Successful grant writing
Getting it right

Critical stages of grant applications...
...and what to consider along the way

Generate an idea
- Why is this interesting and who cares?
- Who will benefit if the work is successful?
- How novel is this idea?
- Why am I the best person to do this?
- Can I realistically achieve what I claim?

Find a matching funding opportunity
- Look at who funds similar research.
- Be aware: different agencies support different types of projects.
- Scan for available calls.
- Be willing to cast a wider net.
- Think outside of the box. Keep your mind open.

Background research
- Understand the different agencies and their styles.
- Talk to the Program Manager – they are used to cold calls!
- Do the literature search, it can save you weeks of writing!
- Assume the panel members know nothing about your work, but everything about your competitors.
- But don't expect the panel members to be experts in your field, put your idea into context.

Write technical portion
- What problem are you addressing?
- Why hasn't it been solved yet?
- Why do you think you will succeed? What is your hypothesis?
- What is your work plan and milestones?
- How will you measure success?

Check administrative parts
- Read the call – again and again and again...
- Calls are usually specific about the formats they require.
- Terms like “required” and “must include” should be adhered to.
- Work on your budgets and other documents in advance – be prepared.
- If you need external letters, give people enough time to get them to you.

Submit and forget
- Allow enough time to upload the files and check pdfs for readability and errors.
- Many agencies systems get very busy during submission times – accept and prepare for this.
- Once submitted, forget about the proposal until you hear from the review panel.
- Make sure that the agency communications don't get filtered into your spam folder.
- Many agencies will return detailed reviews. Use the review to revise and resubmit your grant.

Top tips and tricks

Time keeping: Be realistic about the time it takes to write the grant - grants are like an ideal gas, they fill all the space available to them.

Check your style: Do not use tiny fonts - 11 point is probably as low as you can go. Leave ample margins (3/4 in is pushing it). Avoid passive voice and tell a story.

Know your audience: Find out more about your funding agency and use it to your advantage e.g. emphasize basic science for NSF, healthcare for NIH or technology for DARPA etc.

Connect and network: Grant calls include the contact information for a reason. Call the Program Manager as they can seldom answer all their emails. Prepare all your questions in advance.

Recycle but be warned: If you reuse parts of older grants (everybody does it) watch for the items specific to older grants in those texts - nothing reveals a quick hack job better.

Size matters: When it comes to budget be frugal but realistic. The average size of the award specified in the call is a good indication of the scope of work the Program Manager has in mind.

Be original! Try to be original and propose ideas that make sense, not just the “boilerplate”. Reviewers have read the “boilerplate” many times before. But don’t forget to explain things that look unusual.

Time and effort for a typical grant

<table>
<thead>
<tr>
<th>Task</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Looking for a funding call</td>
<td>25%</td>
</tr>
<tr>
<td>Planning the proposal</td>
<td>25%</td>
</tr>
<tr>
<td>Writing the technical narrative</td>
<td>35%</td>
</tr>
<tr>
<td>Administrative parts</td>
<td>10%</td>
</tr>
<tr>
<td>Submission</td>
<td>5%</td>
</tr>
</tbody>
</table>

And remember...
- Always assume any problems were your fault, not the reviewer's.
- If the reviewer has misunderstood something, then you did not explain it clearly enough.
- Make sure you invest considerable work and effort in any revision - Reviewers will likely do the same.
- …and finally – good luck!
Eight key questions that funders ask reviewers to consider when they evaluate your research grant proposals, and the associated review criteria terms used across various funding agencies:

- **Why does the research matter?**
  - Significance
  - Importance

- **How is the research new?**
  - Innovation
  - Novelty
  - Creativity

- **How will the research be conducted?**
  - Approach
  - Plan
  - Methodology
  - Objectives
  - Aims

- **In what context will the research be done?**
  - Environment
  - Resources
  - Populations
  - Facilities

- **Who's involved in the research and what's special about those people?**
  - Investigators
  - Organization
  - People
  - Researchers
  - Personnel
  - Partners
  - Collaborators
  - Staff

- **What is the return on investment?**
  - Impact
  - Value
  - Relevance
  - Return on investment (ROI)

- **How will success be determined?**
  - Evaluation
  - Assessment

- **How effectively will the financial resources be managed?**
  - Budget

Top tips and tricks:

**Understand the funder:** It’s important that your research aligns with the funder’s goals. Read the funder’s mission statement to consider synergies between its goals and your research program.

**Recognize that funders share the same goal:** When evaluating research proposals, funders that offer research grants want to support research that fits within their mission (relevant) and will bring a strong return on their financial investment (impactful).

**Know that it’s really all the same review:** Despite the use of funder-specific jargon to describe review criteria, reviewers are asked to evaluate proposals based on a common set of fundamental review questions—the eight key questions listed to the left.

**Use the review criteria as your roadmap:** The funder’s review criteria directly inform how the proposal content should be presented and how much space should be afforded for each section of the proposal.

**Use the key questions as a guide:** If a funder does not provide transparent information about its review criteria in its proposal guidance, reach out to the program officer to ask about the eight key questions and which might best apply to the particular opportunity to which you’re applying.

**Use Review Criteria to Guide Proposal Development**

A funder’s goals are to identify research that is:

1) Relevant – fits the funder’s mission

2) Impactful – high return on investment

**Proposal Review Criteria**

Based on 8 Key Questions

**Use as a Guide to Develop your Research Grant Proposal**

And remember...

- To succeed in the highly competitive landscape of research grant funding, you should consider diversifying your funding portfolio.

- Understanding that different agencies use a similar set of review criteria will help you develop proposals for a wide range of funders.