

# How to Get Started with Grants (And Make External Funding Part of Your Career)

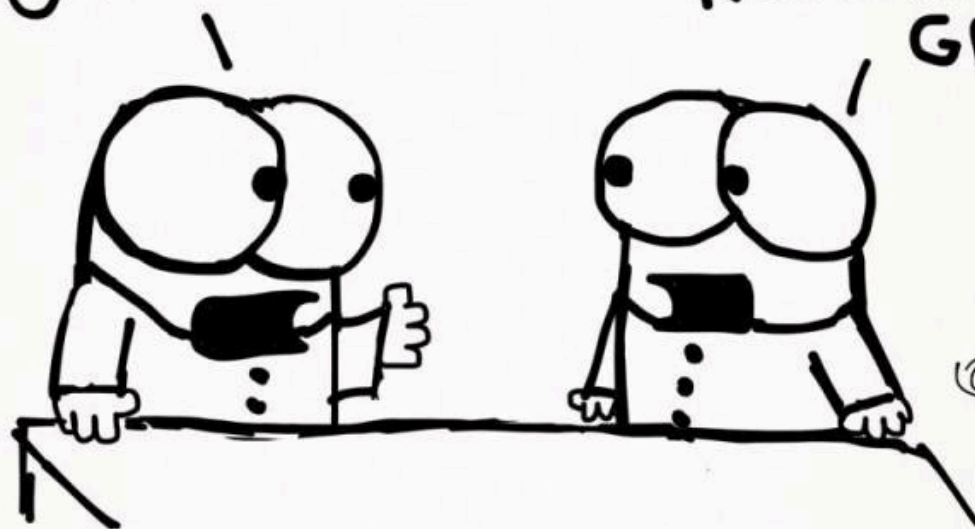
September 22, 2023

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STEM Center & Environmental Sciences

I ASKED  
SANTA  
FOR A  
RESEARCH  
GRANT.

YOU STILL  
BELIEVE IN  
RESEARCH  
GRANTS?



© THE  
UPTURNED  
MICROSCOPE

# Overview

- 9 - 9:30 Introduction and Learning Outcomes  
Finding & Choosing a Funding Source
- 9:30 - 10:30 Preparing a Competitive Proposal
- 10:30 - 11:00 Top Ten Mistakes of First-Time Proposal Writers  
External Funding and Your Career

# Learning Outcomes

1. Explain stages of the grant lifecycle.
2. Identify multiple approaches to finding funding opportunities.
3. Understand how to select an optimal funding source.
4. Explain the major sections of a proposal.
5. Describe strategies used by successful proposal writers.

