Writing compelling proposals

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Key messages

Short and to the point – 3 bullet points

Don’t assume that reviewers know what you’re talking about

It’s not the reviewer’s job to understand your proposal ……

its *your* job to *make* them understand it

Ten Tips for Pitching Winning Proposals

Baseline

3 bullet points – address these in the first paragraph

- What is the key science question you are trying to answer?
- What observations are you proposing to perform?
- How will the observations be used to answer the question?

Proposals – peer review by a committee

Find out who is on the review committee

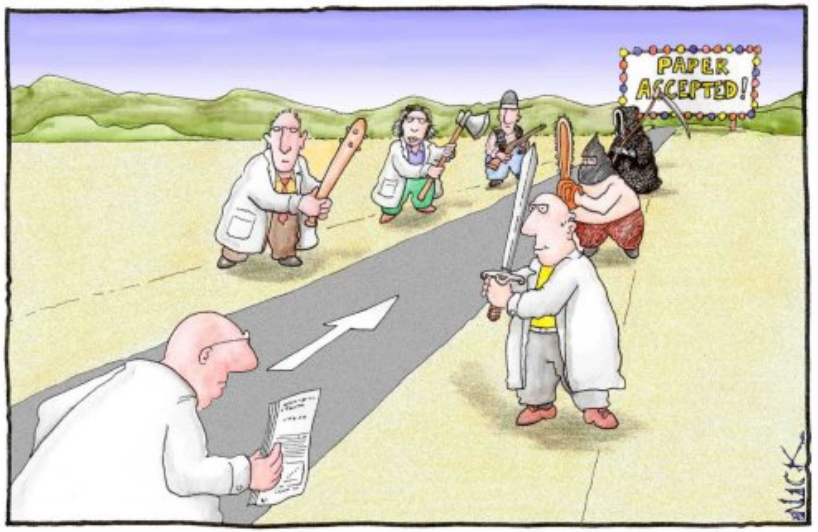
reinforce the point that you aren't writing for a panel of experts

Understand what will happen to your proposal

Obey all the rules

System isn't perfect,

but it's what we've got



Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'

Tips : what to *always* do

Obey all the rules

Short and sweet – 2 pages is better than 10

Use clear and concise language that non-experts understand

Tell a story - make your proposal an enjoyable narrative

Frame it as an experiment ("Hypothesis and Testing") rather than data gathering

Summarize the relevant background, expanding on the context and big questions

Include all relevant references

Include descriptive and supportive figures (make sure to label them)

Clearly explain why the observations are critical for answering the big questions

Provide a detailed but clear technical justification

Demonstrate that your team will be able to do the work

“Close the loop” : an example

- What is the key science question you are trying to answer?

Clusters are the building blocks of galaxies and the nurseries of most stellar systems. Despite their importance, even the fundamental question of whether a single mechanism can describe cluster formation across the mass range from open clusters to globular clusters remains unclear.

- What observations are you proposing to perform?

Answering this question requires observations of a cluster's natal dust and gas well before the onset of star formation. We have identified an extreme molecular cloud that appears to be on the verge of forming a high-mass cluster. We aim to obtain a ~3’ x 1’ mosaic of its dust continuum and molecular line emission at 90 GHz.

- How will the observations be used to answer the question?

These observations will reveal the location, mass, and kinematics of the small-scale fragments within the cloud allowing us to distinguish between competing cluster formation models.

Tips : what to *never* do

Ignore the essential criteria

Submit proposals with typos or that are badly written

Cram text and figures into the page limit

Ask for the wrong telescope / instrument / amount of time / semester

Waffle - less is more

Use jargon & acronyms

Wait until page 4 to describe why this research is important

Assume everyone thinks that this science is the best ever

Ignore comments or feedback provided by the TAC from previous submissions

Show no progress when resubmitting the same proposal asking for more time

Acronyms

GLIMPSE

HIFLUGCS

UCDG

AeBe

ULIRG

RsCVn

ERO

BD

RV

EGOs

VLM

HMSF

FRII

HIPPARCOS

DYNAMO

Things to consider

Would you want to read this proposal?

- Late at night?
- On a plane?
- Along with 80 others just like it?

Are you able to understand your proposal in under 5mins per page?

Can you FIND the main points in the proposal without reading the whole thing in all its gory detail?

Imagine its your hard earned money ....

Observatories and funding agencies need to know that the project is feasible and that results and publications will come from the use of these resources

Suggestions for students and early career researchers

Set aside time before the deadline to form your own “TAC”

Provide helpful, positive suggestions for improvement

Remember, your peers are reviewing your proposal

Take the advice on board

If your peers can’t understand your proposal then the TAC probably won’t

Crafting a good proposal takes a lot of time and patience

“I didn’t have the time to write a shorter proposal”

ATNF proposal submission

2 semesters per year :

- APRS (April – September)
- OCTS (October – March)

Proposal deadlines : mid-June, mid-December

Call for Proposals is issued ~1 month before the deadline

Submit:

- Coversheet (science abstract, outreach statement, authors)
- Observations table (source information, array configuration, time request)
- Scientific justification (what, how, why)

Rules, guidelines, and submission : opal.atnf.csiro.au

ATNF's Time Allocation Committee (TAC)

Review ~120 – 150 proposals per semester

Meeting typically runs for 2 — 3 days (early-February, early-August)

Provide a scientific ranking – time allocation is done separately

Panel of 9 Australian Astronomers, 20 international experts ("readers")

- expertise covers *most* science areas
- ~40 proposals for TAC members; ~20 proposals for TAC readers

Each proposal is read by 4 people, all proposals are discussed

Grades are finalized during the meeting; comments are finalized shortly after

Grades are then given to the ATNF Head of Science Operations (scheduling)

Schedule is released ~month after the meeting; ~month before the semester begins

Oversubscription rate is ~1.5—2

- ATCA: 40% get most of the requested time, 10% get some time, 50% get none

Summary

Take the process seriously

Get help and advice from colleagues, postdocs, senior staff

Requires time and patience

Your first proposal will be the hardest one to write

Writing compelling proposals is a necessary skill for all aspects of our job

Reading other proposals is the best way to improve your own

Do everything you can to give your proposal a broader context, make it readable, enjoyable, clear, and concise …… all of these will help your chances

Thank you

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