1. Have a good idea.
2. Match the objectives of the proposal with an appropriate funding entity.
3. Communicate the objectives, methods, and analysis of the proposed research effectively.
4. Demonstrate that you’re capable of carrying out the research.
5. Prepare a budget that is within guidelines yet adequate for the tasks.
6. Once funded, accomplish your objectives, present the results, and publish your papers.

1. **Have a good idea.** What constitutes a good idea?
   
a.) innovative, major advances in the field
   - exciting new method
   - new way of looking at old problem
   - novel application of existing methods in a new field or region

   b.) certain, feasible, incremental additions to existing base of knowledge (e.g., the next gene sequence for a new organism)

   c.) combining research efforts usually kept separate

2. **Match proposed research with funding entity:** Who should give you money?
   
a). objectives of proposed research should reflect the mission of the funding entity

   b). amounts available from agency should match amounts needed

   c). be sure you fit eligibility criteria

3. **Writing the Proposal:** Communicate objectives, methods, and analysis of proposed research effectively;
   
a.) **Background:** make them care
b.) **Objectives**: show what your goals are

c.) **Methods**: describe what you will do

d.) **Analysis**: how will you make inferences from the information you gather? What are the potential outcomes, and how will these be interpreted?

e.) **Products of the research**: What will you produce for them?

4. **Demonstrate that you can do the work**

   a). Prepare clear, informative vitae, have the same format for everyone on the project if possible. Editing and revising the vita to fit the targeted proposal might help if there is time.

   b). Show that your institution or company has the facilities and expertise to do the research.

5. **Budgets and justification are important**

   a) number of samples should match analytical budget.

   b) Number of trips should match cost.

   c) Salaries within range of normal.

   d) Equipment requested make sense for research; fit expertise of PI

Different funding entities value different products

NSF: “the best science” as well as broader impacts, integration of research and education

EPA: mission-oriented research

NASA: use of NASA products

Private foundations: variety of goals

Don’t waste your time or that of others chasing funds inappropriate to your research or for which there is little chance of your being competitive
Effective Writing Strategies

1.) Match objectives to tasks in methods

2.) Make the proposal attractive with graphics, well-placed figures

3.) Pay attention to font size, margins, format specifications

4.) Summarize the important points again in the conclusions

5.) Make sure all components are there, and no surface errors in anything

6.) Use subheads and dividing into sections to help organize the proposal

7.) Pay attention to references and properly acknowledge the work of others.

8.) Describe specific products of the research (and then complete them!)

More strategies for success

List all criteria, requirements of the proposal, make a check-off sheet

Check everything off when completed

Have a colleague or two read the proposal before you send it off

Effective multi-tasking during proposal writing

Have standard components such as a vita (several forms) ready. Have a current and pending support form ready. These can be done at any time, not during key times as deadlines approach.
Collaborative Proposals

1. Work with the best.

2. Communicate effectively and directly. Make use of meetings, phone calls, and email each at appropriate times (convey information first, ask for responses from collaborators, then if necessary, call each individually to get at specific questions and clarify components, then meet as a group with a specific agenda and goals). In writing, let each person know what you need from them and when. Send out reminders.

3. Meet individually regarding budgets and set specific ranges for budgets. Impress upon collaborators the need to work directly with you in all budget matters.

4. Early on, define expectations, potential products of the research including potential publications and authorship, criteria for authorship.

5. Keep frequent tabs on all project components to measure progress and prevent delays.
Contracts
Todd Jarvis, GEO 518 Guest

Types of Contracts

- Letter Proposal with Signature Block
- Formal Proposal
  - Client-designated format (Typically gov’t)
  - Your format (Easier to develop, graphics)
  - Research (Other experts)

How to recover costs for proposal preparation?

- Client may provide a stipend
- Otherwise, it is part of your overhead which is figured into your costs/billing rates

Contents

- Scope of Work (What are you promising to do?)
- Schedule (When will it get done, deliverables, milestones, meetings)
- Budget (How much will you charge?)

  - Rate per hour
  - Lump Sum
  - Your cost, plus some markup
  - Expenses (markup permitted?)
  - Computers
Terms & Conditions – The “fine” print

‡ (IGNORE AT YOUR PERIL)

- Insurance Requirements
- Liability – Limits?
- Error and Omissions – Limits?

- Indemnification (Ignore this if you like going to court)
- What happens if client gets sued?
- Who pays your legal bills?

Penalty for Your Non-Performance or Client-exercised Severance

Common Problems

“Scope Creep” – Client asks for a little more work under same schedule and budget often times with promise to make it up on next contract (which never appears)

Problems with “Scope Creep”
- Less Profit
- Increased burden with same schedule
- Increased liability

How to deal with “Scope Creep”?
- Ask for scope modification – an email can usually take care of it, or a letter of committal

Who owns the work products you produce?

Conflicts? - Consider mediation instead of litigation.