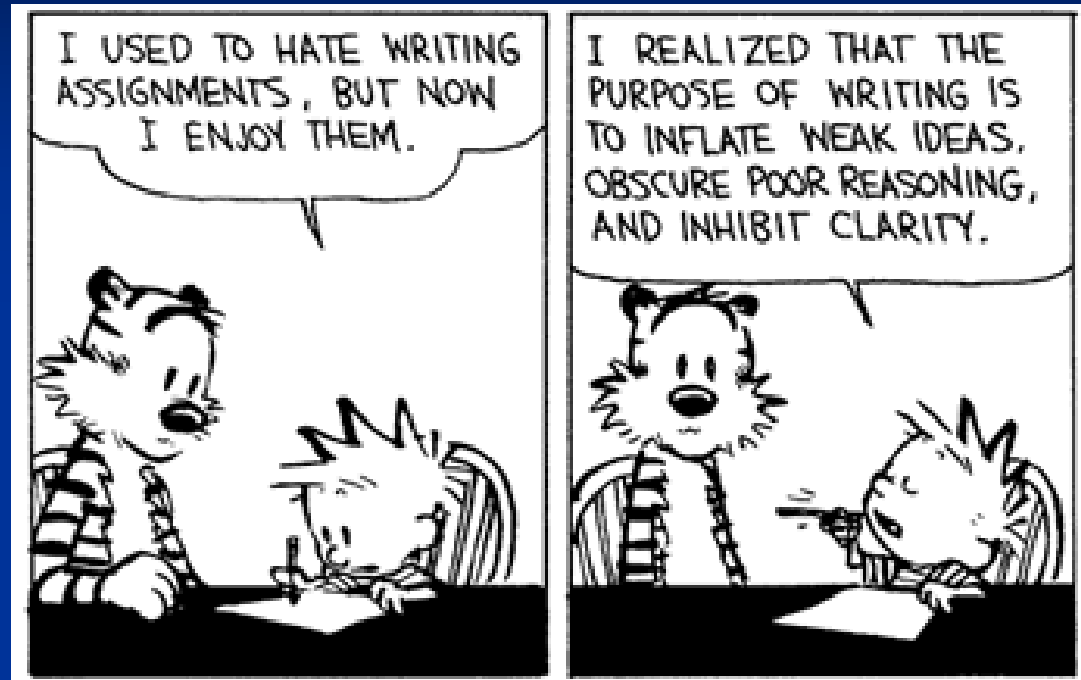


# How to write and review a grant



Adapted in part from:

[http://www.unc.edu/depts/wcweb/handouts/grant\\_proposals.html](http://www.unc.edu/depts/wcweb/handouts/grant_proposals.html)

<http://www.wilbers.com/grants.htm>

# Do's and dont's

- Inspire (don't bore)!
- Inform (don't confuse)!
- Impress (don't flop)!

# How not to flop

- Prepare thoroughly  
(consider writing a review first)
- Tell a story
- Limit yourself to 3 hypotheses
- Cut out all unnecessary detail

# Identify your target!

Research Council  
Medical Charity  
EC



# Give them what they want!

- Format
- Theme
- All issues



*"When writing your essays, I encourage you to think for yourselves while you express what I'd most agree with."*

# General structure

- Background
- Hypothesis
- Experimental plan
- Likely benefits
- Costs

# Background

"Literature reviews should be selective and critical, not exhaustive."

# Background

- Show the importance of your area
- Demonstrate you know the literature
- Convince that this research is timely
- Provide sufficient preliminary data

“Remember that most readers are lazy and will not respond well to a poorly organized, poorly written, or confusing proposal.”

# Some more advice

- "Emphasize why you or your organization is the best qualified to solve the problem."
- "Support your proposal with concrete and specific documentation."
- "Present your strongest and most compelling arguments."
- "Anticipate the reviewers' questions."
- "Make sure your proposal is complete, free of errors, and attractively presented"

# Hypothesis

- Is the hypothesis original?
- Is it testable?
- Can you do it?

“To begin the long process of getting that grant, you need more than a good idea. You need to know what’s possible and realistic.”

# Experimental plan

- Choose the most appropriate methods
- Don't be afraid of new technology - but
- Show that you or your collaborators have past experience with all the methods
- Provide power calculations
- Explain what each experiment will yield

# Collaboration

- 100% of nothing is nothing
- Both parties need to feel satisfied
- Personal contacts are vital

“Make sure you have the personnel needed to carry out your project. You might want to assemble a board of advisers or solicit letters of support from well-known authorities”.

# Contingency planning

- Estimate the risk of each experiment
- Say what you will do to continue the project if any aspect fails

“You may not want to admit it but some of your proposed experiments may not work. Making the whole project contingent on one experiment is too risky”

# Justifying staff - Gantt charts

Construction of adenoviral vectors	■								
Analysis of MMP-10 and -14 overexpression and knockdown on adhesion <i>in vitro</i>		■	■	■	■	■			
Analysis of MMP-10 and -14 overexpression and knockdown on adhesion <i>in vivo</i>							■	■	■
Investigating the mechanism of MMP-14 upregulation by shear stress	■	■	■	■	■	■	■		
Investigating the mechanism of MMP-10 upregulation by shear stress			■	■	■	■	■	■	■
Analysis of MMP-10 and MMP-14 in human coronary arteries	■	■						■	■
		Year 1		Year 2		Year 3			

"Explain the necessary skill sets and functions of personnel you will recruit."

# After the first draft

“Before submitting your proposal, ask colleagues and experienced grant-proposal writers to read and critique it.”

- Don't send a 'rough draft' - your colleagues are busy people too.
- If your colleague didn't understand it, it probably wasn't clear

# Rejections and revisions



- Try to take criticisms constructively
- Arguing with referees is pointless
- Try to revise the proposal along the lines suggested

# Some final points

- “The way you write your grant will tell the reviewers a lot about you”
- “Allow your own voice and personality to come through”
- “Writing with heart improves odds of getting grant”
- “it never hurts to ask ..... the worst thing they can do is say no”

# Last thought

“Final decisions about which proposals are funded often come down to whether the proposal convinces the reviewer that the research project is well planned and feasible and whether the investigators are well qualified to execute it.”

**Good luck!**