# What Determines Success?

*A Good Idea*

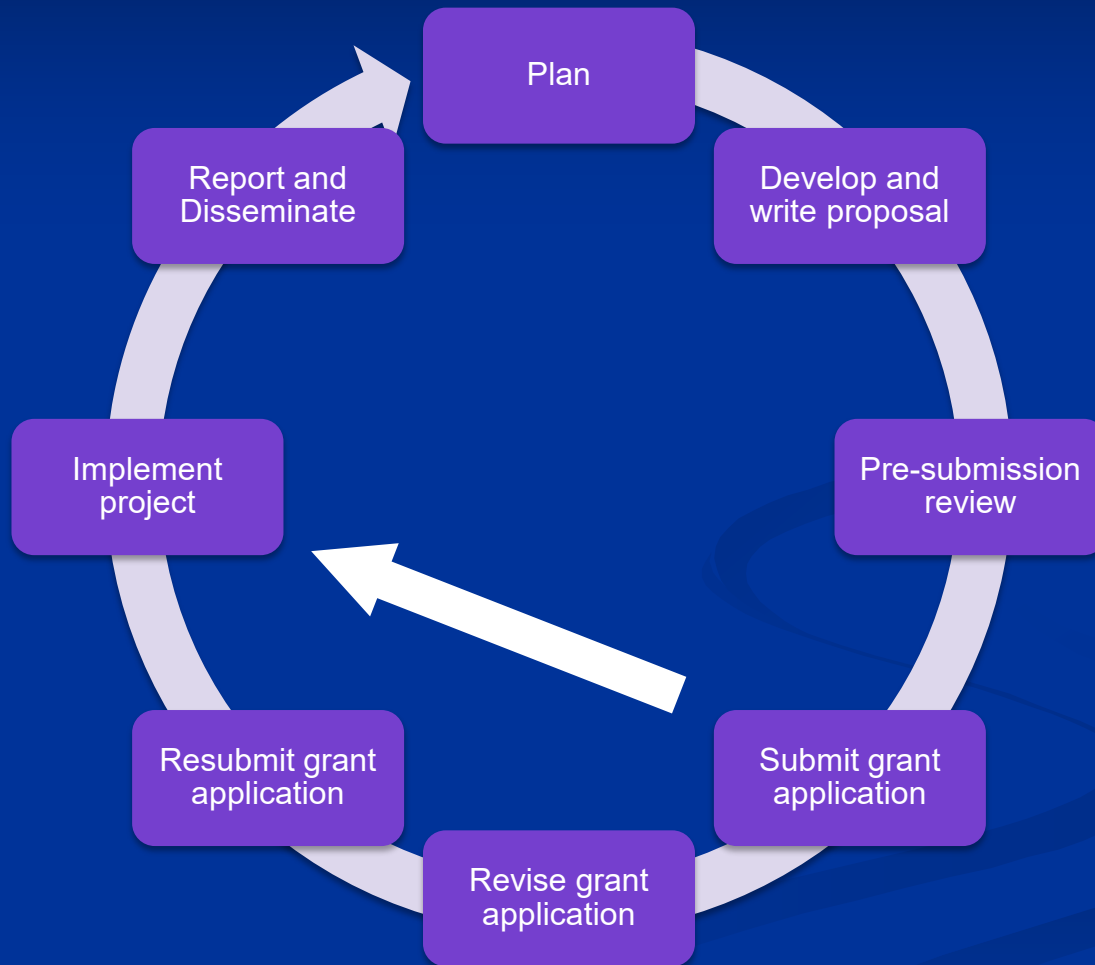
*A Good Fit*

*A Good Proposal*

The art of "grantsmanship" will not turn mediocre science into a fundable grant proposal. But poor "grantsmanship" will, and often does, turn very good science into an unfundable grant proposal. Good writing will not save bad ideas, but bad writing can kill good ones.

