

The CIHR Proposal

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General Points



- Seek out the experts throughout...
 - Get the "right" help
 - Types of expertise - CIHR Institutes, Nancy Klos, Colleagues etc.

- Conform to the guidelines - follow the roadmaps

- Page-by-page

- Look at the criteria of the specific funding opportunity



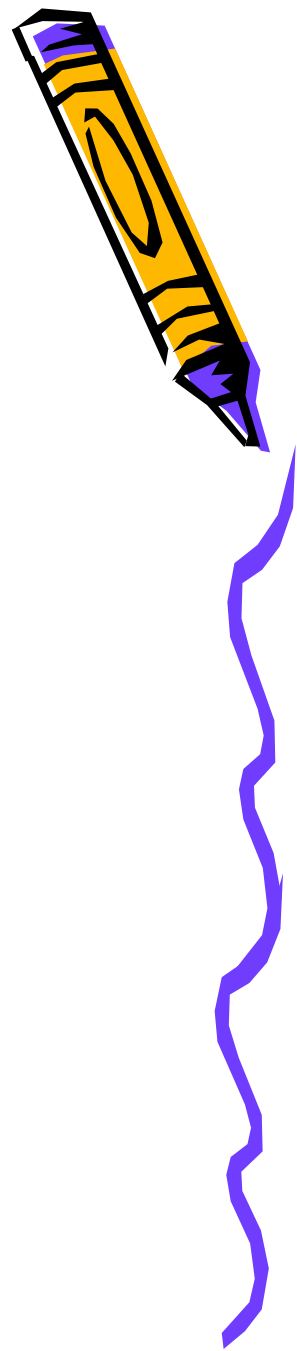
Registration

- Title, PI, and Peer Review Committee

- Peer Review Committees Mandates

<http://www.cihr-irsc.gc.ca/e/4657.html>

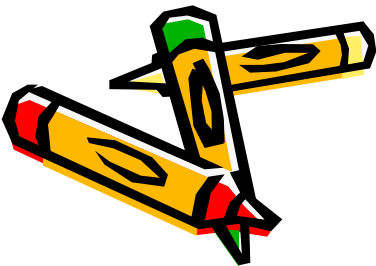
- Operating Grant: Winter 2013 Priority Announcement (Specific Research Areas)



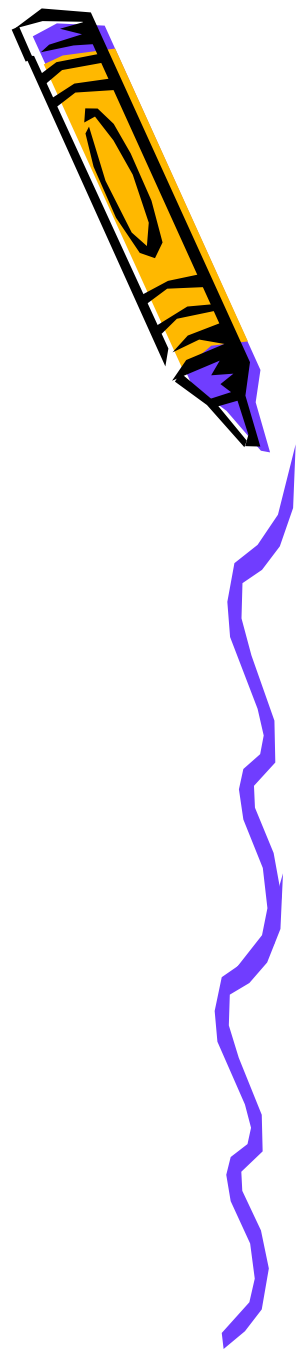
The Proposal: What you Hope to Achieve



- Convince the reviewer that the project is important
- Scientific and Artful Design
 - Creativity in use of methods & techniques
- Convey the researcher's talent for conceptualizing, imagining, and writing
 - Convince the reviewer that you can carry out the research and that you know how to do...
- All this and the size of your canvas is limited!
 - The Canvas is getting smaller!
 - Use words wisely



1. Background: Problem to be Addressed

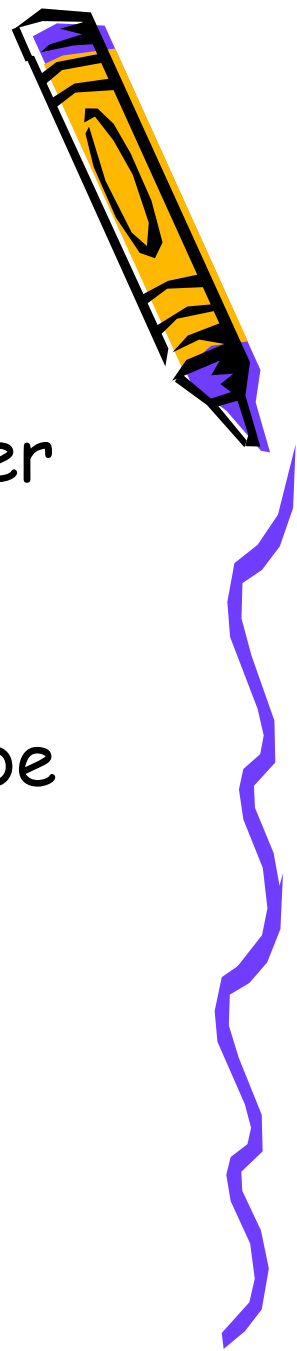


- Setting the stage
 - ❑ Entice/grab the reviewer
 - ❑ **The First Page is So Important!!!**
- WHAT IS THE PROBLEM?
- Relevant background information and relate the background information to what you want to do.
- Provide convincing evidence that the project is important.



