

Notes from Coffee with the Pros – NIH Funding
Panel presentation and discussion 3-3-17

Panel Members:

Lillian Eby is a Professor of Industrial-Organizational Psychology Program and Director of the Owens Institute for Behavioral Research. Her research interests include workplace positive relationships, with particular interest in mentoring and occupational health psychology. Her research has been funded by the NIH and NSF. She has also been a permanent member of the NIH Study Section NIDA-F, Health Services Research Subcommittee; the NIH Health Services Organization and Delivery (HSOD) Study Section; and numerous special emphasis panels. She has also served as an ad hoc reviewer for NSF.

Hitesh Handa is an Assistant Professor in the College of Engineering. His focus is translational research for development of medical device coatings that can prevent thrombosis and infection for potential medical device applications. He is the recipient of an NIH K25 Mentored Quantitative Research award. His R01 proposal entitled *Engineering nitric oxide releasing polymer with immobilized thrombin inhibitor for blood contacting applications* was just awarded funding, and he recently served on his first NIH Study Section.

Joel Ringdahl is an Assistant Professor in the Department of Communication Sciences and Special Education. His research interests include severe behavior disorders, appropriate communication modality, interaction between severe problem behavior and appropriate communication, and interaction between biological variables and severe behavior disorders. He is currently PI on an NIH project entitled *Effects of Antecedent and Response Variables on the Persistence of Communication*. He has served on the Child Psychopathology and Developmental Disabilities study section of the Eunice Kennedy Shriver National Institute of Child Health and Human Development.

Rick Tarleton is a Distinguished Research Professor in the Department of Cellular Biology and was the Founding Director of the UGA Center for Tropical and Emerging Global Diseases. His research focuses on the immunology and pathogenesis of *Trypanosoma cruzi* infection and the resulting disease syndrome known as Chagas disease, which is the leading cause of death among young-to-middle-age adults in endemic areas of South America. His work has been supported by multiple NIH grants over the past 32 years. He is currently a PI on two NIH R01s, three R21s, an R03, and drug discovery grants from the Wellcome Trust and the GSK Open Lab Foundation. He has twice served 4-year terms on NIH study sections and was the Chair of the NIH Immunity and Host Defense Study Section (2013-2015).

Summary of presentation points by Joel Ringdahl

Significance and Innovation:

Spoon feed the significance. For example, how is this going to improve public health?

Scientific premise – reviewers are asked to address this. Consider including a subsection devoted to this. Address the gap in knowledge.

Be explicit about innovation. If not a new method or instrument, maybe a novel strategy?

Approach:

Don't answer your question with the preliminary studies. Just want to provide evidence that the question is there/ tantalizing. Show data that logically lead to the question. Data with small sample size can be good.

Scientific rigor is being emphasized in panel. Use appropriate statistical analysis. For human subjects include variables such as gender, age.

Random tips:

Specific Aims. Avoid interdependency of aims. Avoid making aims contingent on others.

Resubmissions. Avoid telling reviewers why they are wrong.

[Jake added that the Office for Proposal Enhancement can help with resubmissions.]

Keep in mind that some reviewers decide whether they like an application early - after reading the Specific Aims.

Summary of presentation points by Hitesh Handa

Enjoy the process!

Reviewers are reviewing grants outside their area. "Whatever you tell reviewers it what they know." Send your proposal to colleagues outside your field.

The Specific Aims is very important. Human nature is to make a judgement early (and then find evidence to support your opinion as you read on).

"Other 28 people [on panel] are just scientists." Not in your field.

"If you don't mention something multiple times in proposal, reviewers will miss it."

"Reviewers are always right. You can fight with them, but you did not get funded."

Show evidence of prior work together for multi-PI proposals.

Submit R01 applications within first 10 years for advantage of being a young investigator.

Summary of presentation points by Lillian Eby

Repetition is important.

Specific Aims is the most important piece of entire proposal

Specific Aims should include everything including approach and innovation.

Write for smart people whose common language is good research design and analysis.

For NIH, it is critical to have a methodologist on your team.

Make sure that expertise needed in proposal is reflected in the Biosketches.

Avoid too much redundancy in team composition.

Benchmarks and alternative strategies subsection. "I could have done this, but I chose this, and here's why."

Different from writing a journal article. Persuasive writing. Why does this matter? How will this move science forward? How is this paradigm shifting?

Why is this important for the Institute that you are applying to? Contextualize.

Talk to your Program Officer. Get their buy-in from the start. They can provide insights on what they are funding.

Owens Institute provides support for submission in social/behavioral sciences. Part of Office of Research.

Summary of presentation points by Rick Tarleton

"Be careful with advice, including my advice."

No formula for writing a funded grant.

The best way to have a good idea is to have lots of ideas. (New investigators can be too conservative.)

Many proposals are too safe and boring.

New investigators can take too long to get their first proposal in. Don't put in 5 crappy applications, but don't wait for perfection.

I never write in a grant everything I want to do.

Agree with Lillian's comment. I could have done this, but I chose this, and here's why. Easy to eliminate/dismiss a potential problem with one sentence.

Don't make it easy for them to fill in the [weakness] box with a simple problem. I like to admit problem rather than have it thrown back at me. But don't include something in your proposal that will attract a lot of controversy.

Get on study section.

Eby: Take advantage of opportunities for colleague review.

Handa: Junior scientists might be careful not to ask for budget that might be more appropriate for larger, established lab.

Eby: Remember that budget is not discussable during panel. But a budget that seems out of line might make reviewer use greater scrutiny.

Question and Answer

Question: Is it advisable to send R01 to same study section as recently submitted R21? How do you decide which study section?

Tarleton: Remember you may be assigned to different study section. Can call and request and they may abide. I choose study section topic over people on panel.

Eby: Talk to program officer. Look at what is being funded by that study section (RePorter)

Handa: Had good scores on R21 and R01 in subsequent cycles.

Group: No reason not to send proposals to same study section. May be same people. You may have/develop good reputation.

Question: How do you decide between Resubmission vs new proposal?

Ringdahl: Depends on the criticism. Note that for a new proposal, they cannot criticize productivity on previous period.

Handa: Consider taking a break on that project. Don't continue to annoy them.

Tarleton: Have someone knowledgeable review if you suspect that you are not getting a fair review.

Group: You can request that someone not review your proposal. But NIH may not abide by your request. And that person may be in the room. You can put someone in conflict, but be careful because you can make permanent enemy.

Tarleton: Add preliminary data to overcome criticisms.

Question: What is panel like?

Group: We will have, for example, 96 proposals and will discuss 48. We will spend 15 min on each.

Triage is done in advance. Proposals can be rescued from triage at panel.

Proposals from early stage investigators are discussed first.

R21 and R03 are often discussed at the end and therefore often get treated like R01s.

Panels are usually ~30. Usually 3 reviewers for a given proposal. Reviewers score before meeting. Overall score is stated; then primary reviewer summarizes. Chair summarizes discussion. Scores are adjusted based on discussion. Everyone scores. Individuals must state rationale to score outside the defined range. NIH has good videos of mock panel.

Chair plays an important role.

Need a supporter to advocate for your proposal.

Question: What would the impact of a short Summary and/or Narrative be?

Group: Not a big problem for those sections but could be a problem in Specific Aims or Approach.

Group: Following expected structure is important.

Interesting headers can be effective.

Break up text with figures, illustrations.

Question: What is the potential for reviewer personal bias?

Group: Remember that there are 30 peers at the table. This reduces that possibility.

Reviewers are scrutinized before selection.

Senior reviewers should step in if something inappropriate is happening.