

Sample Student Proposal

What would you recommend these students do to improve their proposal?

Joe College, Sue Sophomore and Sam Student

Proposal to NSF

Introduction

We will test a number of different samples to determine if they are alive, dead, organic or inorganic. Our goal is to come up with the most effective and cost efficient method for doing this. Samples have been provided by NSF.

Materials and Methods

Figure 1 diagrams the sequence of tests we will use to determine if the specimens are alive, dead, organic or inorganic.

For the purposes of this series of experiments, we will use the following operational definitions.

Alive = Contains DNA and carries out redox reactions

Dead = Contains DNA and does not carry out redox reactions

Organic = test positive for simple organic tests or burns

Inorganic = does not burn

Results

Based on the results we get from these preliminary tests, we will determine how much it would cost us to analyze 10,000 sample collected by NSF.

Figure 1 -- Flow chart

step 1 = Biuret's tests - If + = organic; if - go to 2

step 2 = Benedict's test - If + = organic; if - to 3

step 3 = Starch test - If + = organic; if - to 4

step 4 = Feulgen's test; If + = alive or once alive - go to 5; if - go to 6

step 5 = Tetrazolium test (redox test) If + = alive (end); if negative go to 6

step 6 = Burn sample If organic it burns; if not it's inorganic

Example of a page of general comments for Dead or Alive preliminary proposals

The following are a few comments you should consider. Note, not all comments will pertain to all of your proposals.

- 1) Did you follow the required format? See pages 54 and 55 of the lab manual.
- 2) Did you include a descriptive title for your proposal?
- 3) If you were the granting agency reviewing this proposal, would spelling and grammar errors affect your decision regarding who would get the grant?
- 4) Is there enough background or supporting information in the Introduction to let the reviewer know what you're planning to do and why this is of importance? E.g. have you provided enough information so that someone who has no prior knowledge would understand your proposal based only on what is written?
- 5) Have you provided justification for your proposed materials and methods? In other words, have you included a description of the logic behind it? For example – Why do you propose doing the various tests and why do you propose doing them in the particular order you chose?

In all writing for this course be sure to do the following.

- 1) Include headings for each section of the paper.
- 2) Double space between lines of text.
- 3) Put 2 spaces between the period (at the end of one sentence) and the capital letter which begins the next sentence.
- 4) Spell check your paper.
- 5) Read the paper out loud to the other members of your group. Does it make sense as written? Do the ideas flow logically from one to the next? Are there adequate transitions between ideas within paragraphs, between paragraphs and between sections of the proposal/paper?

If something doesn't sound right, find out what's missing, unclear or inaccurate and change it.

- 6) Maintain a consistent voice throughout the proposal. Choose either 1st person or 3rd person, but be consistent.