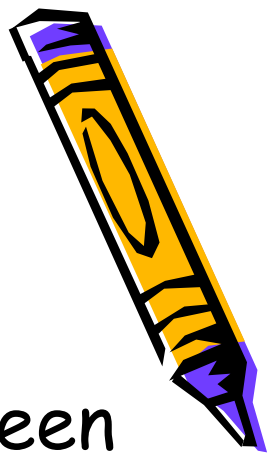
Developing a Polished Argument (Cynthia Verba)

- The project is a research topic that never has been done before.
 - Show that the topic no longer should be neglected.



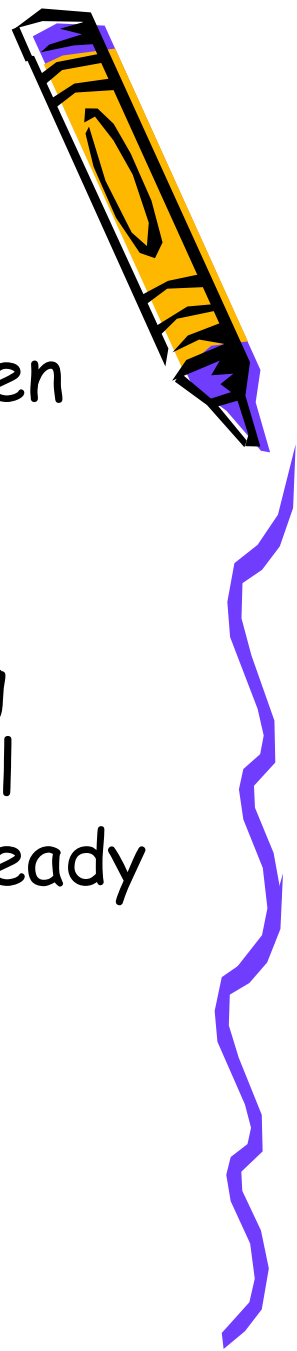
Developing a Polished Argument (Cynthia Verba)

- The project is a research topic that has been examined many times before → well known material.
 - Need for reassessment.
 - You are adding a new dimension, thanks to the work that has already been done.



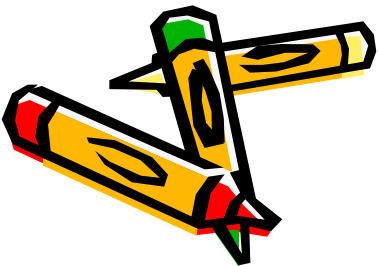
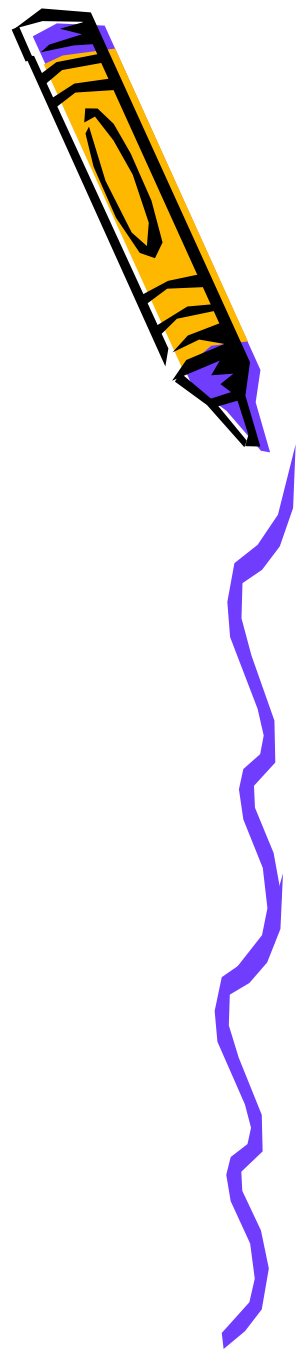
Developing a Polished Argument (Cynthia Verba)

- Where the argument logically falls between paradigms one and two.
 - The project will contribute by exposing some new material which in turn will call for some reassessment of what has already been done.



2. Research Purpose

- Research Purpose
 - ❑ Well-Defined Objectives and/or Research Questions
 - ❑ Logical development
- Hypotheses/Assumptions
- Avoid too many... or else the project may be deemed as not being feasible.
- Threaded throughout the proposal...



