



Ron Payne Photography

Writing Effective Project Summaries for Grant Proposals

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**First, let's define our terms—
a project summary is
a stand-alone document
in a formal multi-part proposal
that explains the goals, methods,
and expected outcomes of the project**

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The Positive Electron

By C. D. ANASTAS, California Institute of Technology, Pasadena, California
(Received February 26, 1933)

Out of a great number of similar tracks in a vertical Wilson chamber, tracks which are as great as that of the parent. From the range and the ionization produced by the track, it is seen that the parent is a positive electron. If these particles are created in the chamber only once in some 500

On August 2, 1932, a photograph of a particle track was obtained in a vertical Wilson chamber (filled with 15,000 gauss) designed in the laboratory of Professor R. A. Millikan and the tracks shown in Fig. 1 were obtained. It is seen that the tracks seemed to be interpretable only on the basis of the existence in this case of a particle carrying a positive charge but having a mass of the order of magnitude as that normally possessed by a free negative electron. Later study of the photograph by a whole group of men at the Lawrence Berkeley Laboratory only strengthened this view. The reason for this interpretation is that a track appearing on the upper part of the photograph is at once faced by the curved track of a well-established negative electron. The other terminations have a range actually visible in the photograph of 5 cm without a noticeable curvature. The only way to account for this is to assume that at the instant of their creation the tracks were a second; two independent

curvature and ionization produced by the track that tends to cause the electron to be called positive. In fact, the tracks are associated with other tracks of the same order of magnitude as that of the parent. The most likely explanation is that the tracks are secondary particles created in the chamber only once in some 500

It is possible with the present experimental data only to assign rather wide limits to the mass of the positive electron.

C. D. ANASTAS, Science 76, 218 (1932).

A project summary is *NOT* a scientific article—

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**A project summary is *NOT* a scientific article—
think of it as a *prospectus****

**why the funding agency should invest in your research*

**Different agencies call this document different
names (abstract, executive summary), and**

→ they all have their own rules

The project summary does for the full proposal what a picture postcard in the museum gift shop does for a famous painting



P. Gauguin, *The Swineherd*



Project Summary



Project Description

It's a miniature version of the full proposal

The project summary will probably be the first thing most reviewers read...



and it may be the *only* thing that some reviewers read!

First step—follow the directions!

Print out a copy of the directions and read them with a **highlighter** in your hand

Make a checklist and adhere to it witlessly

Pay special attention to margins, fonts, and length limits

b. Project Summary

Each proposal must contain a summary of the proposed project not more than one page in length. The Project Summary consists of an overview, a statement on the intellectual merit of the proposed activity, and a statement on the broader impacts of the proposed activity.

The overview includes a description of the activity that would result if the proposal were funded and a statement of objectives and methods to be employed. The statement on intellectual merit should describe the potential of the proposed activity to advance knowledge. The statement on broader impacts should describe the potential of the proposed activity to benefit society and contribute to the achievement of specific, desired societal outcomes.

The Project Summary should be informative to other persons working in the same or related fields, and, insofar as possible, understandable to a broad audience within the scientific domain. It should not be an abstract of the proposal.

Different funders have different rules



Max 1 page—must contain three separate sections: Overview, Intellectual Merit, Broader Impacts



Max 1 page—must list the applicant institution and PI/Co-I names at the top



Max 30 lines of text



Most are max 1 page—must be written to be understandable to the general public

The project summary must “stand alone”

No figures

No tables

No references



No complex equations

No unfamiliar acronyms

No special characters (NSF)

No jargon

Quiz Question #1

How important is the project summary to the success of your proposal?

- a) Not as important as the technical description**
- b) Not as important as the overall budget**
- c) Not as important as having a novel method**
- d) Not as important as having a well-qualified team**

Answer: None of the above

An effective project summary is *critical*

You may be able to recover from a poorly conceived, badly written summary, but you'll have a deep hole to climb out of

If your summary is not compliant with agency rules, your proposal may not get reviewed at all



To whip up a perfect project summary...

*Celia's Project
Summaries*

...follow the recipe! ¹¹

Celia's Foolproof Project Summary

Ingredients:

What problem will you study and why is it important?

What methods will you use and why did you choose them?

What results do you expect and how will you analyze them?

Why you? Why now?

How will funding your project benefit the agency?

Assemble ingredients in this order. Don't add ingredients or omit any. Measure carefully.

Taste frequently and adjust seasonings.

Allow to rest before serving.

Don't write a partial summary



Describe the *entire* project:

goals and objectives

methods, data analysis, metrics

qualifications of the team

unique resources

benefit to the funder

significance to science and society

Omissions and ambiguities in the project summary

raise immediate questions in reviewers' minds

about the whole project

Don't assume all reviewers will be an expert in your narrow field— some will, but some won't, and they may all have equal votes



Advice from NIH:

“This section should be informative to other persons working in the same or related fields and insofar as possible understandable to a scientifically or technically literate reader.”

**Get rid of irrelevancies;
eliminate introductory fluff***



**Project summaries are always constrained by
word or page limits; make every word *count***

**Don't waste precious space on any idea that is
not directly relevant to your project, no
matter how "interesting" it might be**

Delete, rephrase, clarify, quantify

****In fact, eliminate all fluff;
reviewers appreciate conciseness***

If your project is funded, the summary may be made public



Do not include any confidential or proprietary information

Don't put anything in the project summary that you wouldn't want the whole world to see on the agency's website

The summary should represent your best, clearest, most thoughtful, most persuasive writing

To recap...

Follow the rules—witlesly

Use the five-ingredient recipe

Aim for the three *C*'s: *clear, concise, compelling*

Write for a generalist—emphasize *meaning*

Leave out proprietary information

**Plan for time to revise and polish—your
summary must be *perfect!***

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