings are conducted to ensure fairness. The video also includes information on what applicants can do to improve the chances their applications will receive a positive review.

www.csr.nih.gov/Video/Video.asp
More homework: Search the CRISP database!

- which Institute/Center is funding this work?
- which Study Section is reviewing this work?
- who is funded and actively working in this area? (potential collaborators; avoid direct overlaps)
Current and Historical Awards (1972 - 2009)
Query Form

Enter Search Terms: 

Global Logic:  
- And
- Or
- Phrase

Expansion Logic:  
- Stem
- None

Submit Query  Clear Query

Maximum Records: 250

Thesaurus: View CRISP Thesaurus

PI Name (Last, First):

Award Type: All Types

Activity: All Activities

Grant Number: Use % for wildcard

Grant Title: Use % for wildcard

IRG: All

Institution:

Fiscal Year: 2009

State: All

Alabama

Alaska

Submit Query  Clear Query

Search on LCOM IRG
Active awards in 2009, reviewed by LCOM IRG – note which Institutes funded the work!

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<thead>
<tr>
<th>Grant Number</th>
<th>PI Name</th>
<th>Project Title</th>
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<tbody>
<tr>
<td>1R21AC420415-01A1</td>
<td>ALMOR, AMIT</td>
<td>Processing Discourse Reference in Mind and Brain</td>
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<td>1R15DC009027-01A2</td>
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<td>CARAMAZZA, ALFONSO</td>
<td>Cortical Organization of Noun and Verb Processing</td>
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Abstract and Aims

- Critical sections; may be the only part of your application reviewers will read or have read to them!

- Write them first and revise them last

Come to April 2 workshop! All Specific Aims, All the Time
Common pitfalls

- Studies lack cohesiveness
- Sequence of experiments is not logical
- Study results will lead to a dead end
- Contingency plans either not stated, or ill-conceived and not feasible
Common pitfalls of junior PIs

- Overambitious, Overambitious, Overambitious
- Insufficient experimental detail
- Rationale for choice of methods is not explained
- Lack of publication history in the area (can’t do “trust me”)
Finally…..

You won’t get a grant if…

You *Don’t* Apply!

And, you won’t get a grant if…

You *Don’t* *Re-Apply!*
Persistence pays off

**FY 2008 R01 EQUIVALENT GRANTS**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Success Rate</th>
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<tr>
<td>New</td>
<td>8.4%</td>
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<tr>
<td>New with <em>Resubmissions</em></td>
<td>39.2%</td>
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<tr>
<td>Continuations</td>
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<tr>
<td>Supplements</td>
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**R01 Equivalent Grants** R01, R29 and R37
NIH RESEARCH APP SUCCESS RATES * BY TYPE OF GRANT, 2008

- NEW 18.7%
- COMPETING CONTINUATION 37.5%
- SUPPLEMENTS 40.3%
- OVERALL 21.8%

* Awarded/Submitted x 100  Note this number includes all resubmissions