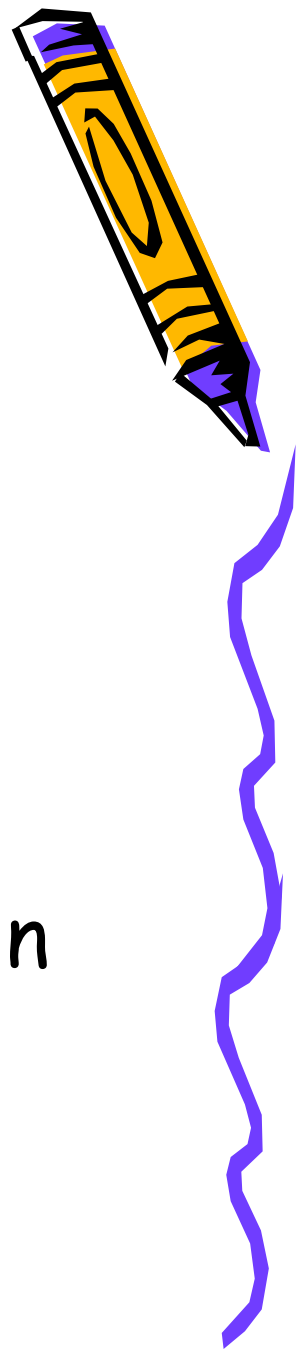
3. Literature Review



- Review should be relevant to the problem only.
- Show where the proposed work fits in the overall field.
- Explain *your contribution to the field* including how it fits to the issues raised in the literature review.
- *Keep it simple and clearly organized.*
- *Tables/appendices ?????*



4. Conceptual Framework

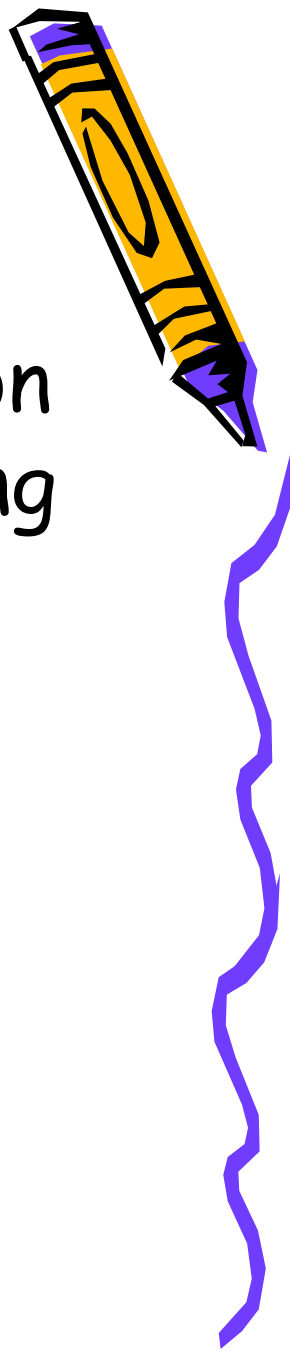


- Fits with the study's variables
- Relate back to the literature
- Diagram/model-Not within the main text



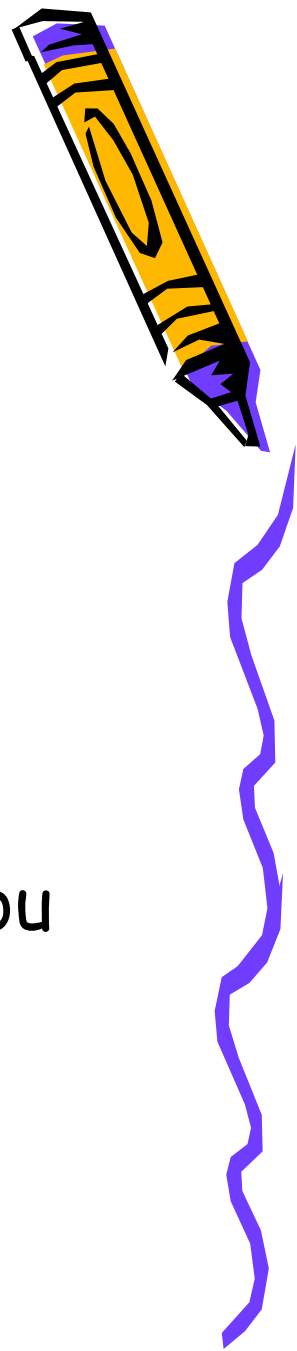
5. Procedure

- Provide in general terms a description of how you will go about accomplishing what you want to do.
- Timeline - diagram and/or table (appendix)



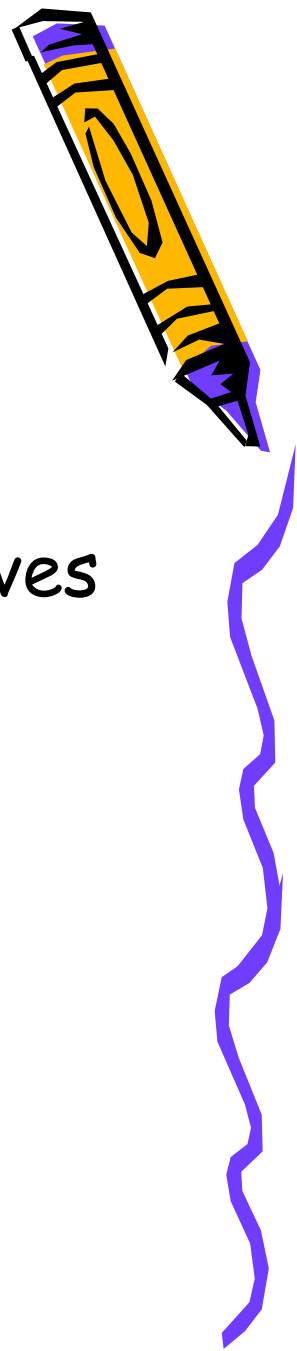
6. Design

- Section devoted to methodology and methods → how you will carry out your study.
- Provide sufficient detail to make the reviewers believe that you know what you are doing scientifically!



