INTERVENTION AND PROGRAM PROPOSALS

TIPS FOR SUCCESS

6th Annual CDC/IUHPE Seminar
Entebbe, Uganda
July 8th – 18th 2009
Joan Kennelly
University of Illinois School of Public Health
kennelly@uic.edu
Successful Proposal Writing

Thinking and Planning

• What do you intend to do?
• What difference will it make?
• To whom is this work important?
• What has already been done and is known?
• How will you do the work?
Successful Proposal Writing

Preparation
- Identify funding agencies/programs suitable for your project
- Consider funding deadlines as opportunities
- Talk to everyone who can help you
- Consider collaborations
All Proposals Provide Clear Answers to:

- What will we learn as the result of the proposed project that we do not know now?
- Why is this important?
- How will we know that the findings are valid?
Successful Proposals are

- Innovative
- Realistic
- Well-developed
- Well-documented
- Well-focused
- Relevant
Other Important Characteristics

- Competence of the Principal Investigator and Research Team
- Institutional Commitment and Administrative Support
- Adequacy of Institutional Resources
- Evidence of Collaboration
Other important characteristics

- Projects and Programs that can be Replicated
- Use of New Technologies or Approaches
- Impact on Local and/or National Infrastructure
How to Get Started

- **Outline Your Idea**
  - *Helps you think through goals and objectives*

- **Consider Collaboration**
  - *Create a support and action team*

- **Begin Writing the Proposal**
  - Be positive and confident
  - Be logical, clear, and accurate
  - Do not use jargon
Proposal Sections

- Specific Aims
- Background and Significance
- Project Design and Methods
- Timetable
- Evaluation and Dissemination Plan
- Abstract
- Budget
- Cited Literature
Specific Aims

- Your projects goals and objectives – state them clearly
- Achievements by which project success is measured
- Usually limited to 4 Aims with several sub-objectives
Background and Significance

- Provides the rationale and support for the proposed project
  - Why is the intervention important?
  - Why is this population important?
  - Why is this setting important?
- Information comes from published literature and other reliable sources
  - Include preliminary data and existing evidence supporting proposal
**Background and Significance**

- Demonstrate your breadth of knowledge in the field
- Use to communicate the significance of your project and how it relates to enhancement of public health
- Discuss opportunities, gaps, and barriers to proposed project
Project Design and Methods

- Usually carries the most weight in review process
  - Identify your theoretical framework
  - Describe design – cohort, case-control, case study, RCT
  - Describe target population and any sampling
  - Describe procedures – what you will do
  - Outline your evaluation plan
    - Indicate how you will know the impact of your project
  - Be sure to justify your choices and decisions
Project Design and Methods

- State expected outcomes and list proposed activities
- Link activities to specific aims
  - Keep activities in a logical sequence with clear timelines
  - Be clear on what you expect to accomplish and note anticipated delays
- Present limitations of your approach
- Detail methods for gathering and interpreting results
Timetable

- Create a timetable of how and when you will accomplish aims and objectives
Evaluation and Dissemination

- Demonstrate awareness of value and limits of expected results based on current knowledge of the problem you are addressing
- Describe evaluation methods and how data will be collected
  - Establish baseline and end points
  - Document meaningful changes within the environment and project
  - Engage external evaluators
Abstract

- Summary of project
- About 500 words
- Usually written last yet read first!
  - Stand alone and provide clear idea of what is being done, where, with whom, and why
Budget

- Estimate total costs of project
- Include details of major expenses
  - Salaries, equipment, other materials
- Budget items should match and justify activities described
- Realistic and accurate
Cited Literature

- Summarize current state of the knowledge on problem addressed with up to date bibliography
- Clear focused grasp of body of knowledge you are applying as well as to which you will be contributing
- Organize literature according to a standard format – APA, medicus index, MLA, ASA
Final Note

- Successful proposals take time
- Start Early
- Collect References
- Write, Share, Discuss and Revise
Scientific Report Writing

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What is a scientific report?

