# Selling your Science: The Art of Effective Proposal Writing



COACh program http://coach.uoregon.edu

- Consult the funder's website and read clearly the call for research proposals; AND the criteria against which YOUR proposal will be judged.
- Know your funder. Be aware of the priorities and interests of the funder you approach.
- Know that funders are unlikely to support the same idea twice.



















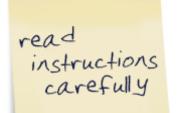


read instructions carefully

Read (and reread, and reread...) the grant instructions (RFP) *very carefully*...

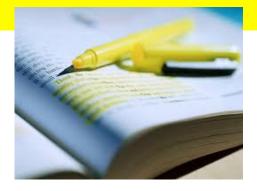
#### HIGHLIGHT ALL THE POINTS THAT MIGHT BE RELEVENT!





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#### HIGHLIGHT ALL THE POINTS THAT MIGHT BE RELEVENT!



Make a LIST from the highlighted points and keep checking it: One left out request could cause a declination!

- Plan your proposal in terms of the aims and objectives of the funder and not just your own.
- Make it clear how you will be helping them to fund their priorities.



- Use key words in the grant guidelines in your proposal
- Make certain that you meet all requirements
- Contact the program officer if you have ANY questions



Consider the questions the funder will be asking:

Why fund you?

Why fund this?

Why now?



... and make sure that the proposal answers them!

What you need to find out:

- Criteria for evaluation
- Who is conducting the review Panel? Individuals?

#### Common criteria for evaluation

#### **Significance**

- Does this study address an important problem?
- If aims are met, will scientific knowledge be advanced?
- What will be the effect of these studies on concepts or methods that drive the field?

#### Common criteria for evaluation

#### **Approach**

- Are the conceptual framework, design, methods and analyses adequately developed, well integrated and appropriate to the project goals?
- Does the applicant acknowledge potential problems and consider alternative tactics?



#### Common criteria for evaluation

#### **Innovation**

- Are novel concepts, approaches and methods employed?
- Are the goals original and innovative?
- Does the project challenge existing paradigms or develop new methodologies or techniques?



#### Common criteria for evaluation

## Investigator(s)

Is the investigator appropriately trained and well suited to carry out this work?

Is the work proposed appropriate to the experience level of

the researcher(s)?



#### Common criteria for evaluation

## Investigator(s)

- Skills training and relevant experience
- Relevant publications and other outputs
- (Those with limited publications should give reason)
- Demonstrated productivity within opportunities available

## Program Assessment: Help the reviewer

Good presentation is often crucial to making your proposal accessible to reviewers and keeping their interest.

- Use diagrams and tables to add clarity
- ✓ Bullet points and sections can break up text
- ✓ Keep to page, word and font size restrictions
- Activate the spell checker while writing

## Program Assessment: Help the reviewer

- Use section headings
- Clear page layout
- No grammatical or spelling errors
- Don't use small fonts and tight spacing

## Program Assessment: Help the reviewer

Position your important points strategically



• ...and make it easy for a busy reviewer to pick them out of the surrounding text

## Warning!

Write for a broad and busy audience of reviewers



- Don't assume that reviewers will have hours to study your proposal
- Assume that some reviewers will only read the abstract, possibly the first few pages and glance over your CV before evaluating your proposal



## Structuring the Proposal

Use a clear and concise outline

Abstract/Project Summary

Table of contents

- Introduction
- Project Goals and Objectives
- Background (includes references)
- N. Research Plan (can include preliminary results)
- Description of Personnel and Project Management (CV usually appended)
- VI. Research Infrastructure/Facilities
- Budget and Budget Explanation
- Suggested Reviewers (can be in the appendix)

## **TITLE and ABSTRACT**



-- descriptive, concise, and memorable!

#### **Elements of a Good Title**

- Should be short and clear
- Should allow the reviewer to understand the intentions of the research
- A catchy title posing a question or including a apparent contradiction may be more interesting and easily remembered:
   BUT DON'T BE "TOO CUTE" (as this can backfire)

## Elements of a Good Abstract/Summary

It should be a concise summary of the WHOLE project.

- Use the abstract to identify the <u>need for this</u> <u>research</u>, state <u>what you intend to do and how you</u> <u>intend to do it.</u>
- Do not include unnecessary detail
- Make each phrase count.
- Remember: it's the first impression a reviewer gets of an applicants worth!



#### **Elements of a Good Abstract**

#### **TIPS**

1. Ask a colleague to read your abstract.

If it is well written, they should be able to understand the essence of the project from the abstract alone

2. WRITE THIS LAST

- Provides an overview of the proposed project.
- Motivates the reviewer to want to continue reading the proposal.
- Convinces the reviewer that you know what you are talking about.
- Expands the abstract but without all the details that are to be presented in oncoming sections.

