Grant Writing 101

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“Inspiring minds today to transform tomorrow”
Objectives

• Find the ‘right’ grant mechanism
• Navigate grant submission
• Understand how grants are reviewed
Where do you start?

Federal Grants (NIH, NSF, DoD, etc)

Non-Federal (Private Foundations)
NIH Career Award Wizard

NIH NRSA F Awards

• **Duration:**
  - F30 – up to 5 years aggregate
  - F31 – up to 5 years aggregate
  - F32 – up to 3 years aggregate

• **Eligibility:** US citizen / Permanent Resident

• **Due Dates:** April, August, and December

• **Overall Success Rate:** 23% (FY2016)
F99 / K00 Individual Predoctoral to Postdoctoral Fellow Transition Award

- The purpose of this award is to facilitate the transition of talented graduate students into successful research postdocs.

- Provides up to 6 years of support in two phases:
  - The initial (F99) phase will provide support for 1-2 years of dissertation research (final experiments, dissertation preparation, and selection of a postdoctoral mentor).
  - The transition (K00) phase will provide up to 4 years of mentored postdoctoral research career development support, contingent upon successful completion of the dissertation degree requirements and securing a postdoctoral position for further research training and career development leading to research independence.
  - The two award phases are intended to be continuous in time.
National Science Foundation Portal

- **Special Programs**
  - Trainee status
  - Business
  - Veterans

- **Program Areas**
  - Topic
  - Discipline
Finding Grant Mechanisms using UAB’s Integrated Research Administration Portal (IRAP)

Powered by Software from InfoEd Global, Inc.
Scoring Grant Sections

- Applicant / Training Plan
- Sponsor(s) / Environment

Overall Impact

Project Plan
Grant Submission

- **UAB Office of Sponsored Programs**
  - Draft Review – 7 business day deadline
  - Final Review – 2 business day deadline

- National Institutes of Health (NIH) Commons: [https://era.nih.gov/commons/faq_commons.cfm](https://era.nih.gov/commons/faq_commons.cfm)

- NSF Fast-Lane: [https://www.fastlane.nsf.gov/fastlane.jsp](https://www.fastlane.nsf.gov/fastlane.jsp)
Overview of the grant review process

1. Grant is submitted
2. Grant is forwarded to the CSR for assignment
3. SRO assigns grant to reviewers
4. Reviewers submit scores
5. PO, SRO, and reviewers meet
6. SRO organizes scores / comments and sends to applicant
How are grants assigned to a study section?

• The applicant can request assignment to a particular institute and study section in a cover letter.

• If a letter is not provided, the CSR will assign the application based on title and abstract content.

http://public.csr.nih.gov/StudySections/Pages/default.aspx
What is an SRO (Scientific Review Officer)?

- Administrator of the study section
- Checks each grant for completeness
- Assigns reviewers
- Communicates with applicant and reviewers regarding:
  - assignment
  - supplemental information
How are reviewers assigned?

• SRO assigns reviewers based upon the grant content and matched expertise of the reviewers

• Permanent study section reviewers
  • Established investigators
  • Serve 4 year terms, reviewing grants each cycle

• ‘Ad-hoc’ reviewers
  • Provide needed expertise, which is lacking in permanent members
  • Serve only for designated cycle
Scoring Grant Sections

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Project Plan
## NIH Scoring System

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

**Non-numeric score options:** NR = Not Recommended for Further Consideration, DF = Deferred, AB = Abstention, CF = Conflict, NP = Not Present, ND = Not Discussed

**Minor Weakness:** An easily addressable weakness that does not substantially lessen impact

**Moderate Weakness:** A weakness that lessens impact

**Major Weakness:** A weakness that severely limits impact
Overall Impact

- Reviewers will provide an overall impact/priority score to reflect their assessment of the likelihood for the project to exert a sustained, powerful influence on the research field(s) involved from the five core review criteria.
What happens during study section meeting?

• Before the meeting, reviewers submit preliminary scores; these are compiled by the SRO.

• In general, grants with ‘non-competitive scores’ are not discussed during the meeting.

• Grants with competitive, fundable scores are presented by the reviewers and discussed by the entire panel during the meeting.
  • each study section member scores all applications that are discussed
NIH Review Panel Video
If you have questions / concerns about the reviewers’ comments...

• Read the comments several times
  • Ask others to read them as well

• **DO NOT CALL THE SRO OR ANY MEMBER OF THE STUDY SECTION!!!**

• Call the Program Official...
Handling Rejection

• Don’t respond in anger
• Address all points
• Reread document critically
• Seek advice
Current NIH policy on resubmissions

• As of April 2014:

  • Following an unsuccessful resubmission (A1) application, applicants may submit the same idea as a new (A0) application for the next appropriate due date.

  • NIH will not accept a resubmission (A1) application that is submitted later than 37 months after submission of the new (A0) application that it follows.
NSF Resubmission Policy

• Proposals that have been declined are not eligible for resubmission for one year from the original date of submission and must be substantially revised to be considered.

• Resubmittals that have not clearly taken into account the major comments or concerns may be returned without further review.
Summary

- Start EARLY; Know the deadlines
- Search IRAP, etc
- Important Question / Goal
- Revise / Resubmit
- Just-in-Time info; Adjust Budget; Progress / Final Reports
- REPEAT!!
UAB Resources

- UAB Graduate School Professional Development Program
  http://main.uab.edu/Sites/gradschool/programs/professional
- Writing Fellowships (GRD 709)
- Guide to Effective Grant Writing (2012)

- UAB CCTS Research Commons:
  https://www.uab.edu/ccts/researchcommons

- UAB Grad School: http://www.uab.edu/traininggrants/

- UAB Faculty Reviewers on CSR Study Section Rosters
  (but NOT if they are on a study section where you intend to submit an application)
NIH and Other Resources...

- NIH Extramural Training Mechanisms
  http://grants.nih.gov/training/extramural.htm

- NIH RePORTER: searchable database of funded NIH grants
  http://projectreporter.nih.gov/reporter.cfm

- Science’s ScienceCareers.org –
  http://www.sciencemag.org/careers/where-search-funding