6. Design: Key Points

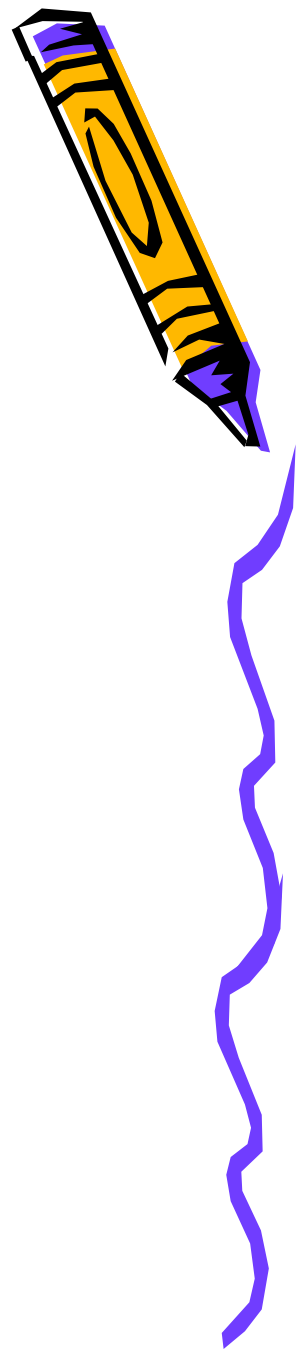
- The feasibility of the project hinges on the research design – and especially on how closely it mirrors the major objectives under investigation.
 - ❑ Research objectives/questions/hypotheses should be your guide.





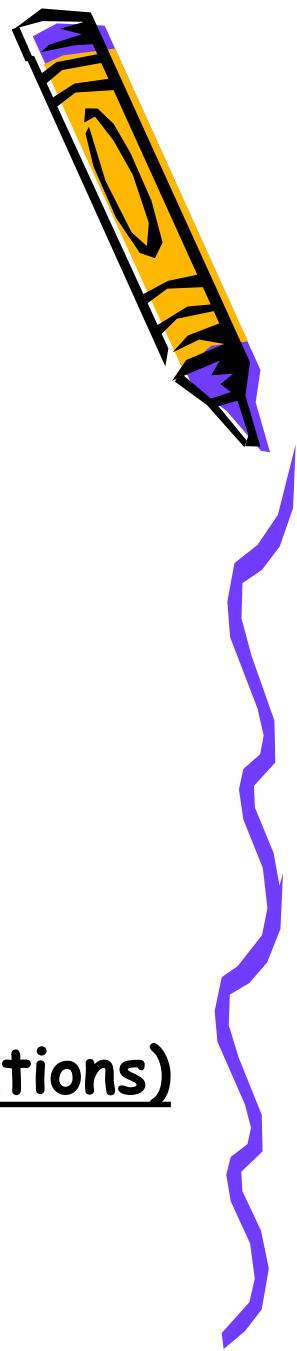
6. Design: Sections

- Methodology
- Sample
- Data collection
- Data analysis
- Reliability & Validity
- Ethics



6. Design: Key Points

- Provide information for every technique used
- Logic & Form
 - Define--->Apply
 - Words, numbers
 - Visual displays (in appendices)
- **Attack soft spots**
- Special considerations (e.g., vulnerable populations)



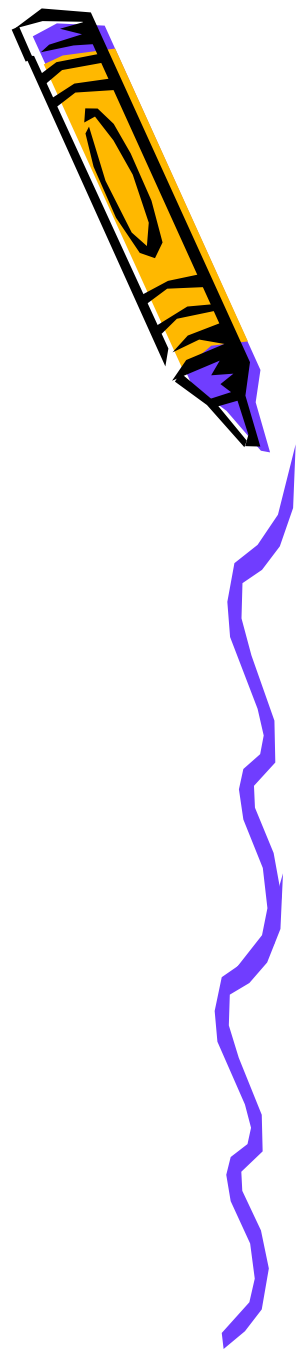
7. Research Team

- Who are they and what contribution will they make.
 - Start with the PI - Evidence that you can do the job
 - Identify special background or skills
 - Identify what they will be doing
- Ensure you have the right stuff in terms of expertise.
- Research investigators versus research personnel.



