Leaping the Hurdles and Navigating the Maze

How to Get NICHD Funding

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Demographic and Behavioral Science Branch (DBSB)
Center for Population Research (CPR)
National Institute of Child Health and Human Development (NICHD)
National Institutes of Health (NIH)
U.S. Department of Health and Human Services
What do I do?

- Program official at DBSB/NICHD
  - Migration, population distribution, race & ethnicity, population & environment methods, some centers, most F32s, K01s
- Help applicants up until they submit their application, then after their applications are reviewed
  - SRAs handle review, more on this later
What do I do?

- Manage funded grants for NICHD
- Write program announcements and RFAs
- Help establish DBSB’s (and NICHD’s) priorities
National Institutes of Health (NIH) Overview

- The mission of the NIH is to uncover new knowledge that will lead to better health for everyone
- 27 components (institutes and centers)
- $27.3 billion in funding in 2003
- 4/5 goes to grants and contracts supporting extramural research
NIH funding for behavioral and social science research (2002)

$2.3 BILLION

- Mental Health: $402
- Drug Abuse: $400
- Cancer: $249
- Child Health: $246
- Aging: $209
- Alcohol: $171
NICHD

- Largest single funder of behavioral and social research on population

- Most funding for this research is through the Demographic and Behavioral Sciences Branch (DBSB)
  - $87.4 million grant funding in FY02
**NICHD:** Nat’l Institute of Child Health & Human Development  
**NIA:** Nat’l Institute on Aging  
**FIC:** Fogarty International Center  
**CSR:** Center for Scientific Review  
**DSR:** Division of Scientific Review  
**DBSB:** Demographic & Behavioral Sciences Branch
Funding Opportunities and Mechanisms at the NICHD
DBSB *always* interested in funding research in:

- Fertility and contraception
- Mortality, morbidity and health
- Migration and population distribution
- Immigration and immigrants
- Family and household structure and processes
- Marriage and cohabitation
- Demographic methods
- Economic demography
- Behavioral research on HIV/STDs
- Population and environment
- Race and ethnicity
- Child care
- ... and more
What kinds of funding can I get?

- Training and development
- Research support
Grants for junior investigators: Training and development

- **F31** Predoctoral Fellowships
  - Minority students
  - Students with disabilities
- **F32** Postdoctoral Fellowships
- **K01** Mentored Population Research Scientist Development Award
Grants for junior (& other) investigators: Research

- **R01** Research Project Grant
- **R03** NIH Small Research Grant Program
- **R21** NIH Exploratory/Developmental Research Grant
- **R15** Academic Research Enhancement Awards (AREA)
- **S** Research Supplements to Promote Diversity in Health-Related Research (on existing R01s & other grants)
R03 NIH Small Research Grant

- Limited funding/short period of time
- Examples:
  - Pilot/feasibility studies
  - Secondary analysis of existing data
  - Small, self-contained research projects
  - Developing new research methodology or technology
R21 NIH Exploratory/Developmental Research Grant

- New exploratory and developmental research projects

- Examples:
  - Feasibility studies
  - Unique/innovative use of an existing methodology to explore a new scientific area
  - High risk/high payoff
## R01/R21/R03 (at NICHD)

<table>
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<tr>
<th>Limits</th>
<th>R01</th>
<th>R21</th>
<th>R03</th>
</tr>
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<tbody>
<tr>
<td>Time</td>
<td>5 years</td>
<td>2 years</td>
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<tr>
<td>Funding cap</td>
<td>$500k/yr</td>
<td>$200k/yr</td>
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<td></td>
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<td>$275k total</td>
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<td>25</td>
<td>15</td>
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<td>Review</td>
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<td>CSR</td>
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<td>NIH</td>
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<tr>
<td>Renewable?</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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Special funding initiatives

Most important thing to remember:

YOU DON’T NEED A SPECIAL FUNDING INITIATIVE (RFA, PA) TO APPLY FOR FUNDING

I’ll remind you again in a few minutes
Special funding initiatives

- RFA: Request for Applications
- PA: Program Announcement
- How NIH asks researchers to consider certain topics or areas
- Also how NIH notifies researchers that funding mechanisms (e.g., R03s, R21s, K01s) are available
- Notices give additional information about RFAs and PAs
## RFA versus PA:

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<tr>
<th></th>
<th>RFA</th>
<th>PA</th>
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<tbody>
<tr>
<td>NIH sets aside funds for projects?</td>
<td>Yes</td>
<td>Usually not</td>
</tr>
<tr>
<td>Special application deadlines?</td>
<td>Yes</td>
<td>Usually not</td>
</tr>
<tr>
<td>How long active?</td>
<td>Until deadline</td>
<td>3 years</td>
</tr>
<tr>
<td>Special review panel?</td>
<td>Yes</td>
<td>Usually not</td>
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</table>
Examples of RFAs

- Mind-Body/Interactions and Health
- Development of Community Child Health Research
- Population Research Infrastructure Program
- Health, Environment and Economic Development (HEED)
Examples of PAs:

- Research topics
  - Social & Demographic Studies of Race & Ethnicity in the United States
  - Social & cultural dimensions of health
  - Methodology & measurement in the behavioral & social sciences
  - Population movement
  - The science & ecology of early development (SEED)
Examples of PAs: Funding mechanisms

- NIH Small Research Grant Program (R03)
- NIH Exploratory/Developmental Research Grant Award (R21)
- Mentored Research Scientist Development Award (K01)
Remember:
Relatively few research grants result from RFAs & PAs

DBSB R01s, FY2000
4 things to know about AIDS research funded through DBSB:

- Different application deadlines
- Different study sections
- Money comes from different funding streams
- For more information contact Susan Newcomer at:
  (301) 435-6981 or sn19y@nih.gov
Examples of NICHD/DBSB announcements—HIV related

- Research on HIV/STD prevention messages
- Research on social networks and HIV risk prevention
- Demographic research on sexual behaviors related to HIV
The Process: Idea to Application

• A good idea
• Before you apply
• Rules for writing a grant application
• Other things to know and do
The starting point . . . Have a good idea

- No amount of grantsmanship can disguise a weak idea . . .

- But poor grantsmanship can kill a good idea
What is a good idea?

A good idea:

• Addresses a significant question
• Brings something new to the table
• Is focused
• Is feasible
Before you apply

- Look at the funder’s website
- Talk with program staff about research ideas & funding mechanisms
- Read the instructions in application (and PA/RFA, if applicable)
- Know the deadlines
Learn from what others have done

- Get copies of
  - Successful applications
  - Successful summary statements
  - Unsuccessful summary statements

“Summary statement” = Critique from review group = “Pink sheet”
Find a guide

- Work with someone who knows the process
  - Another researcher, outside NICHD
- And way, way before you apply: Pick a mentor who will help you launch your career
Now sit down and start writing

- Here are a few pointers
Know your strengths & weaknesses

- Write about what you know
  - Don’t use your first application to completely change research directions
- Never change research directions to respond to an RFA or PA
- Don’t promise more than you can deliver
Develop a unified proposal with a sharp focus

1. Theory
2. Hypotheses
3. Data

4. Research and analysis plans

should all be carefully integrated and logically related
Be persuasive

- Sell your ideas early in the application
- Crisply state your specific aims
- Explain yourself—Don’t assume reviewers will know what you mean
- Tell reviewers:
  - What you want to do
  - Why is it important to do this research
Take your time

- Don’t rush in an underdeveloped application to meet a deadline
- Think through and address
  - All aspects of your research plan
  - All possible objections to it
- Leave time for trusted colleagues to critique your application – several times!
Don’t irritate the reviewers

- Follow the directions
- Don’t be sloppy
- Don’t use teeny, tiny type
- Don’t include an appendix as large as a cow
Other things to know and do
Know the deadlines

