"Running a Great Lab": Notes from Session #8, "Grant writing tips from recently tenured faculty"

April 23rd, 2009 6201 MSB Guest Speakers: Amy Charkowski, Plant Pathology; Paul Wilson, Engineering Physics; Adel Talaat, Pathobiological Sciences Facilitators: Allen Laughon Organizer: Jennifer Sheridan

Paul Wilson: Mostly Dept. of Energy grants. His grants are mostly single-PI grants, in response to calls for proposals.

Adel Talaat: NIH grants

Amy Charkowski: NSF and USDA grants. Tried a USAID grant, and strongly recommends against such international collaborations until after tenure...or at least know what you are getting into.

Random advice:

- If you get good reviews on a grant, even if you are not funded, put your reviews in your tenure package anyway.
- Serve on grant review panels; it really helps your grant writing.
- Try and write grants early. Circulate your work and get feedback.
- "Recycle" your grant text; makes your prose more mature.
- Be realistic in setting out work goals in a proposal. Don't overreach. Review panels seem to like the most basic, conservative stuff you do. They are less excited about the really new idea, the thing that gets *you* excited. So, even though that really novel idea is what gets you out of bed in the morning to do your research, put the focus on the mundane stuff in your grant. You can always do the exciting stuff once you get the money.
- Good to have a couple of different projects (2-3) going, but try to keep them somewhat related. Too many disparate projects is hard to manage. Difficult to make a "significant contribution" if you have too many projects going at once. But only having one project is risky—what if it doesn't work out like you hoped?
- Grantsmanship:
 - Make sure you have very clear objectives.
 - Don't forget to write a good "limitations" sections. The review panel will certainly come up with limitations, and it's to your advantage if you have thought about them and addressed them first.
 - Write in clear, simple sentences.
 - You can go to NIH and see some successful grants.
 - In the structure of your proposal, you should present your (1) idea, (2) some alternatives to that idea, (3) evidence that you are technically able to do the work (publications, etc.). You don't need deep detail about your methods and plans. This is a sales pitch more than a technical plan.

- If you have not filled up all the pages, make your margins bigger, put in some white space to make it readable.
- Use bullet points (even in the abstract)
- Make it very clear what the grant is about. Make it very easy for a reviewer to present your grant for the panel.
- Grants and conference talks are not really about technical communication—they are more about selling yourself than they are about teaching. You have to pique your audience's interest, and your goal is to get them to want to know more (by asking for your paper, meeting you, speaking with you after a talk, giving you money so that you can do the work.) It's also about giving the reviewer confidence that you can do the work you proposed.
- The first renewal is more difficult to write than the first grant. Reviewers will look at productivity first. Focus in the renewal on what you have done—then add some new ideas.
- Don't write grants with only an eye to tenure—write grants that allow you to do the research you love; the tenure will follow.
- Know what the program officer wants, and where the field is heading. Network! Find out where funding programs, fields are going. Talk to people with grants in a particular program area.
- When do you switch fields/concentration areas? When is a field "too crowded?" If you aren't getting funded even with good reviews, field might be too crowded. Look at related fields where there may be more funds (e.g., move into clinical research areas.)
- How much do you focus on new methodology in a grant, vs. deliverables? Don't make it all about the methodology, but put in some method. Improvements in method can help you gain efficiencies in your research, which leaves you time to do new things once your deliverables are complete.
- Within NIH—if you want to do some unproven, risky work, the R21 mechanism is great.
- Q: Is there a relationship between grant dollars, and getting tenure? A: Not necessarily; committees look at the tenure case as a whole, and different fields have different grant possibilities, so impossible to give a general rule. Some people with no grants get tenure; others with grants do not.
- Very good to get NSF Career awards, because they are so flexible. Look for workshops on campus that can help you craft your proposal (esp. the educational component.)
- Tips for getting grants processed on campus: get the budget done early. That's mostly what College grants offices and RSP scrutinize. They care less about the text of the proposal. Once you have your basic docs (current/pending support form, biosketch, budget), it's easier to modify and update in future years. But doing the forms for the first time is time-consuming.
- For NIH grants, is it a good idea to direct your grant to a particular study section? Probably not—you never really know if knowing somebody on a panel is going to help or hurt you. But if you do know that somebody on a panel is going to be hostile to you/your work, you can request that your proposal be reviewed in a different panel, and they usually honor that.
- Become more and more exposed to grants—review colleagues' grants, and have them read yours.