8. Dissemination of Findings

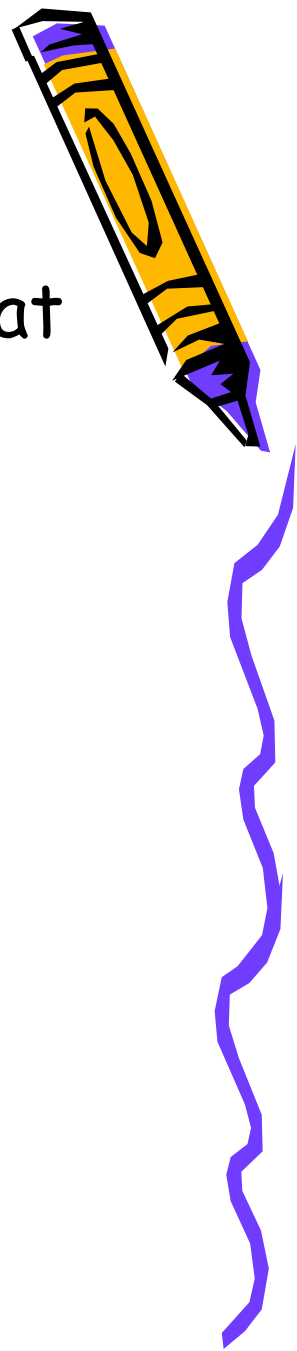
- Have a well thought-out plan
- **More than journals, conferences → Translation of knowledge**
 - Key players, Organizations, Participants, Policy makers.....**
 - PROACTIVE-KTE**
- Build into overall timeline



8. Dissemination of Findings

- Guide to Knowledge Translation Planning at CIHR: Integrated and End-of-Grant Approaches (CIHR, 2012)

- <http://www.cihr-irsc.gc.ca/e/45321.html>



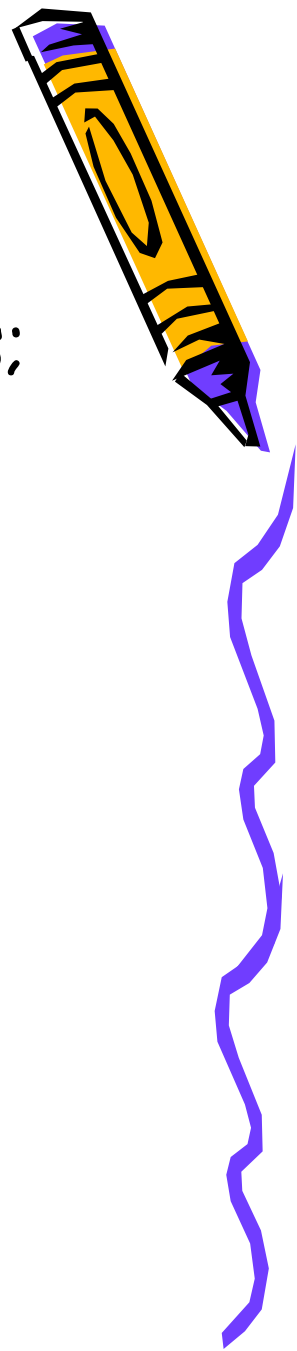
9. Significance

- Go out with a bang!
- Short summary paragraph that will help the reviewer recall the importance of the work!



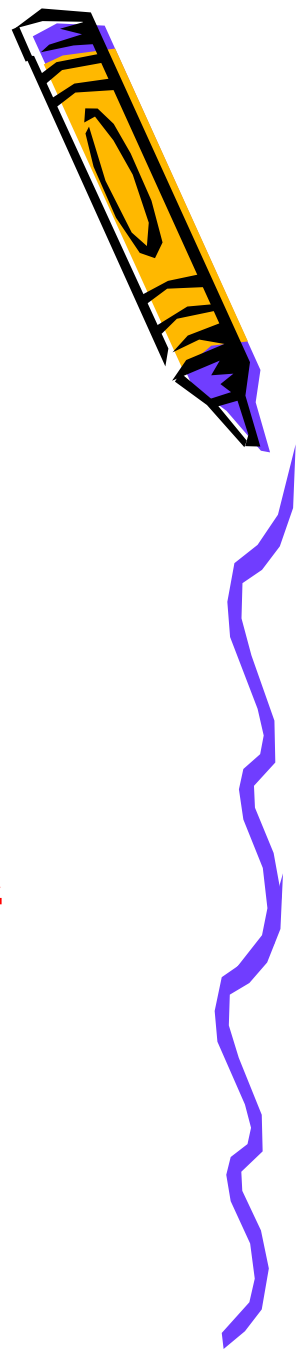
Appendices

- Tables of lit. review; interview techniques; Diagrams; Letters of commitment...
- A must → Research instruments
- Remember more is not always better!



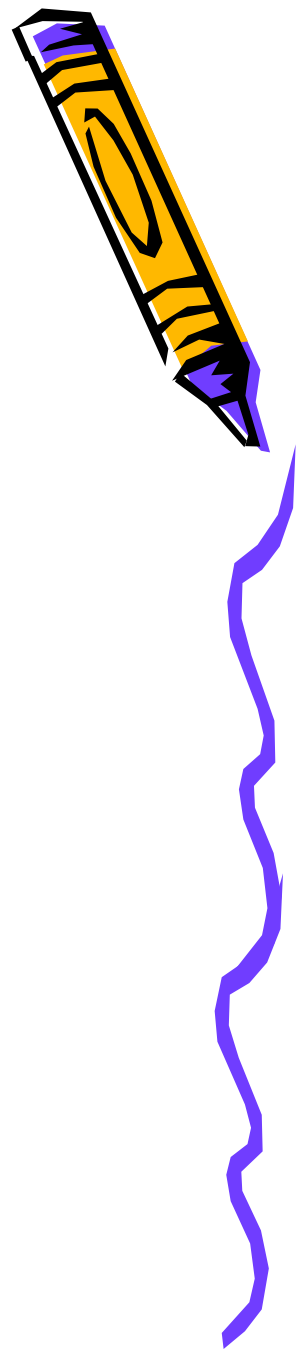
Budget

- Check your numbers
- Provide sufficient explanation for budget items
- A poorly prepared budget can influence a reviewer's assessment of PI's ability to conduct the proposed study.



