GUIDELINES FOR WRITING

GRANT PROPOSALS

Africa Section Communications/Mentoring Program

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CONTENTS

WRITING GRANT PROPOSALS

You have come up with a brilliant idea for a research or conservation project. Now all you need to do is find the funding for it. In most cases, this means that you will have to write a grant proposal and submit your idea to a funding agency. Although grant proposal writing can sometimes seem like a daunting task, it often provides a useful exercise that forces you to think deeply about your project and its feasibility.

Funding agencies will reject even the most brilliant idea if the proposal is poorly constructed. Fortunately, proposal writing is a skill that you can learn. This document provides you with some basic guidelines that can help improve your skills in writing grant proposals.

Always keep in mind that the key to writing a successful grant proposal is being able to sell your idea, and convince the reviewer of the importance of your project. Also keep in mind that writing a good proposal takes time and cannot be done overnight. Many proposals fail because they are written too hastily. Remember that each step of the proposal writing procedure (preparation, writing, rethinking your strategies, and rewriting) takes time. Most people take weeks, if not months, to write and rewrite proposals. So, be prepared!

A) BEFORE YOU START

- ❑ **Originality** – Generate your own educated ideas, and be as innovative as possible. This will help to raise the chances of getting your proposal funded.

- ❑ **Background knowledge** – Study the literature thoroughly before you start writing your proposal! It is crucial that you are aware of relevant classic studies, as well as recent work. See section F for some helpful resources.

- ❑ **Familiarity with funding agency** – It is important that you familiarize yourself with the goals and aims of the funding agency where you intend to submit your proposal. What is the background of the funding agency? What sort of projects do they typically fund? Does your project fill their requirements? Is your project appropriate for this funding agency? What sort of information does the agency want you to provide?

- ❑ **Consolidate essential information** – Make sure that you have all the necessary information available, including the proposal format and/or guidelines from the funding agency, all the necessary background data and literature, and your CV.

- ❑ **Timeframe** – Create an activity chart, and allow enough time for one or more reviewing rounds by co-authors or colleagues (also see section G). Plan to have your grant proposal ready well ahead of the funding agency's deadline!

B) CONTENTS

Most funding agencies use a template document, which you can fill in directly. Other funding agencies list only the sections that they want you to fill in. It is important to use the *exact* section titles that the funding agency suggests. Also make sure that the order in which you provide your information is logical and to the point.

Some funding agencies perform two selection rounds, and use different formats for each round. The 'pre-proposal' format is typically short (about three pages) and is intended to provide a quick overview of the project without many details. If your pre-proposal is selected, the reviewing committee will invite you to submit a 'full-proposal'. Full proposals are longer (up to 15 pages), sometimes with additional forms for

budget and timeframe, and they require detailed, in depth information about your project. Below, you find a format that you can use as a guideline for writing your own proposal. Although there are important differences between proposals for research and conservation projects, and formats may differ from agency to agency, the main contents are typically the same.

1. SUMMARY

❑ The summary (executive summary, abstract) is intended as a stand-alone text that repeats or paraphrases key sentences from the body of your text.

❑ This section is analogous to the abstract of a scientific paper, with the main difference that scientific abstracts are typically written in the past tense; whereas proposal summaries are usually written in the future tense. Furthermore, abstracts for scientific papers often consist of only one paragraph, whereas those of grant proposals usually consist of several paragraphs.

❑ The summary is the **advertisement for your proposal**. Do not assume that people will automatically be interested in your project. It is up to you to spark the interest of the reader by writing a good summary. If the summary is not inviting or persuasive enough, reviewers are likely to reject your proposal. The summary should provide the reader with a clear idea of the background of your project, what you intend to do and why this is innovative, interesting, or important.

❑ Funding agencies often distribute project summaries to the press. A journalist, having read only the summary, should be able to write a short news story about your project. Ensure that your summary conveys the critical information that you would like the world to know.

❑ The idea of the summary is to give the reader a frame of reference for your proposal. The summary should make it *impossible* for the reviewer to think things like: "Not an original idea… Rationale is weak… Writing is vague… Problem is not important…. Project is too large."

❑ It is important to keep the summary specific and concise. Most funding agencies require that you keep the summary to half a page or an *absolute maximum* of one single-spaced page.