Adapted from UWI-Madison Writing Center, A.C. Comrie, University of Arizona, R.E. Churchill
A Scientific Report is:

The Formal writing up of a practical experiment, project, or research investigation

- Clearly defined sections in standard format
- Differ from essays in their objective writing style conveying clear and concise information
Scientific Reports

- Main Purpose is to Communicate
  - Convey essential information effectively
  - Communication is a process not a product
- Presume the reader knows little or nothing about your project/research
- Provide sufficient detail to permit exact replication of your project
Scientific Reports

- Use figures, tables, and other data to tell the story
  - Insert figures and tables after the paragraph in which mentioned
  - Label all axes and include units of measurement
- Avoid jargon, slang, and colloquial terms
### Moving from Measurement to Meaning

<table>
<thead>
<tr>
<th>Data</th>
<th>Information</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000 new Cases of Cancer</td>
<td>50% more than last year</td>
<td>Focus education campaigns on age groups that have not started to smoke</td>
</tr>
</tbody>
</table>

R.E. Churchill
## Moving from Measurement to Meaning

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<td>One fatal case of lung cancer costs society as much as education campaigns for 100,000 people</td>
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R.E. Churchill
Target Audience

- Who are they?
  - Those you want to understand and use your report
- What do you need to know about them?
  - Values, Interests, Concerns, Enthusiasms, Vulnerabilities, and Fears
- Why?
  - Customize report in terms of form, style, tone, language, use of visuals, and timing of publication

R.E. Churchill
Questions Every Report Should Answer

- Why should I care?
- What does it mean to me?
- What do you expect me to do about it?
Goal in Reporting Science

- To create material that is well understood
Scientific Reports: Form and Function

- To Inform
- To Persuade
- To Inform and Persuade
To Inform: Major Report Sections

- Introduction
- Methods
- Results
  - And
- Discussion
IMRAD

Structures the report to say, “

“Here is the problem; this is how I studied it; here is what I found; and, this is what it means”.

Note: field and case studies do not usually use the IMRAD format
To Persuade: Major Report Sections

- Single
- Over-Riding
- Communications
- Objective

R.E. Churchill
Present the most important things first.....then move to the details.

Provide supporting evidence

Cite authority

Add elements of persuasion

R.E. Churchill
When asked about how public health officials could affect his behavior, a politician responded:

- Have a Good Idea
- Be Credible
- Have Images
- Make the Problem a Public Concern
Full Report Structure

Most reports include about eight sections.

- Title
- Abstract
- Introduction (and background)
- Method
- Results
- Discussion
- Conclusion
- Acknowledgments (optional)
- References
- Appendices
Report Structure

- Title
  - Describe contents clearly – keep it short and precise
  - Do not use jargon, abbreviations or ‘cute’ words

- Abstract
  - Self contained summary of the full report
  - State main objectives, describe methods, summarize important results, and state major conclusions and significance
    - Written last, about 150 words
Report Structure

- **Introduction**: Sets the scene for the report
  - Identify the problem, address why it is important
  - Refer to previous work/research and relevant literature
    - What is known and what gaps exist
  - Briefly describe your project or experiment objectives – state your aims and any hypotheses

- **Methods**
  - Explain how you studied the problem; describe design, materials, subjects, and equipment used
  - Be clear about the steps you took and provide enough detail for replication
Report Structure

- **Methods sub-headings**
  - Participants
    - Defining characteristics
    - How many/sample size
    - Why and how selected
  - Design
    - Study type - cohort, case control, matched groups
    - Methods - secondary data, survey, focus groups, structured interviews
  - Materials – fully describe
  - Procedure – what was done from start to finish
Report Structure

- Results
  - Clearly describe actual findings and link the narrative to tables, figures, and the specific aims of the project
    - Present in logical order
    - Graphs and tables should be understandable independent of text
  - Describe statistical analyses - type of tests and why, software
  - Results are basis of discussion section
Report Structure

- Discussion: Most important part of the report
  - Likely longest section
  - Summary of main results
  - Discuss meaning of findings/observations; did the intervention achieve the goal?
  - Describe patterns and relationships; explain how results relate to expectations, previous work and literature - highlight contradictions or exceptions
  - Suggest theoretical and practical implications
  - Note future work needed in the field.
Report Structure

- Discussion
  - Do not overgeneralize
  - Do not ignore surprises or deviations in the data
  - Avoid speculation
Report Structure

- Conclusions
  - Very brief summary; restate aims/ key questions and findings
- Acknowledgments (optional)
  - those who directly contributed
- References
  - Provide full citations for all authors you have referred to in the report text
- Appendices
  - Material relevant to the report such as: raw data, interview tools, surveys