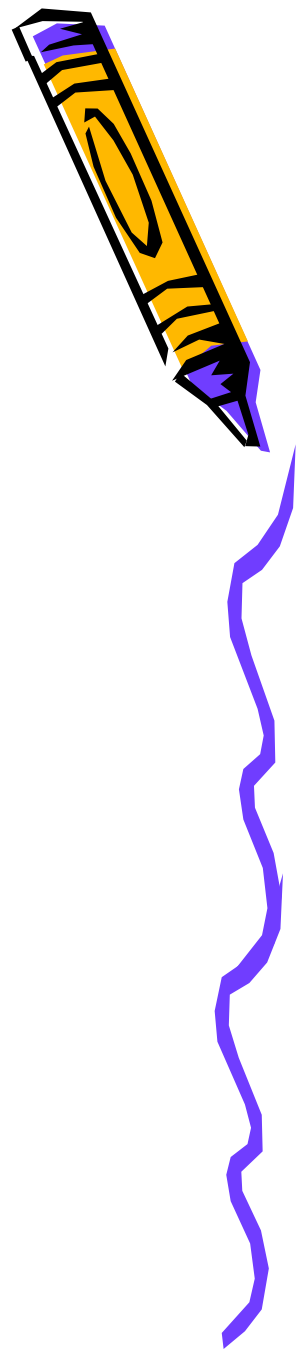
Additional Points

- Leave yourself time
- Preliminary work always helps

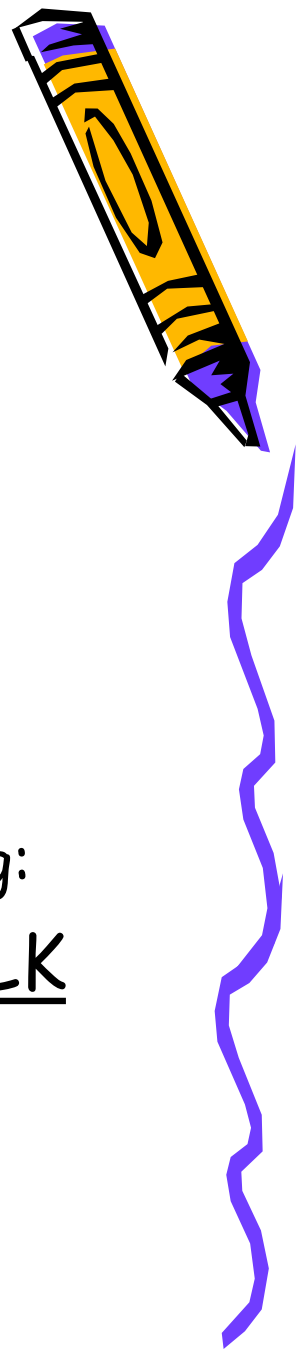


Additional Points: Morse & Field (1995)

- Clarity
- Comprehensive
- Consistency
- Accuracy



Additional Points: The Audience



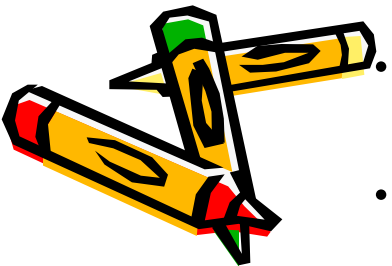
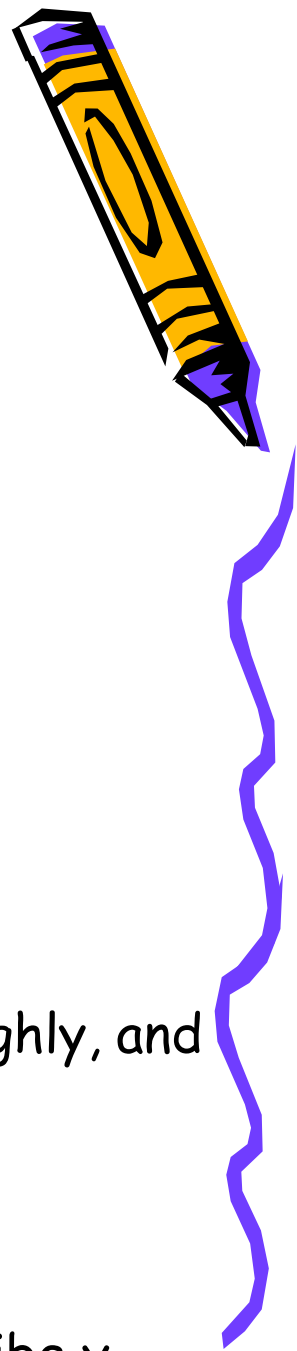
- Show respect for the audience
 - ❑ Defend, without being Defensive

- Writer vs. reviewer burden
 - ❑ Avoid jargon/"name" and "method" dropping:
SAY WHAT YOU MEAN IN PLAIN TALK



Additional Problems (aka 'How to make reviewers unhappy')