❑ Try to avoid the use of jargon. If you cannot avoid it, then explain jargon to readers who are unfamiliar with the specifics. Also avoid abbreviations as much as possible because they deter comprehension of your summary.

❑ Write the summary last, after the rest of your proposal is ready and you have a good overview.

2. OBJECTIVES

❑ The purpose of this section is to (i) provide the necessary information for your reader to understand the background of your project, and (ii) introduce the problem that you aim to solve.

❑ Briefly introduce the taxon and/or the system that you focus on in the paper so that the reader gains an appreciation for them. If you focus on taxa that are unfamiliar to most people, you should provide a brief account of pertinent information such as their natural history.

❑ If you are writing a proposal for a **scientific research project**, you must either (i) ask clearly stated questions or (ii) test explicit hypotheses. A proposal to 'look at' or 'find out all about' is too vague and non-scientific - and will certainly be rejected.

❑ If you are writing a proposal for a **conservation project**, it is critical that you clearly state feasible objectives that will contribute to the preservation of your focal taxon/ecosystem within a reasonable timeframe.

❑ Although it often pays to set your goals high, the reviewers are likely to reject your proposal if it sounds too ambitious to be realistic. It is critical that your objectives are feasible within the timeframe

given by the funding agency. For instance, if you are writing a proposal for a one-year grant, do not submit a 10-year plan but instead make sure to set goals that can actually be reached within a year.

- ❑ First introduce the reader by providing the **background information** that places your project in a wider framework. What is known about your topic? What is not known? Guide the reader to appreciate an important question or problem that has not been addressed. This typically takes about 1-4 paragraphs. It is especially important to make good use of the literature in these introductory paragraphs, because it shows the reader that you did your homework.

- ❑ State your **objectives** in a final paragraph. Make sure to state the objectives as clearly and concisely as possible. Using bullet points can help to list your objectives in a nice orderly way.

- ❑ When you have finished the entire proposal, check to see if every sentence in the methods section relates in an obvious way to an objective. If it doesn't, either add to the objectives, or delete the extraneous parts of the methods (and vice versa).

3. RATIONALE AND SIGNIFICANCE

- ❑ This is the section where you need to convince the reviewer that your study is **novel** and **important**.

- ❑ Avoid literally repeating sentences from the previous section, but do mention your objectives again in this section.

- ❑ To convey novelty, you can use language such as: "This study has the following two major innovations…." or "Our study will be the first to address the crucial issue of…" or "These results are likely to substantially alter management practices of the Nigerian Ministry of Forests."

- ❑ To convey importance, point out how scientists, managers, or others need the information you will provide. For instance, you information may be critical to establish informed conservation of an endangered species or ecosystem. You can use language such as: "By enabling us to accurately track the migration patterns of this highly endangered species, the results of our project will provide essential data for conservation actions" or "This research will provide the essential socioeconomic data that can be used to improve the livelihoods of local fishing communities in western Tanzania."

3. METHODS

- ❑ Because the methods section is typically long (about half the length of the entire proposal), you almost certainly need **subheadings** to keep the reader from getting confused. The content of the subheadings will depend on your project, and may include headings such as: Study Area, Treatments, Selection of Experimental Trees, and so on.

- ❑ Ensure that your methods are **appropriate and adequate** for answering the question and/or solving the problems that you described in the objectives section. Also make sure that the reader has a clear idea of how the data you have collected will address each of your objectives.

- ❑ You may wish to include tables or figures to support the narrative of the methods (for instance, a map showing the study area). You may embed them in the narrative, or place them at the end.

- ❑ The methods section does not require an introductory paragraph. However, it might be useful to begin with a few sentences that provide an overview of the timeframe of your project. For instance, you might write: "Our research will take place on eight study sites in the Eastern Arc region, and will include a year of pre-treatment data collection and two years of experimental manipulations." After providing this very brief overview, continue with the methods that you intend to use.

❑ You are not obliged to describe the details of statistical methods (although some proposal templates provide a separate section for this), but *do* mention the main tools, issues of replication and randomization, any potential for pseudo-replication, and adequacy of control units.

