

ASA Early Career Researcher Mentoring Workshop – Session summary

Session Topic: Writing a Successful Proposal

Discussion Leader: Rachel Webster

If you only remember three things from this talk, remember these...

1. Don't be a Delta function! Make sure you have some breadth in your academic and service activities.
2. Always have some great research ideas in your back pocket - you never know when the opportunity will arise to apply for some funding.
3. Make sure your proposal addresses a 'big idea' people care about.

Session summary/notes

Funding success is the result of an imperfect, quantised process. Indeed, if just one assessor does not like your proposal, you are toast. The "best" projects do not always get funded. But don't be discouraged: if you are not failing sometimes, you are not applying enough! In any case, a bad proposal should never be submitted.

A few key points:

- Feasibility:

Good proposals strike the right balance between "we have already done it" and "we have not done anything yet". Ideally you will have done enough to show it is feasible, but the exciting science will remain to be done. (Also, if you are going to go ahead and do it anyway, then why should they give you the money for it?). If you are not proposing new research, but improving something already done, your improvement must be huge!

Further important questions to take into account are: is a new technique exploited to accomplish the research? Is the team skilled enough to achieve the results? Are you pushing the boundaries?

Finally, a physicist must be excited by the project described: key readers in the College of Experts are physicists, not astronomers.

- Co-authors:

Each person appearing in the proposal should add value to it. Indeed, for ARC proposals Co-Is track records will also be examined.

Is there an "ethical" reason why a particular person should be on? Including a senior is fine, but distinguish yourself from being just a tiny cog in a large project.

Be as clear as possible in defining your role in the science - make sure you are leading the project.

Avoid name dropping: you need to be able to demonstrate a genuine working relationship with the big names. Hence, keep the team reasonably small so that there will still be people left in the community who will know what your work is about.

ECRs are judged most heavily on project: note that the DECRA is designed for ECRs.

- Budgets:

The budget it is not going to make or break a proposal, but the important thing is to establish why you need the money. This is obvious for a fellowship, but not so much for projects that do

not have to pay your salary.

A standard Astro proposal has a post-doc/student (suitable for doing the heavy lifting). Travel is fair game and you can include it. Also, do not pad the budget, and do not translate telescope time into dollars in an attempt to convince the ARC that they should match this quantity in kind! Take care when requesting funding for students since most good students come with scholarships. In any case justify their presence in the team, for example highlighting specific tasks.

- The Big Idea:

The final question to ask is whether there is a big idea that your proposal addresses - though of course you may not completely solve it. However it needs to be contributing to solving a problem people care about.

- Track Record:

Don't apply for funding if your track record is not yet competitive. Spend the time writing papers. Don't be shy about explaining any aspects of your career that have slowed down your publication record.

Interesting quotes from the discussion

"If you throw enough mud at the wall some will stick"