— *Jacob Kraicer, MD, PhD*

# Grant Cycle



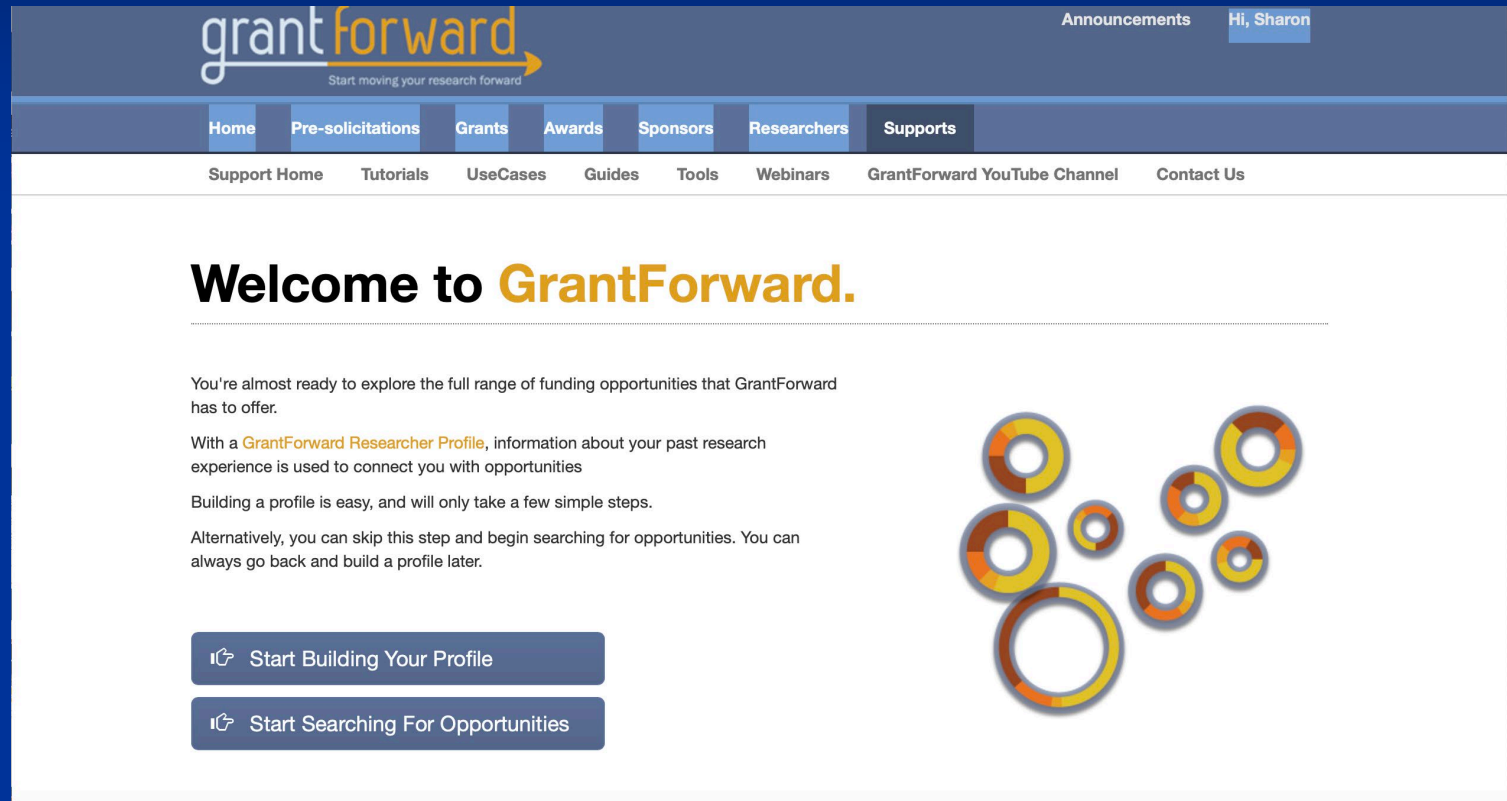
# Finding Funding







# Searchable Databases



The screenshot shows the GrantForward website homepage. At the top left is the logo "grantforward" with the tagline "Start moving your research forward". To the right of the logo are links for "Announcements" and "Hi, Sharon". Below the logo is a navigation bar with tabs for "Home", "Pre-solicitations", "Grants", "Awards", "Sponsors", "Researchers", and "Supports". Underneath this is a secondary navigation bar with links for "Support Home", "Tutorials", "UseCases", "Guides", "Tools", "Webinars", "GrantForward YouTube Channel", and "Contact Us". The main content area features a large heading "Welcome to GrantForward." followed by a paragraph: "You're almost ready to explore the full range of funding opportunities that GrantForward has to offer." Below this is a paragraph: "With a GrantForward Researcher Profile, information about your past research experience is used to connect you with opportunities." This is followed by another paragraph: "Building a profile is easy, and will only take a few simple steps." The next paragraph says: "Alternatively, you can skip this step and begin searching for opportunities. You can always go back and build a profile later." At the bottom left, there are two blue buttons: "Start Building Your Profile" and "Start Searching For Opportunities". On the right side of the main content area, there is a graphic consisting of several overlapping circles in shades of yellow, orange, and red, some of which are partially filled.

grantforward  
Start moving your research forward

Announcements Hi, Sharon

Home Pre-solicitations Grants Awards Sponsors Researchers Supports

Support Home Tutorials UseCases Guides Tools Webinars GrantForward YouTube Channel Contact Us

## Welcome to GrantForward.

You're almost ready to explore the full range of funding opportunities that GrantForward has to offer.

With a [GrantForward Researcher Profile](#), information about your past research experience is used to connect you with opportunities

Building a profile is easy, and will only take a few simple steps.

Alternatively, you can skip this step and begin searching for opportunities. You can always go back and build a profile later.

[Start Building Your Profile](#)

[Start Searching For Opportunities](#)

# Searchable Databases

Failed to open page | Start Page | Candid | Foundation Center and GuideStar are now... | Philanthropy News Digest

## Candid.

Candid at a glance ▾

Philanthropy News Digest | News | RFPs | Jobs | Features |

Special issues: [War in Ukraine](#) | [U.S. Social Sector](#) | Sign up: [Alerts](#) | [Newsletters](#)


### Editors' picks

## Mennonite Central Committee gifted property valued at \$171.1million

The bequest from the estate of Henry Rempel is a large portfolio of rental and development properties for the ongoing support of MCC's ministry.

The properties are located across British Columbia and held in subsidiary companies now owned by MCC B.C...

September 21, 2023



### News from other sources

Filter by:

Subject

Location

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theindiaapost.com

### Biden-Harris Administration Announces Commitment to Advancing Water Equity and Access for All

September 21, 2023

# Finding Funding

- E-Mail Notification
  - Grant Forward
  - Philanthropy News Digest
  - Federal agencies / other funders
- Your colleagues
- Professional society newsletters
- Acknowledgements of funding support at the end of journal articles, posters, and oral presentations

# Choosing a Funder

- Understand the organization's funding priorities
  - Read mission statements, strategic and annual reports
  - Research what the funder has funded recently
  - USASpending.gov
  - Guidestar.org
- Assess the match of your project to the funder in the following areas: project goals, methods/approach, size of your budget, your level of expertise

Why? You must ensure a good fit of your project to the funder.