❑ It is useful to end the methods section with a paragraph that discusses **expected outcomes**. What sort of results might you get? What are the practical implications of those results? Clearly state what sort of results would lead you to various conclusions. For instance: "A positive correlation between predation rate and prey body mass would tend to confirm our hypothesis of size-dependent selection." (Note that this example is silent on whether the correlation is based on ranks or raw data, and does not specify alpha level, but it does clearly state how results will relate to your goals).

❑ Proposal templates often include a separate section where you can fill in the **timeframe** of your project. If not, you should add this as a subheading to the methods. You can present your timeframe as a bulleted list of what you plan to do in each time period. Be as specific and detailed as possible.

4. CITED LITERATURE

❑ If you are writing a research proposal, you are required to support statements with scientific evidence derived from (pilot) experiments, personal communications (see below), or citations from published literature. Citations are not always required for conservation project proposals, but it can be useful to add them.

❑ In the cited literature section, you should list *only* the literature that you actually cited. Make sure that *all* your citations are listed in this section! Also make sure that you cite all references according to an accepted scientific format. If the funding agency does not provide any examples on how references should be cited, use a reference list from a scientific paper as a guideline.

❑ For more information on how to cite your sources correctly, see the SCB Africa Section Communications/Mentoring Programme Guidelines for Writing Scientific Papers, which can be downloaded from the SCB website: http://www.conbio.org

5. BUDGET

❑ The budget is typically presented in spreadsheet or table format.

❑ Immediately after presenting the budget itself, you should include a justification that includes information such as who will be hired (rate of pay and hours worked for each), travel costs (miles per day, mileage rate, days per year, etc), an itemized list of materials and supplies, etc.

❑ The budget should show that you have considered all the types of expenses and that you have adequately justified each expense.

C) FORM AND STYLE

❑ Your **writing style** is important because it determines the way your reader perceives your proposal. Even the most brilliant ideas will be rejected if the proposal is poorly written. You can learn a lot from other people's work. Try to find some grant proposals that you can use as examples and spend a few hours studying them to see how they are structured. Make sure that someone proofreads your writing before you submit your proposal (also see section E).

❑ Failure to **comply with formatting rules** can result in immediate rejection, so make sure that you follow the instructions provided by the funding agency to which you intend to submit your proposal.

- If this is truly your idea, and you are the only one writing the proposal, you can use the singular form. Otherwise, you should always use the plural form, and write "we" instead of "I".

- Grant proposals are usually written in the future tense.

- Almost all proposal formats have **word or page limits**. Most funding agencies will not read your proposal if it exceeds that limit. Brevity is very important in grant proposals. Endless sentences discourage most readers, so it is best to avoid them. Maximum readability is achieved by keeping your sentences concise. Avoid needless repetition. Exclude all information that is not relevant to your proposal.

- If necessary, use prepositional phrases to minimize long strings of nouns. This helps to maintain the flow of your narrative.

- Divide blocks of text different paragraphs. The first line of a new paragraph should be indented (using a default left tab stop of 0.63 cm or less).

- Make sure that you are to the point, and avoid being vague.

- Avoid using popular buzzwords such as 'sustainable', 'community-based' or 'capacity building' *unless* you can provide specific examples. For instance, if you plan to "establish a community-based ecotourism project that aims to build capacity of local fishermen", you need to make clear exactly how communities will be involved, and in what way this will contribute to building the capacity of the fishermen.

D) CURRICULUM VITAE

Some funding agencies will ask you to provide a copy of your curriculum vitae (CV) to establish your credibility. You should submit only one or two pages (i.e., a double sided A4 paper).

- Begin your CV by providing your name and contact information.
- Your CV should contain the following information:

  - **Education**: Approximately one line for each degree. State the name of the degree, name of university, and the year when the degree was awarded. If you have enough space left, you may also list relevant thesis titles and the name(s) of your major professor(s).

  - **Employment**: Do not list every job that you have ever had. List a maximum of four or five professional jobs that are relevant to the proposal.

  - **Professional Societies:** List the professional societies that you belong to, and the years of membership.

  - **Related Activities** (or Synergistic Activities): List any office you held in a professional society or conservation organization, government advisory panels and other significant public service, and research teams you may have served on.

  - **Grants**: If you have previously received grants to work on similar projects, you should mention them in your CV. List co-awardees, title of the project, total award amount, funding agency, and dates of the project.