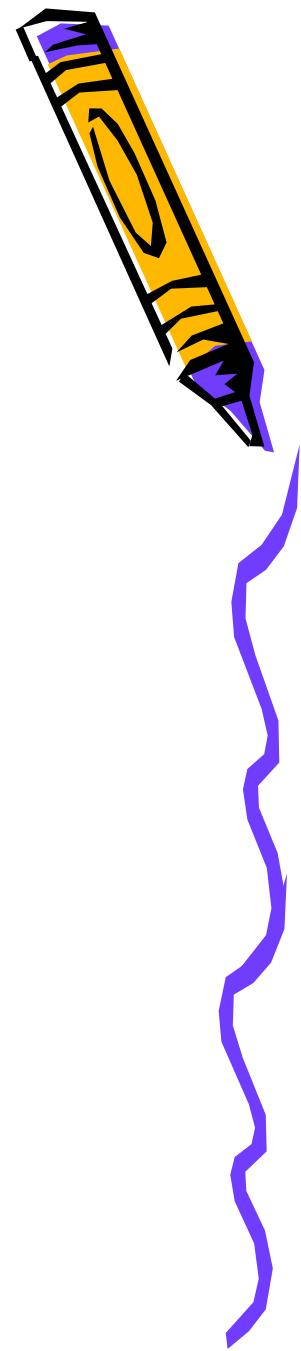
- Poor grammar, spelling errors, factual errors, typos
- Failure to follow instructions precisely
 - Content and Format
- Format altered halfway through the paper
- Failure to clearly state goals
- Not enough detail/vagueness
- Assume your reviewer knows your field thoroughly, and jump straight to the particulars
- Bounce around from subject to subject
- Claim you are going to do x then actually describe y



Common Mistakes in NIH Applications

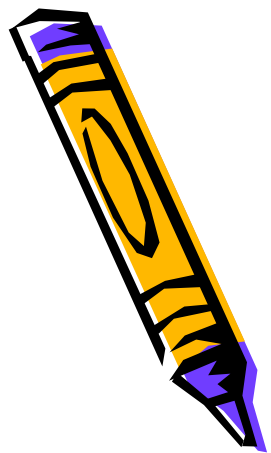
http://www.ninds.nih.gov/funding/grantwriting_mistakes.htm

- Problems with significance
- Problems with specific aims
- Problems with experimental approach/design
- Problems with investigator
- Problems with environment



Questions to Ask

- Do I have a Viable Research Idea?
- Do I try an entirely new research topic than into revising the old one?
- Do I apply to the next competition or wait?
- Do I consider other CIHR's programs or granting agencies?



Response to Previous Reviewers



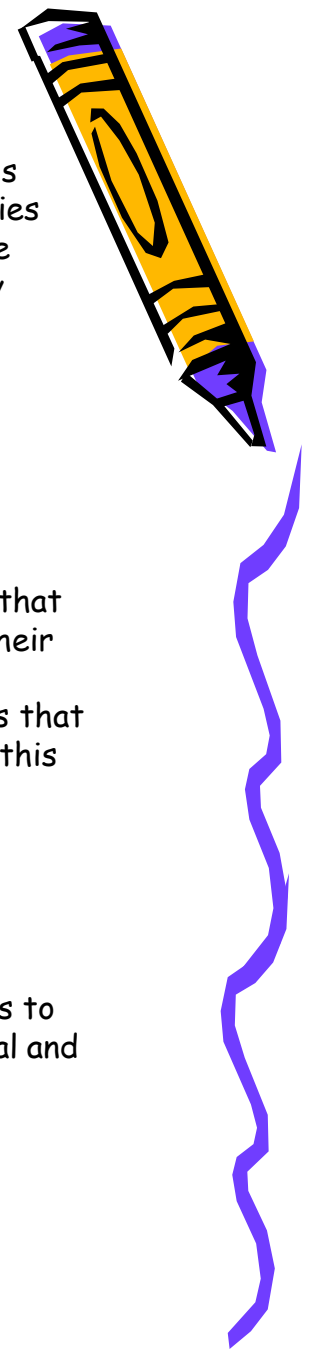
- 2 rebuttal pages - Comments stand alone
- Ask the question: Are you satisfactorily addressing previous concerns?
- Be careful of how you word your responses
 - Be Positive
 - Like the customer, the reviewer is always right
 - Support for not agreeing with certain suggestions
 - Highlight Positive Aspects of the Review



Response to Previous Reviewers

- We appreciate and thank the reviewers for their thorough and careful review and believe their insightful comments and recommendations will help to make our study even more solid...
- This reviewer was very impressed about the proposed study...
- The reviewer had no major concerns with this proposal but had suggestions or questions in following four areas...
- The reviewer expressed concern that those children who use the handheld computers...
- The reviewer, however, identified the following three areas needing clarification...





Reviewer #1:

1. **Comment:** The choice of PedsQL for mental health conditions rather than chronic illness is interesting. One investigator is cited using the measure for a similar population. The activities subscale may not be as relevant, but the other subscales should work. Being able to compare quality of life findings to those of youth with other chronic illnesses and/or disabilities may prove useful.

- **Question:** Should we compare QOL to other CI/disabilities?
- **Question:** Should we include the health and activities subscale?
- **Question:** Should we have a research objective that includes QOL?