# Awarded Federal Grants Look-up

The screenshot displays the USA SPENDING.gov Advanced Search interface. The top navigation bar includes the USA SPENDING.gov logo and links for Search Award Data, Explore the Data, Download the Data, and Find Resources. The main header is 'Advanced Search' with 'Share' and 'Download' icons. On the left, the 'Filters' section includes a 'Submit Search' button and a 'Reset search' link. Below this are 'Keyword' and 'Time Period' filters. The 'Time Period' filter is set to 'FY 2023'. The main content area shows '1 Active Filter: TIME PERIOD FY 2023'. Below the filter, there are view options: TABLE, TIME, MAP, and CATEGORIES. A toggle for 'Prime Awards' is turned on, and 'Sub-Awards' is turned off. The main chart is titled 'Spending by Awarding Agency' and shows a bar chart with three bars: Department of Health and Human Services, Social Security Administration (SSA), and Department of Defense (DOD). A 'Feedback' button is visible in the bottom right corner.

**USA SPENDING.gov** Search Award Data Explore the Data Download the Data Find Resources

Advanced Search Share Download

**Filters**  
Learn which data elements are associated with certain search filters

Submit Search  
Reset search

Keyword  
Search by Keyword

Time Period  
Fiscal Year Date Range  
 All Fiscal Years  
 FY 2023  FY 2015  
 FY 2022  FY 2014

1 Active Filter: TIME PERIOD FY 2023

Learn how active filters work

TABLE TIME MAP CATEGORIES Prime Awards Sub-Awards

### Spending by Awarding Agency

What's included in this view of the data?  
View a list of the top Agencies from highest to lowest. View your results by Awarding Agency, Sub Agency, or Office, and hover over the bars for more detailed...

[read more](#)

Agency	Spending
Department of Health and Human Services	High
Social Security Administration (SSA)	Medium
Department of Defense (DOD)	Low

Feedback

# Criteria for Choosing a Funder

- ✓ Eligibility
- ✓ Funder's Mission
- ✓ Scope of Work / Budget
- ✓ Risk Tolerance
- ✓ Success Rate

# Developing the Proposal First Steps





# Know Your Funder

Goal: To understand the organization's interests, culture, style, and priorities

- Read, re-read, and read the request for proposals (RFP)
- Ask questions of the program officer
- Talk to successful grantees
- Talk to colleagues who have served as reviewers
- Ask to see successful proposals

Why? Funders give money to satisfy their needs.  
You must find out what they REALLY want.

# Analyze the RFP

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**Funder's Definition of Problem**

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Anticipated Funding

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Principal Investigator Eligibility

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Institutional Limits & Restrictions