## Answers the "So What" question

- Intellectual: why is it being done?
- Benefits: Social, economic, environmental (with an emphasis on the interests of the funder).

## Answers the "Why you" question

- What unique talents and expertise you and your team bring to the problem
- How your laboratory/institution is uniquely equipped to aid in the success of the project

## Answers the "Why now" question

- Why is the problem that you seek to solve important now?
- ✓ What unique opportunities can you bring together at this time to solve the problem?

## **Project Goals and Objectives Section**

- What you intend to achieve by this piece of work.
- Small steps you need to reach to achieve your goal.
- Needs to be specific and clearly stated
- Should be realistic, consistent and link to the methods, timetable and outcomes.

## **Elements of a Good Background Section**

Put the work into context:

- What has been done before?
- How will the proposed work add to it?
- What is the innovative aspect in the research project?

Build your case by demonstrating your capability and familiarity in the area

## Elements of a Good Methodology Section

#### Provide a clear research plan:

- Demonstrate how the specific goals are to be investigated
- Be specific and demonstrate your knowledge of where barriers may arise and how you would move around or over them.
- Make it clear that appropriate facilities and personnel are available for the research.
- If your own experience is limited, consider adding collaborators.
- Describe any preliminary work.

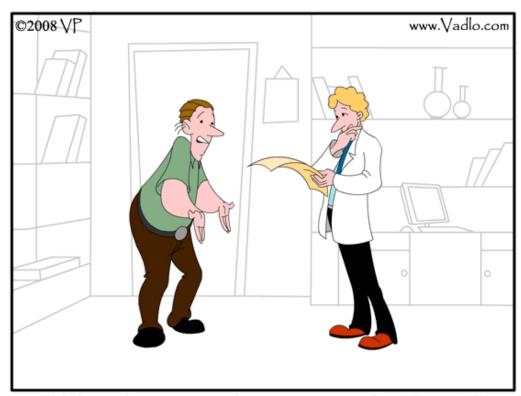
#### **Outcomes Section**

In this section one should:

- Describe the contribution to the knowledge and importance for future research
- The benefits to users, and the broader relevance to beneficiaries
- Highlight how results will be disseminated (publications, conferences, commercial exploitation, websites, ....).

## **Budget and Budget Explanation**

The budget request should be in proportion to the volume and complexity of the work activities



With this much grant money, only experiment we can do is "flip a coin"!

## **Budget and Budget Explanation**

- Be aware that funders vary as to what they are prepared to pay in terms of direct project costs, such as staff and equipment, and indirect costs, such as overheads
- The funder might request to approve beforehand inputs from other institutions participating in the project

## Vitae and Biography

#### Pay attention to details and appearance!!

#### Common format:

- Name at the top with contact information
- Education (including thesis)
- Professional Appointments
- Awards and Honors
- Publications
- Patents and other accomplishments

Use reverse chronological order

## Warning!

- Avoid abbreviations and acronyms
- Never use pronouns such as:
  - "I", "me", "my", or "our"
- Don't use fancy fonts
- Avoid lists of boring sentences
- Don't add photographs
- Don't add personal, family or health information
- Proof, Proof and Proof again





## Make sure you have a positive web presence

- Your online presence will eventually replace a resume
- Use your website presence to communicate your competence and aspirations
- A positive website presence is particularly important if you are from a relatively unknown institution, country or university.

Need A Website?

#### **The Review Process**

The review process can take several forms depending upon the organization:

- ✓ A set of individual reviewers (2-6) that review and score the proposal independently.
- ✓ A panel of reviewers that convene to discuss the proposal and develop a consensus view of the quality of the proposal
- ✓ The proposal is ranked relative to other proposals in determining the final funding decision.



#### **The Review Process**

Position in the ranking is important – it could mean the difference between success and failure.

Proposals are often ranked into the following categories:

- ✓ Fund
- ✓ Fundable
- ✓Invite resubmission (used by some funders)
- ✓ Reject





# Most proposals do not fail because of bad science — but because of

- Failure to follow directions
- Poor logical organization
- Lack of detail
- Failure to consider the funder's objectives
- Failure to anticipate reviewers' objections



#### **The Review Process**

- ✓ If the project is retained for funding Celebrate
- ✓ If the project is found fundable???
- ✓ If invited for resubmission
  - revise proposal based on feedback from review
- ✓ If rejected DO NOT GIVE UP,
  - try to get feedback and remember:It is a learning process!





#### ✓Allow plenty of time to revise

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## QUICK TIPS

✓ Avoid jargon – say what you mean in clear, simple language



- ✓ Don't be afraid to state the obvious
- ✓ Anticipate questions that may arise, before they arise
- ✓ Ask a colleague to review your proposal
- ✓ Present your proposal in terms of the aims and objectives of the funder



Be enthusiastic about your idea – if you don't sound interested, why should anyone else be?