- At NIH, for R01s* and many other mechanisms:
  - February 1, June 1, October 1
  - Revisions may have different dates
- AIDS applications 3 months later
- Check application guidelines for your situation

*Unless RFA
Most common pitfall for new applicants

- Great ambitions ... underdeveloped plans
Another common problem

- Failure to read the instructions
  - READ the application form
  - READ the RFA, PA, or Notice, if applicable
  - Specific instructions in an RFA, PA, or Notice supercede instructions in application form
Myths about applying

- It’s better to have an established researcher as PI
- Shorter project periods are more likely to be funded
- It’s a good idea to underestimate the project’s cost
- Don’t apply unless there is a PA or RFA
Why you should apply for NICHD grant funding:

- It’s hard work to get a grant, but a GREAT way to support your research.
  - You control the science
  - Grant has few administrative requirements
- You get great input from wise people about your research
- Prestige of the NICHD/NIH reputation will be associated with your research
Application to funding: How does NICHD decide what to fund?
Brilliant idea

Brilliant proposal

Institution submits

Join French Foreign Legion

Revise proposal

Get funding

NIH reviews
Evaluation of scientific merit

Your proposal comes in and gets reviewed
Evaluation of scientific merit separate from funding decision

- Evaluation of scientific merit:
  - Run by scientific review administrators (SRAs)

- Decision whether to fund:
  - Program staff
  - Advisory council
  - Institute director
Who reviews NIH proposals?

- A “study section”—there are dozens
- Which study section depends on:
  - Scientific content and methodology
  - Mechanism (e.g., R01, R03, F32, K01 . . .)
  - Which Institute proposal goes to
  - Whether responding to RFA
What’s a “study section”

- Top scientists with relevant expertise from outside NIH
- Special scientific review administrators, not program staff, put together
- Most applications go to one of the standing committees that meets three times a year
  - You can look up the rosters to see who is on
Five review criteria

- Significance
- Innovation
- Approach*
- Investigator*
- Environment*
What R01 reviewers are told about evaluating new researchers:

- **Approach:** More emphasis on demonstrating feasibility of techniques/approaches than on preliminary results
- **Investigator:** More emphasis on training and research potential than on number of publications
- **Environment:** Evidence of institutional commitment—resources, time to perform research
Basics of NIH Review

- Priority score assigned
  - Numerical rating—Scientific merit of proposed research relative to "state of the science"
    - 100-150: Outstanding
    - 151-200: Excellent
    - 201-250: Very good
    - 251-300: Good
    - 300-500: Unscored (usually)
What applicant gets after review

- A score
- Detailed written comments from at least 2 reviewers
  - Even if your application is “unscored”
- Scored applications: Written summary of discussion from study section meeting
  - SRA prepares
Cover letter with application

- You can request CSR to:
  - Assign your application to a particular Institute to consider funding (e.g., NICHD, NIA, FIC)
    - Mention name of program official you have talked with
  - Assign your application to a particular study section to review scientific merit
The funding decision
Most research projects

R03s, etc.

DBSB reviews proposal & summary statement, makes funding recommendation

Review by Advisory Council

NICHD Director makes final funding decision
What if I don’t get funded?

- TRY AGAIN!
- Nearly all funded investigators have had proposals blown out of the water . . . But they applied again
- Even applications that are “unscored” can receive funding if appropriately revised
- Talk to program staff
What Program Staff Can Do for You
What program staff can do for you

- Help you before you submit your application
- Let you know what your scores are
- Let you know what happened to your proposal during study section
- Help you interpret your summary statement
What program staff can do for you

- For scientific reasons, arrange funding for grants that are a little below the funding line (currently exceedingly rare)
- For scientific reasons, recommend adjusting grants’ budgets (also rare)
What program staff cannot do

- Serve on the external review panel
- Run the external review panel
- Choose the external reviewers
- Assign your proposal to a particular review panel