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Proposal Format

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**Review Criteria**

# Look at example proposals

Institute of Museum and Library Services

National Institutes of Health

National Endowment for the Arts

National Endowment for the Humanities

U.S. Department of Education

# Begin planning



Determine Time,  
People, Resources

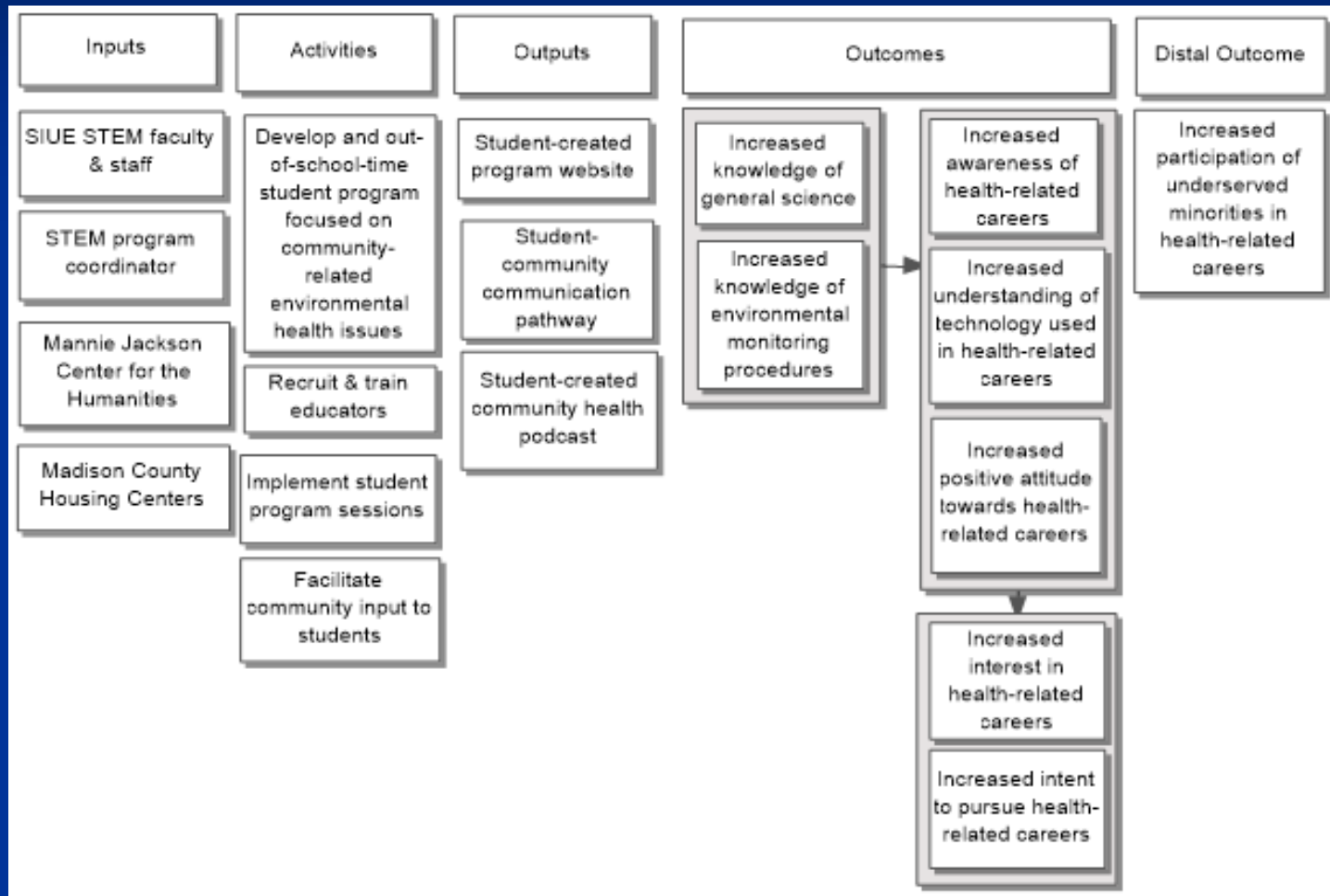


Enlist  
Collaborators



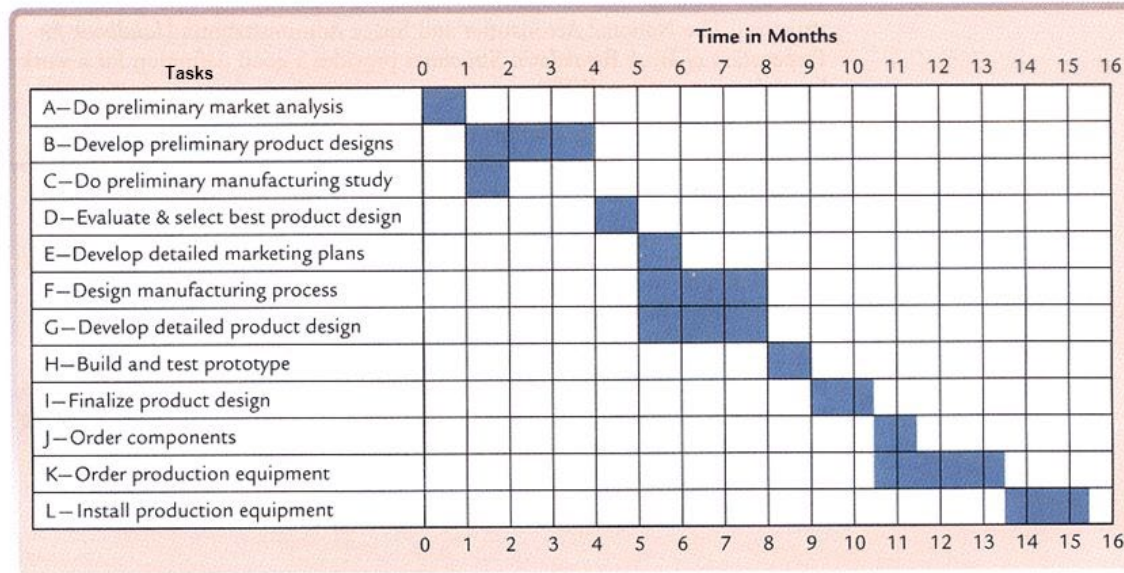
Update Your  
Literature Base

# Logic Model



# Timeline

## A Simple GANTT chart



# Develop a High-Level Budget

Academic / Research Salaries

Who is involved and to what extent of time commitment?

Other Professional / Clerical

Student Support

Are there equipment needs and how will procurement affect schedule?

Equipment

Is travel consistent with the grant purposes?

Supplies

Are there partners or sub-contractor issues to be addressed?

Travel – Local & Conferences

Sub-Contracts

Is there a match required and do you have it?

Consultants

Is the budget request consistent with the scope of work?

