UCL Geography ECR Grant Writing Workshop
Good Grant Writing

"I'm a fiction writer in the grant-proposal genre."

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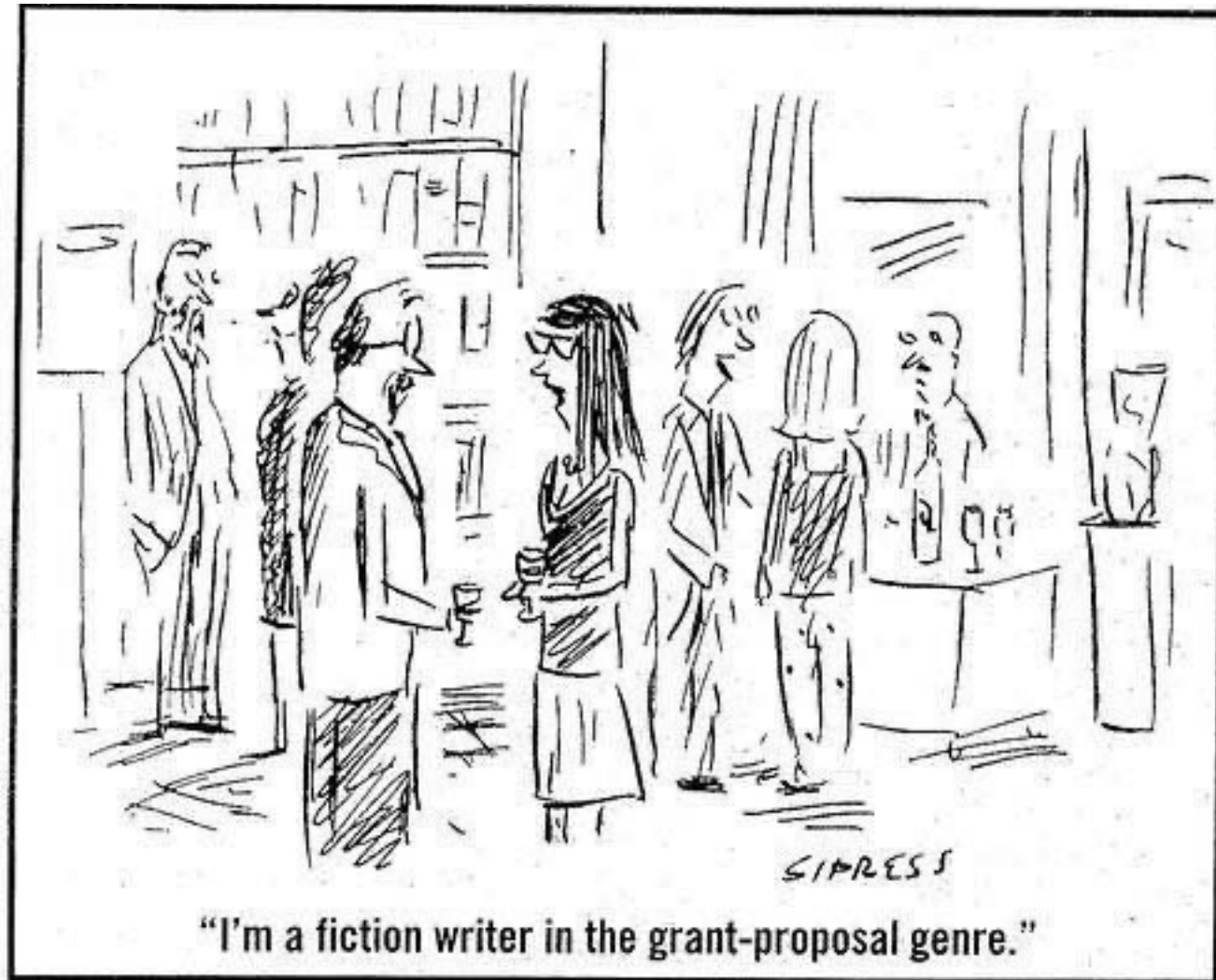
Credentials

I've submitted many proposals. Some have actually been funded.

Fellowships:
Fulbright, Harvard Centre for the Environment, UKRI-funded Researcher in Residence

Grants:
Principal or co-investigator funded by ERC, EPSRC, Defra, ESA, NERC

I've also served as reviewer and on many grant award decision panels.

Reviewer:
ERC, NERC, USEPA, NOAA, NASA, Irish and Canadian funding agencies, BELSPO.

Much of my advice may be obvious; hopefully some of it is useful!

General Structure

Once you've formulated your fundable idea (see slides by Jenny and Lewis)...

