Welcome to NICHD: Grants 101

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What I hope you will take away from today’s talk?

• General info on some of NICHD’s area’s of interest --- with an eye towards SREE
• Types of funding mechanisms that are available
• Thinking of grants/fellowships as a critical part of your career development plans
• Hints on how to avoid common mistakes when applying
• Suggestions on effectively interacting with program staff at NIH
Know your audience

- NICHD funds research in a range of topics that directly relevant to SREE
  - E.g., literacy, mathematics, social/affective development, language development
- In contrast to other funders, NIH views these problems through the lens of a public health organization
  - Your application will need to reflect this.
  - Your mentor and/or program officer can help you with this
Child Development & Behavior Branch
one of the branches within NICHD

- Language, Bilingualism & Biliteracy Development & Disorders
- Reading, Writing & Related Learning Disabilities
- Early Learning & School Readiness
- Developmental Cognitive Psychology, Behavioral Neuroscience, & Psychobiology
- Human Animal Interaction Research
- Math & Science, Cognition & Learning
- Pediatric Behavior & Health Promotion
- Social & Affective Development, Child Maltreatment & Violence

http://www.nichd.nih.gov/about/org/crmc/cdb/
Will NICHD Fund My Research?

• Opportunities for funding at NICHD are diverse, but you should check with a Program Officer (PO) before submitting a grant application
  ▫ Most grant applications are not in response to a specific Request for Applications (RFA) - They are “unsolicited applications”
  ▫ However, an NICHD Program Officer may direct you to another funding source as appropriate
How do you figure out what to announce to apply to?

- Applicants should consider at least these factors:
  - Career stage (e.g., graduate student, postdoc, Asst. Professor)
  - Publication record --- It’s not simply the number of pubs!
  - Pilot data --- type, quality, and how pertinent to your planned project
  - Mentorship needs
  - Actual costs of doing the necessary training / mentorship or conducting the research
  - Realistic view of timeline
    - It typically at least 9 months from application date to funding
Background on most common funding options

- **R01** Research Project Grant Program
  - Up to 5 years, less than $500K per year in direct costs
  - If direct is $500K or over, you need to contact program official 6 weeks or MORE before application due date
  - Early Stage Investigator Initiative
  - [http://grants.nih.gov/grants/funding/r01.htm](http://grants.nih.gov/grants/funding/r01.htm)

- **R03** Small Grant Program
  - Up to 2 years
  - $50K/year direct
  - Not just for early career investigators (at least at the NICHD)
    - [http://grants.nih.gov/grants/funding/r03.htm](http://grants.nih.gov/grants/funding/r03.htm)

- **R21** Exploratory/Developmental Research Grant Award
  - Up to 2 years
  - Up to $275K total direct costs over the course of the grant
Brief Overview Cont.

• Fellowships (pre & post-doc)
  ▫ **F31** --- Individual Predoctoral Fellowships to Promote Diversity in Health-Related Research
    • Includes funds for stipend, tuition and fees and minimal research expenses
    • This is in your name!
  ▫ **F32** – Individual Postdoctoral Fellowships
    • Stipend and funds for some research expenses.
    • This is open

• Career Development awards
  ▫ E.g, K99/R00, K01, K08, & K23

  ▫ NOTE: you must be a citizen or non-citizen national of the United States, or must have been lawfully admitted to the United States for Permanent Residence
Where grant applications fit into career planning and development?
Planning for your career

• When should you begin planning for an application?
  ▫ **NOW**...applications take months/years of planning to be positioned to apply
  ▫ It often takes more than a year to obtain funding if one is successful
    • It is rare to be funded on the first submission
    • The needs are different by type of funding and collecting things like pilot data take time
Generate a career development plan for yourself
- Identify goals for the next 7 years
  - Why 7 years? This requires at least 2 award if you are going to receive funding from most federal funders
- Work back from goals to identify path to success
- Identify necessary precursors
  - Publications, preliminary data, degree attainment, training/mentorship, etc.

And remember
- Don’t get overwhelmed...it’s a marathon not a sprint!
- Be strategic to increase likelihood of success
Applying for grants
Grant Writing

- This is different than writing for a journal
  - Prospective view
  - Big PICTURE is important
  - Make the case for the value of the science to the field (theoretical and practical import) and consideration of alternative outcomes
  - Why is this the best next step?
Grant Writing --- Prospective rather retrospective!

• Grantsmanship matters!
  ▫ Your ability to convey your understanding of the science and intentions clearly and succinctly is important (for both grants and manuscripts)
  ▫ Know your audience! You need to be able to convey complex ideas and concepts to scientists outside of your field

• Playing an active role in grant writing provides insight on how science is planned and conducted
  ▫ Big Picture is Key --- what is the significance?
  ▫ Long term vision for how project will impact the field
  ▫ Understanding of benefits and limitation of approach
  ▫ AND yes the technical details do matter!
What to consider when thinking about potential opportunities: Part 1

- Planning is CRITICAL! The Funding process takes TIME
  - Identifying potential projects
  - Finding opportunities
  - Write applications
  - Review Process
  - Revision Process
  - ETC
General Grant Writing Comments

• Pay particular attention to how you pose and/or write:
  ▫ Title, abstract, aims, examples, etc.

• Be explicit
  ▫ Pages are limited so think carefully about what to make explicit and what to leave implicit
  ▫ Applications are shorter now (vary by mechanism) so this decision in increasingly important

• Think big picture BUT don’t overstate import

• Revise, revise, revise!!!
  ▫ Come in with a strong proposal --- NIH only allows 1 revision to any application
Review Process

- Application submitted by specific due date and reviewed some period later (roughly 3-4 months)
- Reviewed by panel of scientific peers in the community
- Evaluated for scientific merit
  - Think significance, innovation, methods, expertise, and resources
- Funding based upon scientific merit, programmatic considerations, availability of funds
- The vast majority of people have to revise and resubmit before they are competitive for funding
The Value of Review Statements

- **Review Statements (summary statements)**
  - Don’t take the comments personally but rather think of these as constructive criticism
  - Helpful to identify strengths and weaknesses in current approach and future directions
  - Think richly about the feedback that you were given and how this feedback has implications to the project more generally
    - Not every concern will be presented --- reviews provide context as to weakness and strengths but NOT a checklist for revision

- Talk to the program staff for context!!
How do I interact with POs?

• Usually email is the best start
  ▫ Initially, send a short introduction
    • who you are (include info about scientific training and current job/career level)
    • what your scientific interests are
    • goals you are trying to achieve through possible funding sources
    • Offer to send a scientific concept of your work for review (think 1 page or less here)

  ▫ FOLLOW-UP if necessary

  ▫ Be assertive, but not pushy --- this is your career after all
Conclusion

• Plan ahead! You need a long term vision for where you want to go career-wise and scientifically

• Be your own advocate

• Happy writing!
For More Information See…
http://www.nichd.nih.gov/about/org/crmc/cdb/
or contact
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