Facilities & Administrative Costs

# Parts of a Proposal and the Craft of Proposal Writing







*Research grant writing in progress.*

# Proposal Sections

- Title and Summary/Abstract
- Overview / Introduction
- Goal / Objectives / Specific Aims
- Background and Significance
- Preliminary Studies
- Research Methods or Program Components
- Dissemination
- Timeline
- Expertise and Project Management
- Budget and Justification
- Other Grants Received or Pending
- Data Management
- Sustainability

# Use an appealing format and writing style

- Do not expect a linear (cover to cover) reading
- Use headings liberally
- Bold or italicize key thoughts (sparingly)
- Use charts, diagrams, tables (include a figure for your timeline)
- Leave white spaces -- no solid pages of text

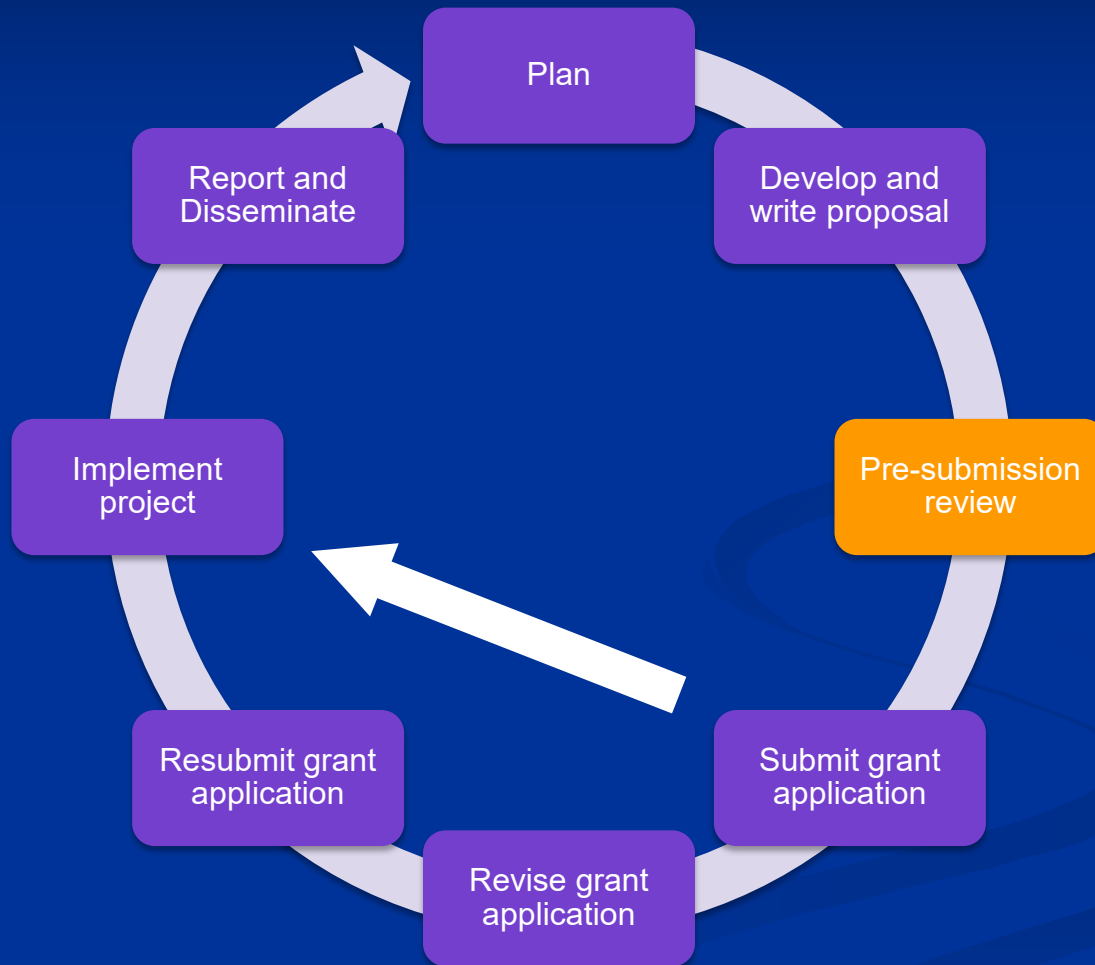
# Use an appealing format and writing style

- Use active voice, not passive.
- Avoid jargon or other shorthand.
- Avoid vague or overused words (e.g., “unique,” “innovative”).
- Follow all rules for fonts, text size, margins.
- Make it interesting - don't bore the reviewer!

# The budget should not be an afterthought

- ❑ Proposal budgets directly reflect the depth of project planning and speak to the credibility of the researcher.
- ❑ The budget and proposal copy must be mutually reinforcing. A reader should never be surprised by finding a line item in the budget that was not referred to in the narrative and budget justification.
- ❑ Create a budget by analyzing the individual tasks needed to complete each objective.
- ❑ Avoid lump sum requests; be as detailed as possible. Budget details and a good justification makes it difficult for reviewers or the program officer to recommend a reduction.