Check the guidelines, get access to a successful application

The proposal typically includes the following sections (order varies). Content of each component is like a speculative publication:

- **Summary** (similar to an abstract)
- **Introduction** (what's known, what isn't known and why we should care)
- **Objectives** (what this proposal seeks to achieve)
- **Investigators** (who is your team, what do they bring)
- **Work Programme** (includes individual tasks, tools, timeline, people)
- Expected **Outcomes** (emphasis on new knowledge)
- **Budget** (with justification of resources)

Other sections that are often also required: data management, risks and risk mitigation, diversity, pathways to impact, public engagement, support letters

Summary: the hook to draw in the reader

A good summary has all the key components of a good abstract:

1. **What is the question?** What questions is the proposal seeking to answer? What specific ideas will be tested?

2. **What will be done?** How will the proposers go about answering these questions? What methods will they use?

3. **What are they likely to find?** What are the anticipated outcomes from the proposal?

4. **Why is it important?** Why is the answer to the scientific question meaningful? How general/transferable are the findings? What will change when this study is complete?

Pitch is vital. Consider who you are writing this for.

The Proposal: Tell A Story

Give your proposal a narrative

How will you get from here to there? Cause and effect.

Narrative at its core: Set Up → Event → Conclusion

Proposal narrative: Introduction → Methods and Expected Results → Outcome

Narrative does not diminish your proposal, but heightens it and keeps the reader engaged. It's a powerful information retention tool. Use it!

Many elements of a good story to draw on: hero, villain, conflict, intrigue, plot twists, winners, losers, underdogs, conundrum, mystery, adventure

Shortwave podcast on Your Brain on StoryTelling:
https://www.npr.org/transcripts/795977814

BBC Inside Science on The Science of Storytelling:
https://www.bbc.co.uk/sounds/play/m00057rl

Set Up, Event, and Conclusion of the story of Black Panther

T'Challa's father dies. He must return to Wakanda, as he is heir to the throne.

He is usurped by a powerful enemy, leaving his family and Wakanda vulnerable.

He reclaims his place as leader of Wakanda when he proves his worth by uniting the tribes and defeating an army of foes.

Introduction: the Set Up

Convince the reviewer that your topic is important and that there's a knowledge gap (that you will address by the end of the proposal).

Provide copious and appropriate references to demonstrate you are knowledgeable of the state-of-art.

Be brief. Not an exhaustive literature review. Provide only the necessary information for the reviewer to follow along and to motivate your proposal.

Layout:
Paragraph 1:   What's the problem
Paragraphs 2-3: Background information and further justification for your proposal and approach.
Paragraph 4:   Say what you will do: "Here we/I propose to …"

Work Programme: The Event

Possibly the most challenging to write, as it's speculative and involves many moving parts (budget, timeline, investigators, risk mitigation)

Individual tasks should fit thematically into larger work packages.

All steps in the process should be clear and follow a logical sequence that can be mapped to objectives, research questions, overall aim, deliverables, budget.

Entertaining YouTube video on giving clear instructions for making a PB&J sandwich: https://www.youtube.com/watch?v=FN2RM-CHkuI

Requires allocation of tasks: who will do what, for how long and why (certain tasks are better suited to PhD students, postdocs, technicians, investigators).

Mitigate or identify contingency plans for all foreseen risks.

Illustrate how tasks interlinked, when these will occur and for how long, who will do what, what resources are allocated. Get ideas of what works (and doesn't) from past successful applications.

Expected Outcomes: The Conclusion

What will have changed at the end of the project:

- New way of doing things
- Upended the status quo (prove the establishment to be wrong!)
- New knowledge/evidence
- Mystery solved
- Ability to do something not possible before

And by the way, there will also be:

- Peer-reviewed papers (demonstrates rigour)
- Presentations (share with and get feedback from the community)
- Conference sessions (many researchers interested in or impacted by focus)
- Public engagement events (advertise beyond the field)
- New data sets, new technology (software/instrument)
- Press release (get media's attention to share widely)
- Workshops (targeted involvement of relevant stakeholders)
- Training or capacity building (enhance uptake of knowledge or technology, address debilitating capacity deficits)
- Highly skilled next-generated of scientists (PhD students, postdocs)

General Tips and Pointers

Ensure the proposal is clear and concise and that the important points stand out (repetition, illustration, map objectives/outcomes to scope).

Use acronyms and jargon very sparingly, as these often stand in the way of effective communication.

Prevent typos and grammar errors that also impede effective communication and give the impression of a sloppy proposal.

Don't let tight word/page limits be a crutch. Write all you think needs to be said, then go back and edit to meet the word limit.

Get a range of experts to read your proposal (research support, PhD/postdoc advisor, mentor, past awardees/panelists/reviewers, colleagues at all levels).

Edit, edit, edit. Then edit again. There's always room for improvement.

If you have the luxury of time, pack away the proposal for a few days to look at it later with fresh eyes.