

HOW TO WRITE A GOOD GRANT APPLICATION

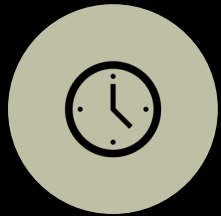
SORRY, A **GREAT** GRANT APPLICATION

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UNIVERSITY OF AZUAY

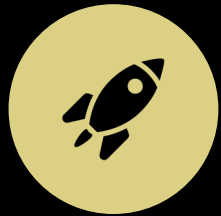


THE RESEARCH SCIENTIST'S DELEMA

FUNDAMENTAL ELEMENTS



TIME



SPACE AND
EQUIPMENT



MONEY



MORE
MONEY



MORE
AND
MORE,
MONEY

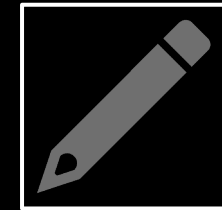


HOW TO GET MONEY

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Beg [need a benefactor]

Borrow [not possible]



Steal [not recommended]

Write a grant application



YOU MAY ASK:

WHY IS THIS OLD MAN
GIVING THIS TALK?

AGE AND EXPERIENCE

GRANTS RECEIVED FROM:

American Cancer
Society

National Institutes
of Health/Cancer
Institute

U.S. Department
of Energy

U.S. Department
of Defense

Loyola University
building grant

Defense Nuclear
Agency

Veterans
Administration

Pharmaceutical
Companies: G.D.
Searle, Upjohn,
Ciba-Geigy

AGE AND EXPERIENCE

GRANTS APPLICATIONS
REVIEWED FOR:

American Cancer
Society,
Member and
Chair

National Institutes
of Health,
Radiation study
section

U.S. Department
of Defense

Dutch Cancer
Society

Department of
Defense, Canada

Institutional
Review Board,
Rush and Loyola
medical schools

Chartwell
Foundation,
Chair of grant
programs

Veterans
Administration

BEFORE YOU START WRITING:



Search for the best source of funding. Make sure you and your institution qualify.



Funding agencies only accept applications that match their funding priorities.



Know and follow the rules.



Do the above and you might just get funded and become famous.

ANATOMY OF A GRANT APPLICATION

SUMMARY OF MAJOR GUIDELINES

Title and Author(s)

Abstract (Summary)

Objectives and Rationale

Introduction and background

Experimental Plan

Discussion of Significance and Innovation

Detailed Budget

Principal Investigator

THE TITLE:

Keep it short, but
fully describe the
topic of the study



Attract interest
and attention to
the study

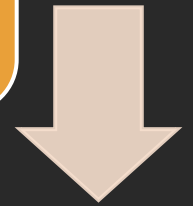
THE AUTHOR(S):

The first author is the principal investigator (PI) responsible for the grant application

Include all individuals, and their role, i.e., a statistician.

ABSTRACT:

The abstract is **one of the most important parts** of the application. The reviewers get their first and most important impression



If you do a great job writing the abstract, the reviewers will have a **positive attitude** reviewing the rest of the proposal.

FIRST ENCOUNTER: FIRST IMPRESSIONS ARE IMPORTANT



FIRST IMPRESSIONS CAN LEAD TO SUCCESS



OR FAILURE





The objectives should match the time frame and the budget.



The rationale should justify each objective.



Clarity of writing is essential !!!

OBJECTIVES AND RATIONALE

INTRODUCTION AND BACKGROUND

Include what has been done by you and others

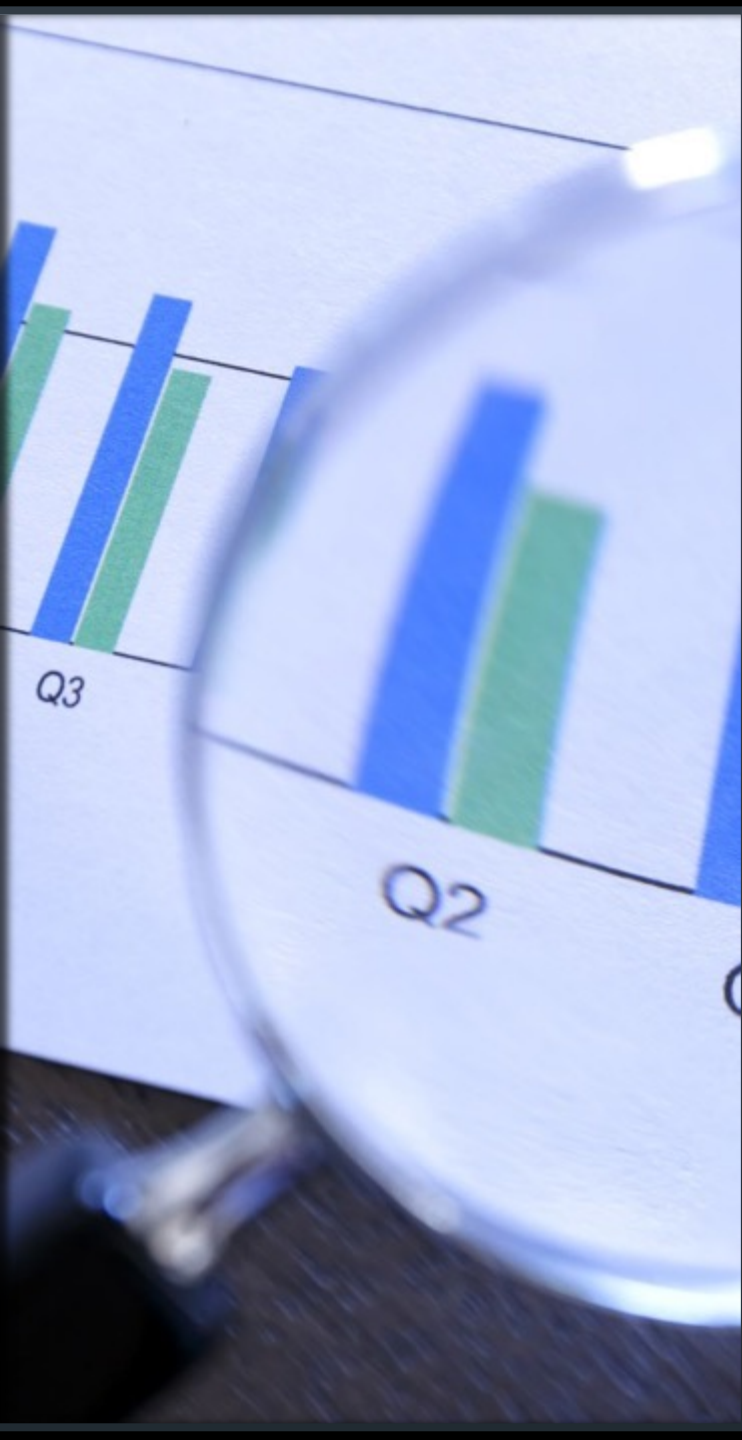
'STATE OF THE ART'