# Grant Cycle



# Pre-submission Review

- Conduct a “self-review” using the evaluation criteria.
- Ask people to read your drafts--both from within and outside your field / sub-specialty.
- Ask if someone at the funding organization will read a draft.

# The Seven “C”s: A Good Proposal...

is Clear

is Comprehensive

is Congruent

demonstrates Competence

demonstrates Commitment

is Compelling

is (somehow also) Concise





*“Is it just me or are these review panels getting a lot tougher?”*

# Merit Review

- The GOOD: Peer review helps ensure that the best scholarship/project is funded.
- The BAD: Reviewers are human, and they have unconscious (and sometimes conscious) biases that may surface during the review.
- The FIX: Unconscious bias training for reviewers

# Merit Review

Serving as a reviewer is the best way to find out what the funder really wants and how the process works.

# Learning from Rejection

“Rejection is in the fabric of what we do. We send our papers, carefully crafted to consider every angle and interpretation of our hard won data, and ‘*Slap!*’ we’re squashed like vermin.”

—Mole (2007) J. Cell Sci. 120:1143–1144.

“Dear Editors,

Thank you for the rejection of our paper. As you know, we receive a great many rejections, and unfortunately it is not possible for us to accept all of them. Your rejection was carefully reviewed by three experts in our laboratory, and based on their opinions, we find that it is not possible for us to accept your rejection. By this we do not imply any lack of esteem for you or your journal, and we hope that you will not hesitate to reject our papers in the future.”

—Mole (2007) J. Cell Sci. 120:1311–1313.

# Funding Rates

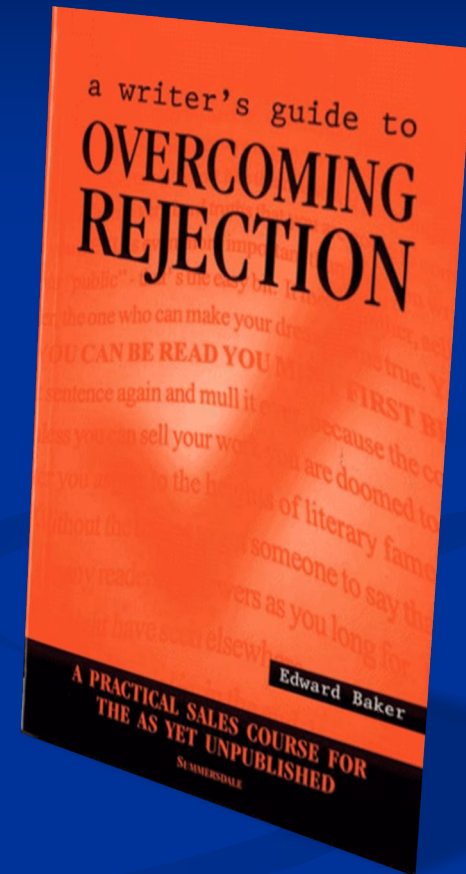
NSF

<https://dellweb.bfa.nsf.gov/awdfr3/default.asp>

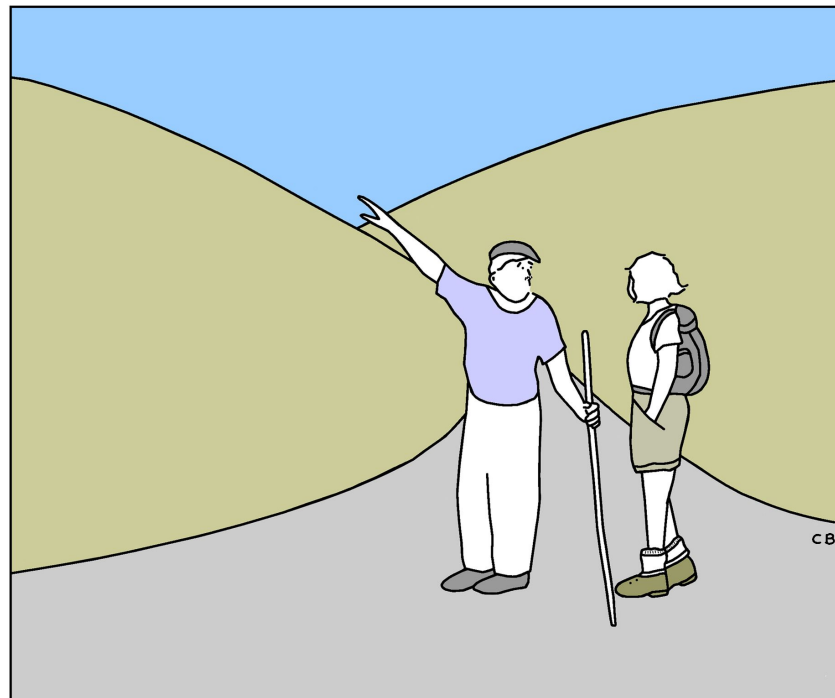
NIH

<https://report.nih.gov/nihdatabook/category/10>

# Resubmit or Regroup?



# Top Ten Mistakes



*"The best grants lie that-a-ways, Ma'am."*

# Top Ten Mistakes

1. Underestimate the time needed to secure grants
2. Avoid communicating with the program officer
3. Assume the reviewers will know the significance
4. Fail to write to a broader audience
5. “Promise the World”



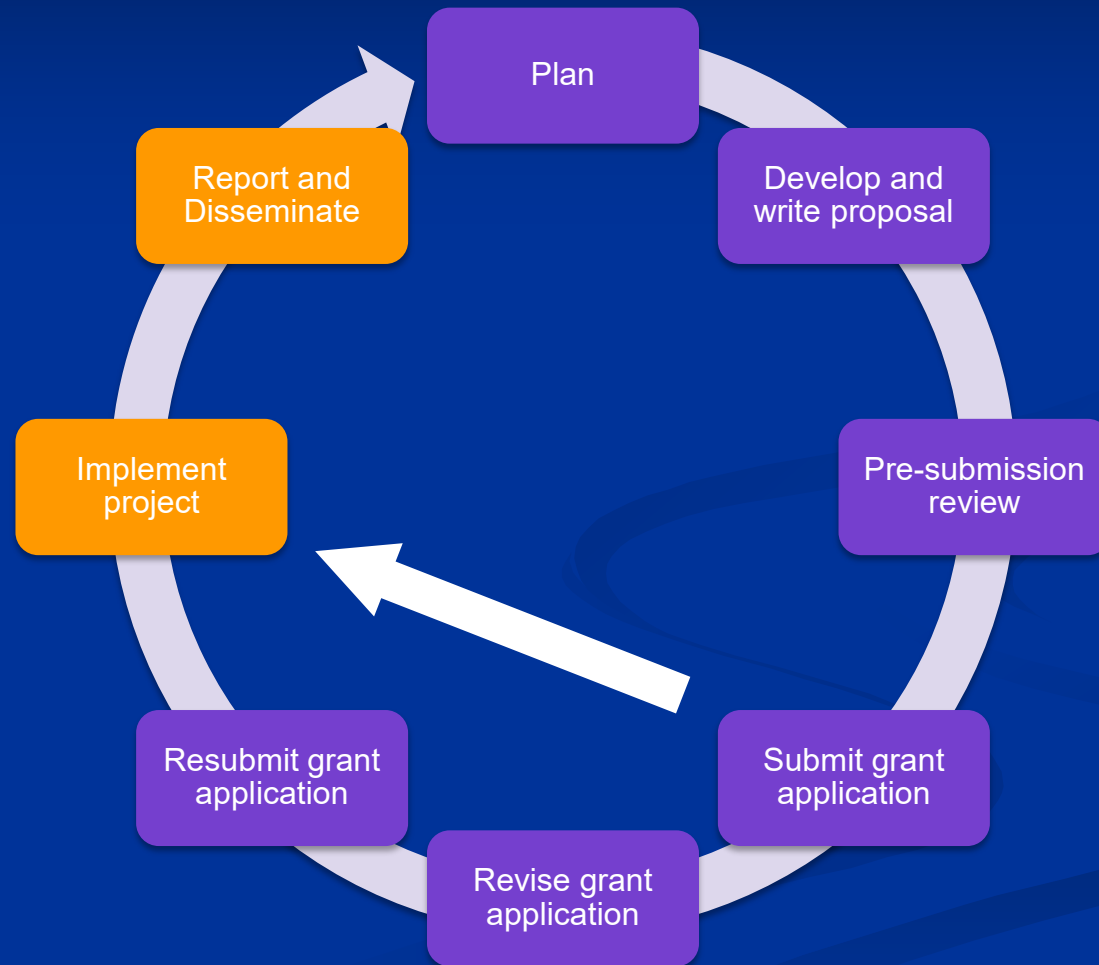
# Top Ten Mistakes

6. Fail to address the evaluation criteria
7. Develop a budget that is too small/big
8. Dismiss the reviewer comments
9. Sit back and wait while a grant is pending
10. Think rejection is defeat

# Grant Cycle

Stay in touch with the funder!

- Report regularly on your research progress.
- Send any noteworthy news or publications.
- Follow annual reporting guidelines.



# External Grants and an Academic Career



# What Determines Success?

*A Good Idea*

*A Good Fit*

*A Good Proposal*



*"They're harmless when they're alone, but get a bunch of them together with a research grant and watch out."*

Thank you for your attention!

Let's talk about grants:

[slocke@siue.edu](mailto:slocke@siue.edu)

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