2. **Comment:** I suspect that if the investigators are able to create an interview environment that is perceived to be absolutely safe, the adolescents may appreciate the opportunity to tell their story. However, I would expect an interviewing approach that ensures that the youth feel absolutely no pressure to "succeed" at story telling. It is common for interviewees to ask "is that what you want" implying an assumed expectation and level of "performance." Steps to avoid this and make the interview fun are critical as is the skill of the staff you will hire to do the interviews.

- **Scientific Officer (SO):** Need to ensure that youth with anxiety are comfortable with the interview questions.
- **Thoughts:** The September proposal included a chart in the appendices that listed strategies to help youth feel comfortable in the interview setting. I will include this in the March proposal and add another sentence to the proposal if there is room.





Addressing the Reviewers

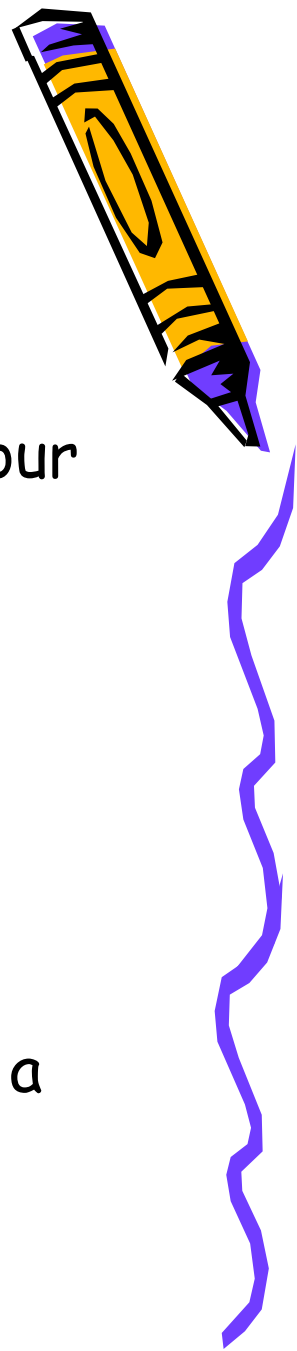


- Pay attention to SO notes
 - How positive?
 - Is the study warranted but still needs work?
 - Look for comments that were not addressed by the two reviewers - what do these comments indicate?
 - Read between the lines

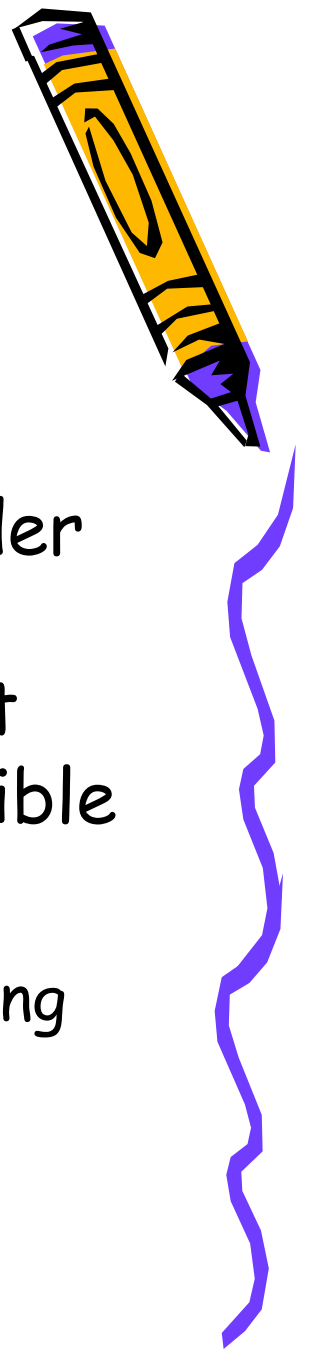


Addressing the Reviewers

- Decide how and to what degree needs responding to
- Carefully assess what will strengthen your proposal
- Some concerns will require greater attention
- Idea and/or approach
- Look for any insights that could lead to a revised direction
- Be true to the study



Moving Forward



"The very best scientists fail. Very good, fundamentally new ideas may have a harder time cracking the funding barrier than 'pretty good' ideas. If the reviewers 'just didn't understand you,' YOU are responsible for that."

- Janet S. Rasey, Ph.D. Director, Research Funding Service University of Washington Seattle, WA



Additional Sources



- CIHR - citizen engagement, KET documents etc.
- Strategies & Tactics of Writing NSF and NIH Research Grant Proposals
<http://www.baruch.cuny.edu/grants/documents/StrategiesandTacticsofWritingNIHandNSFResearchGrantProposals.pdf>

*See page 8 and on



Additional Sources

- <http://www.washington.edu/research/guide/grantwriting.html>
- **Proposal Writing**
 - [Fundamentals of Grantsmanship](#) by Janet S. Rasey, Ph.D., Research Funding Service
 - [A Guide for Proposal Writing from the National Science Foundation](#)
 - [The Art of Grantsmanship](#) - A useful guide by Dr. Jacob Kraicer of the University of Toronto Department of Physiology; its specifically for medical researchers, but of interest to anyone looking for funding.
And more.....
- **NIH Grantsmanship**
 - Grant Tutorials from NIAID - How to [Plan](#) and [Write](#) a Grant
 - [How to Write a Grant Application](#) (PDF file)
 - [NIH Guide](#)
- **Toolkits**
 - [Researchers Toolkit](#) from HealthLink

