

AgriLife Grants Workshop

San Fernando, Ph.D. P.E.

Past Panel Experience

- NSF – Over 10 review panels (CBET, Directorate of Engineering), last two were virtual. My focus today will be on NSF review process.
- USDA – 2 panels and several adhoc reviews.
- NSF Instructions
 - The Program Director invites (typically 02 or more months in advance)
 - Sends details (proposal titles, PI/Institution names) of all proposals and asks to mark on each proposal – highly qualified, qualified, not qualified, COI
 - About a month in advance I receive my designations. Typically 03 proposals as primary reviewer (leads panel discussion), 03 as the secondary (add to discussion), and 03 as scribe (add and take notes). I sometimes get a proposal that I marked “not qualified” to review. This is likely when most panel members marked “not qualified”.
 - All reviewers are required to upload the written reviews and ratings (E, E/V, V, V/G, G, G/F, F) prior to the panel meeting.

Notes while reading the proposal

- Proposals that get high ratings:
 - Addresses a clear need and/or a knowledge gap and suggests a novel approach to fill the need/gap.
 - Are hypothesis driven (one central hypothesis and 2-3 objectives (with working hypotheses) to test the central hypothesis. The objectives are clearly aligned with testing the central hypothesis.
 - Looks something like... A is associated with C, but as of now we do not know how to maximize/minimize C due to a limitation of A. However, it is proven (from **preliminary data**) that B is associated with C (a light bulb should go off in your reviewer's head – wow, why didn't I think of this!). So, it is our premise that C could be maximized (or minimized) by introducing B.
 - The objectives are then centered around studying implications of A and B on C (or sometimes preparation/design/development, characterization/verification, and testing). This is oversimplified, but, my experience is that this section is the hardest to write and the most critical for the success of the proposal.
 - If you get this right – you have made a convincing case to get the reviewers excited.

Notes during the panel

- I seldom see the same people in panels put together by the same program. However, almost always I see nesters in the field. It is humbling to see some people that you revere in person.
- One of the best things I did (I was told to do) as an Assistant Professor was requesting a program manager to include me in a panel. Yes, it can be intimidating at first, but, gives you invaluable experience on how the system works (also a peek into the best proposals that get funded – to learn how to write winning proposals).
- It is critical that you get your name out. Panel members do comment on your (other) work. They do look at your publication/productivity record and do comment on quality of your output/lab. But... a great idea is critical!
- Almost always, Assistant Professors' (proposals) get some preference!
- When to quit? After ~3-4 submissions, if ranking do not change substantially – time to move on!

Recommended

E/V, E/V, V – 2 E/V or above typically gets recommended for finding

E/V, V, V – Two V and above would be recommended, but lower tier

The Program Director has significant discretion in the mid tier proposals – so, critical to talk to him/her

Not Recommended

...G, G – 2Gs will doom the proposal

.....F

V, V, G – If there is a G by even one panel member, the enthusiasm will be low

Panel members do change their original ranking during/after the panel discussion

At this point, you would need a champion to move your ranking higher

Key reasons for not getting funded

- No critical need/gap addressed (at least the leaders in the field do not think so).
- What is proposed is not novel (only incremental).
- Objectives do not address a central hypothesis.
- Preliminary data are not directly relevant to the hypothesis or the model system used is too far away from the real one.
- Methods proposed are inadequate or do not achieve the objective(s). No proper/adequate validation/verification techniques included.
- Overcrowded or no longer mainstream (bioenergy, nanotechnology, even COVID now.).
- No track record! Build your track record on a solid core (competency)- not the latest fad. However, if you can use your core competency on the latest fad, go for it!