  - **Publications**: If you have many publications, list only those relevant to the proposal (in which case, use the subheading 'Relevant Publications'). You are free to list both peer-reviewed scientific papers, as well as other types of publications – as long as they are relevant. For instance, if you have written a report for a conservation agency, given an oral presentation or presented a poster that is pertinent to the topic of your proposal, you may list this under publications. Make it

clear that the reviewer knows exactly what type of publication you are referring to (e.g., abstract, oral presentation or abstract, poster presentation). Provide full citations of all your publications so that the reviewer can easily find the documents. If your poster or abstract is available online, it may be useful to provide a website link.

- **References**: It might be required to add the names and contact details of two or three references. These can be former employers, colleagues, or professors in whose lab you worked. The funding agency may contact them for information about your professional background and character. It is important to list people that know you well, but it is unethical to list relatives or close friends.

❑ List your activities in chronological order, starting with the most recent date. Always provide the start date and ending date (e.g., 2006 - present).

❑ The most important thing to keep in mind is to be honest, and do not attempt to deceive the funding agency in any way. For instance, do not state that a grant was awarded to you if someone else actually wrote the proposal. Do not list a submitted paper as an 'in press' publication unless you are absolutely certain that it will be published by the journal that you submitted it to. Do not claim to have held a membership you do not have.

E) GENERAL POINTS

❑ **Do NOT plagiarize other people's work**. Plagiarism means literarily copying or using someone else's words, ideas or results without any attribution. Plagiarism is highly unethical and it can backfire if the reviewer recognizes someone else's words or ideas. If you use someone else's words, ideas or results, you should always acknowledge this and refer to the original source.

❑ Make sure to **proofread** your work before submitting it. Proofreading and editing your own work can be difficult sometimes. It often helps to put your proposal aside for at least one day. This will allow you to distance yourself from it, so that you can look at the proposal from a fresh perspective.

❑ When you revise your proposal, try to look at it from the point of view of a critical reviewer. Ask yourself the following questions: Does every sentence make sense? Is every sentence useful? Does the text follow a logical order? Is the main message conveyed in a clear, concise, and convincing manner?

❑ It can be very useful to also let someone else proofread your work for you, especially if you are not writing in your native language. Although it is typically the coauthors' task to help improve the quality of the proposal, it can also help to ask an impartial colleague to proofread your work.

❑ Hand in drafts to your coauthor(s) or colleagues way ahead of a final deadline, if possible. This will allow you to get the critical feedback that your work may need.

❑ Mistakes such as spelling errors, sloppy citing, mislabeled figures, inaccurate taxonomic names, and unfinished sentences are inexcusable. They can make reviewers really grumpy, so make sure that you use a spelling and grammar checker. Scrupulously scan your proposal for mistakes one more time before you submit it.

F) RESOURCES

The following resources may be helpful when writing a grant proposal:

❑ **The Tropical Biology Association** (TBA) organizes annual workshops on proposal writing for African scholars. The TBA has published a Skills Series that also includes a very useful document on writing funding proposals, which can be downloaded from their website. You can also find a list of funding resources on the TBA website. See: http://tropical-biology.org

- Joseph Levine from Michigan State University wrote a **Guide for Writing a Funding Proposal** that can be accessed online and provides writing hints and examples. You can also download a PDF of his guideline via the following link: http://www.learnerassociates.net/proposal

- The James Cook University published a useful **Handbook on Applying for Research Grants**: http://www.jcu.edu.au/office/research_office/assist/binaries/handbook.pdf

- **The National Science Foundation** (NSF) of the USA provides detailed online guidelines for scientific research proposal writing, which can be accessed here: http://www.nsf.gov

- **Online Access to Research in the Environment** (OARE) provides students and researchers in more than 100 developing countries with the opportunity to access one of the world's largest collections of literature in environmental science research for free. See: http://www.oaresciences.org

- For an inventory of other websites that can help you stay up to date with the latest advances in conservation and scientific research, see the resource list in the SCB Africa Section Communications/Mentoring Programme Guidelines for Writing Scientific Papers, which can be downloaded from the SCB website: http://www.conbio.org

- For an up to date inventory of funding bodies for scientific research and conservation projects, see the Society for Conservation Biology Africa Section website: http://www.conbio.org

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