How to Write a Research/Fellowship Proposal

General Aims

The aim of a research proposal is to demonstrate that you have a project worth doing and manageable within the timescale you are applying for.

To make clear that your project is manageable within the relevant period, you need to show that you understand the scale of the issues and problems you are addressing.

What is expected?

- must address the **following questions**: What do you plan to accomplish, why you want to do it and how you are going to do it;
- In should contain all the key elements involved in the research process and include sufficient information for the readers to evaluate the proposed study;
- Is should convince others that you have a worthwhile research project and that you have the competence and the work-plan to complete it.

Major Points of a Research Proposal

A research proposal has three main points:

- Explanation of proposed research (*what* will be done).
- Novelty and/or importance of the study (*why* it should be done).
- Methods and techniques to be employed (*how* it will be done).

How to build up a research proposal...



What do I have to say?

A single question clearly exposed with adequate evidence for the answer.

Try stating the question and its answer in one simple sentence.

General structure

- 1. Title
- 2. Abstract and Keywords
- 3. Background and Rationale
- 4. Research Objectives
- 5. Research Plan & Methodology
- 6. Significance and novelty
- 7. Bibliography

1. TITLE

Provide a **specific "summary"** of the proposed work.

- Should giving a clear indication of your proposed research approach or key question
- no longer than 10-15 words, no abbreviations or acronyms.

1. TITLE

Example:

- NO (too much detail): "A three-year study for understanding how adult neurogenesis can be restored in aging individuals and counteract age-related cognitive decline by using several mouse models."
- NO (not enough detail): "Adult neurogenesis in the aged hippocampus"
 - YES: "Restoring adult neurogenesis in the aged hippocampus to counteract age-related cognitive decline"

2a. ABSTRACT

A brief description of the hypothesis and the goals of the project:

- should indicate **what questions** you are addressing;
- represents a summary that allows readers to quickly assess the basic premise of your proposal.

2b. KEYWORDS

Describe and categorize your research proposal.

- represent the content of your proposal
- have to be specific to your field or subfield

Example: hippocampus, adult neurogenesis; neural stem cells, aging, mouse genetics.

3. Background and Hypothesis

Describe the" **state-of-the-art**": what is currently known by the experts in the field;

- then **narrow the focus** of details pertinent to the proposed work;
- The highlight what is **the hypothesis** that you wish to test in your project.
 - if available describe the **preliminary data** that strengthen your hypothesis;
 - always use **journal articles and cit**e them appropriately in the text.

4. Research Objectives

- What is the **hypothesis** that you are testing?
- What are the **questions or major points** that you seek to answer?

You should formulate these clearly, giving an explanation as to what problems and issues are to be explored and why they are worth exploring.

5. Research Plan & Methodology

- How do you plan to answer to your aims and in how much time do you expect to accomplish them?
- What will you use as a biological paradigm (cells, animals, etc)?
- What kind of **equipment and supplies** will be necessary for the project?

It might be useful **to construct an outline** before completing this section, as this will give you an idea of what you will need, and if your goals are attainable in the given time.

5. Plan of work & Time Schedule

- Include an **outline of the various stages** and corresponding **time lines** for developing and implementing the research.
- Usually your research should be completed within three years.

6. Significance and novelty

- Explain the **novelty aspect** and the **significance** of your project with respect to the existing literature and more generally to the society ("added value").
 - Outline the clear contribution and advancement that your project will give in your field of research.

7. Bibliography

- List of references to key articles and reviews discussed within your research proposal.
- Follow the **instruction guidelines** for formatting.

Getting Tense! PAST and PRESENT

- When quoting

 previously published

 work, refer to it in

 present tense (e.g.

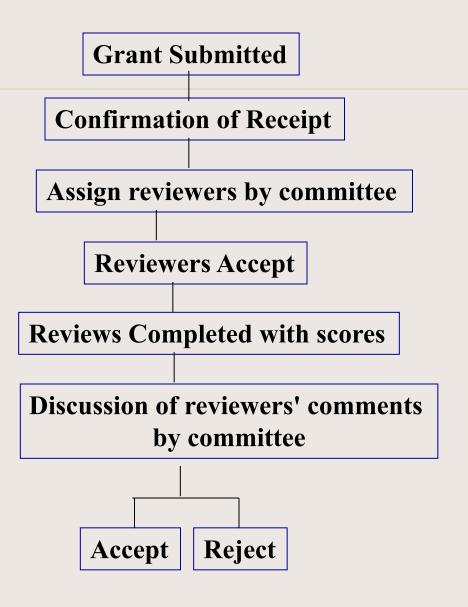
 penicillin treats strep

 throat)
- When describing your own study, refer to work in past tense (e.g. we tested a new antibiotic for strep throat)

Proofread before Submitting

- ✓ Are terms used consistently throughout?
- ✓ Do numbers in abstract match numbers in text and tables?
- ✓ Do citations in text match references?
- ✓ Are Syntax and Grammar acceptable?

Overview of Review Process



If your grant is rejected...

Do not take it too personally!

Consider carefully the reviewers' comments and try again the following year!



