

Research Grant Writing- Keys to Success

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Objectives

Identify the components of a successful research grant

Discuss 3 strategies for improving the quality of a research grant submission

Follow All Instructions!

Font, font size, margins, word count, page limits

Specific headings

Format for citations, if specified

Deadlines - date AND time (note time zone)

Note the review criteria and meet them:

- Significance of project

- Innovation

- Approach

- Environment

“Proposals deviating from the above specifications will not be considered.”

Consider Priority Areas

Does the application list any priority areas?

Is your area of interest in line with theirs?

Does your institution have priority areas for research/EBP/QI that may fit?

Specific Aims

MOST IMPORTANT SINGLE PAGE OF THE GRANT!

Be clear and logical, link components, tell a story

Components:

1/2 to 2/3 page - Brief description of problem, population, importance, technique or measure you will use

2-3 aims/hypotheses

What do you expect to find, how will this study change practice/contribute to knowledge/lead to new interventions, etc

Specific Aims

First sentence should grab interest, establish relevance

What is the problem?

- Name target population in first sentence

- How many, or what %age, experience the problem?

Why is the problem important?

- Clinical, economic, social consequences

What have others found?

- Where are the gaps, how will your study fill a gap?

Specific Aims

2-3 aims

What exactly are you going to do and how? Be Clear
include DV/IV/population/measures

If space, have hypothesis associated with each aim
What do you think the study will show?

Use strong action verbs:

Identify

Optimize

Determine

Specific Aims

Examples:

To compare X to Y using Z

Hypothesis: children who receive X intervention will demonstrate significantly higher Z than children receiving Y

To determine whether there is a significant relationship between A and B, controlling for C

Hypothesis: as A increases, B increases, with C as a covariate

Specific Aims

Summarize - how findings of this study will impact clinical practice

Rationale - what will be possible after this project that is not possible now

Title

Is the title descriptive, concise?

Does it describe concepts (variables) and group being studied?

Does it fit within the character limit?

Proposal Narrative

Includes:

Background/significance

Purpose/specific aims

Methods

Expected impact

Plans for dissemination

Proposed timeline

Background/Significance

Review the literature - what is the problem (your DV), what has been tried?

Describe target population - demographics, characteristics, why is the problem important (significance)

Describe your solution /approach (your IV), advantages, has it been tried before (innovation)

Be concise, not exhaustive

Preliminary Studies

Less than ½ page

Do you have any experience with this population/problem/related issues/similar data collection instruments/work with same research team?

Methods - Design

Is the research design clearly stated and appropriate for the study?

Qualitative vs quantitative

Cross-sectional, retrospective, longitudinal (prospective)

Randomized vs non-randomized

Blinded?

Methods - Tools / Analysis / Timeline

Are methods appropriate to purpose, aims of study?

Are measures reliable, valid? If newly developed, have you clearly indicated how this study will determine their reliability, validity?

Is data analysis plan well-defined, appropriate?

Is timeline realistic in meeting the study purpose and aims?

Methods - Plan for Data Analysis

Data analysis plan: need to show that you've thought about how to demonstrate difference, relationship, etc

Meet with statistician

Specify what statistical tests you will run and how

T tests, ANOVA, multiple regression, etc

Using SPSS, STATA, Excel...

Methods - Timeline

Timeline - be realistic, not overly optimistic

Include time for IRB approval...2-4 weeks

Recruitment almost always takes longer than you expect

Data analysis

Writing/dissemination

Abstract

Second most important part of proposal

Introduce a compelling story

Make a case for the urgency/magnitude of situation

Abstract

Does the abstract meet specified word count?

Does the abstract incorporate main features of proposed study:

- problem and its significance

- purpose/aims

- methods

- expected impact

Budget

Is the budget reasonable? Are the itemized costs reasonable and justified?

Include participant incentive if you can

Consider protected time for investigator(s) if allowed

Do you need to pay statistician/consultant?

Do you need to pay for measurement tools?

Does the budget cover the scope of study?

Appendices

Are study measures included in the application, including appropriate citations?

Does the study include a letter of support from the appropriate person (unit director or manager for PCS proposals) that clearly specifies what support will be given to the study?

Biosketches

Plan for Dissemination

Does the proposal clearly identify the methods of dissemination?

Are the plans for dissemination realistic and appropriate?

Identify potential journals for manuscripts

Use JANE: <http://jane.biosemantics.org/>

Journal/Author Name Estimator

Final thoughts

Have a friend/family member read it - does it make sense?

Check your grammar

Define all abbreviations the first time you use them

Use connectors between paragraphs, sentences

Final thoughts

Summarize at the end of the narrative

You are telling a story - aim for logical flow, connection throughout

Don't be boring! You've got to pull the reviewer in

Available Resources

aphon.org

EBP/research committee

Mentoring committee