What needs to be done to advance knowledge?

How does your proposed work fit those needs?

THE EXPERIMENTAL PLAN

- BE REALISTIC IN YOUR RESEARCH GOALS.
- RESTATE YOUR OBJECTIVES AND SHOW HOW YOUR EXPERIMENTAL DESIGN WILL ADDRESS EACH OBJECTIVE.
- CONSULT A STATISTICIAN.
- A POOR RESEARCH DESIGN AND THE WRONG STATISTICAL ANALYSIS WILL SINK YOUR PROPOSAL.



DISCUSSION:



Stress the innovation and significance of the proposed studies.



Use phrases that can be used by the reviewers as they prepare their summaries.

THE BUDGET



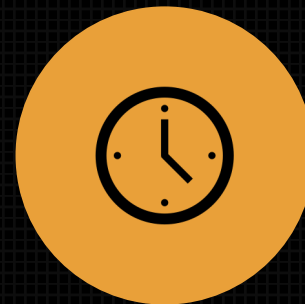
The budget must be realistic and tailored to the objectives.



Do not pad the budget with unrelated items.



The university office of grants the contracts should be involved in the preparation of the budget.



This section takes a long time to prepare.

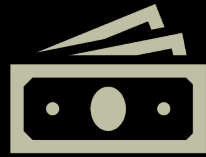
INSTITUTIONAL REVIEW BOARD

THE IRB

- GRANT APPLICATIONS MUST BE REVIEWED BY THE IRB BEFORE SUBMISSION.
- THE IRB HAS SUBCOMMITTEES THAT REVIEW ETHICS, HUMAN SUBJECTS, ANIMALS, RADIATION, TOXIC CHEMICALS, VIRUSES, BACTERIA, AND GENETIC MANIPULATION



UNIVERSITY OFFICE OF GRANTS AND CONTRACTS



All grant applications must be signed by an authorized university official



Grants are usually made to institutions, not to individuals



Spending of the grant is monitored by the university accounting office



THE REVIEW PROCESS

- YOU FINISHED THE GRANT APPLICATION [MONTHS OF EFFORT, **NOT** DAYS OR HOURS]
- YOU RECEIVED ALL NECESSARY SIGNATURES, I.E., THE IRB, THE AUTHORIZED UNIVERSITY OFFICIALS, ETC.
- YOU SENT OFF THE PROPOSAL **EARLY!!**
- **NOW WHAT HAPPENS?**

INITIAL REVIEW PROCESS

Reviewed by the administrative staff of the granting agency **FOR COMPLIANCE TO THE RULES.**

RULES VIOLATIONS? Your application may be, “administratively withdrawn”. It will not be reviewed.

DECISION TIME:

- THE CHAIR OF THE REVIEW BOARD SELECTS A PRIMARY REVIEWER, A SECONDARY REVIEWER AND 2-3 READERS.
- THE PRIMARY REVIEWER ASSIGNS A PRIORITY SCORE. SHE/HE WRITES A SUMMARY AND PRESENTS HER/HIS ASSESSMENT TO THE WHOLE REVIEW BOARD (ABOUT 30 PEOPLE). THE SECONDARY REVIEWER DOES THE SAME. THE READERS AGREE OR DISAGREE WITH THE ASSESSMENT.
- YOUR APPLICATIONS IS DISCUSSED AND SCORED BY THE WHOLE BOARD.

DECISION TIME

- ALL GRANT APPLICATIONS ARE RANKED BY SCORE
- THE AVAILABLE FUNDS ARE MATCHED TO THE RANKED SCORES AND A LINE IS DRAWN.



TIPS FOR SUCCESS

Write

Write simply and clearly (Do not use google translate, the Chat-generative pre-trained transformer (GPT) or other AI bots.

Follow

Follow the rules!!

Help

Have people you trust and who are knowledgeable in the field read the proposal

Finish

Finish the proposal and submit it **early**. The administrative assistants will kiss you.

THIS PRESENTATION IS AVAILABLE ON LINE AT:

- ONLINE LOCATION: