25 Rules on How to Write a Good Proposal

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This Morning's Programme

My 25 Rules

Your first short proposal

Discussion on your proposals
Rule 1:

You need to have a good scientific idea or problem to be attacked!
Rule 2:

Good or bad idea – that is defined by your peers. Take this into account!
Rule 3:

Before you start to write – make sure that your mission fits the mission of the funding agency!

Do not become an Anti-David !!!!!!
Rule 4:

Be optimistic - there are many, many funding agencies...

DFG  NSF
BMBF  NASA
DLR  DOE
ESF  Humboldt
EU  ESA
Rule 5:

Find others who successfully applied to this agency. Study a sample proposal!
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2. State of the art
3. The proposal proper
4. Methods and data
5. Schedule
6. Required funds
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Rule 6:
Funding agency people are only partly administrators—they have scientific experience, contact them with your questions!
Rule 7:

Think about external and internal deadlines!
Rule 8:
The display of the proposal should be attractive. Avoid spelling errors!

No handwritten proposals, but avoid overdoing
Rule 9:
The peer-reviewers are not paid! And often are from different fields.
Rule 10:
The title of your proposal should be sexy!
But do not prostitute yourself!

Study of the interaction of stellar winds with magnetized objects surrounding stars at habitable distances

or

Magnetospheres of Extra-Solar Planets
Rule 11:
Follow strictly the rules of the funding agency for the title page etc.
Rule 12:
The abstract is important. It serves as a first, sometimes also final information about the proposal.

Sample abstract:
The proposed study aims at collecting statistical information about successful proposals. Details are found in the proposal proper.
Rule 13: Proposal writing is a very ritualized process.
Rule 14:

Your scientific hypothesis should be testable! And it should be significant.
Rule 15:

Specific aims are important! You cannot do everything at the same time.

Extra-solar magnetospheres:
- Find scaling laws for magnetospheres
- Find scaling laws for planetary magnetic field
- Apply laws found to known ESPs
- Find scaling laws for radiation
Rule 16:

Current state of knowledge section is very important and critical.

- What is known?
- What is not known?
- Why is your hypothesis important?
- Give a fair review of previous and competing work. It is a peer-review process!
Rule 17: Experience of your team

Present your highly skilled team!!!!
Rule 18:

Pilot study results are very important.

...but some colleagues already did the research they are asking funding for. This is somewhat absurd and non-scientific...
Rule 19:

Methods and tools to be used should be described in some detail.
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Rule 20:

Prove your management qualities and provide an organigramme
Rule 21:

Provide them with a time table and schedule!
Rule 22:

Ressource level: be as detailed as possible! Add a bit for the referees to cancel.
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<th>Amount</th>
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<tr>
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<tr>
<td>Publication</td>
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Rule 23:

Only the one who tries can win!
Rule 24:
If you loose -
keep on trying!

Il faut imaginer
Sisyphe heureux

Albert Camus
Rule 25: If you win, have a party and invite Dieter and me!