X-FACTOR RATING

This past week, I found myself in session with a series of academic and administrative leaders who wished to assess how I would handle large, complex proposals. This question – or rather their *barrage of questions with increasing intensity* – caused me pause. I described to them what I’d do with *any* grant, as I refuse to believe that it should be any different undertaking these highly prized “X-factor” grants (e.g., National Institutes of Health P01, National Science Foundation STC, Department of Energy EFRC) than any other. This attitude prevents me from being intimidated by new grant challenges.

As I see it, a proposal is a proposal.

I distill the essence of completing a grant package into the following elements:

Once it has been determined that the grant opportunity is appropriate (see: here), the actual grant preparation process, involves:

1. Carefully reading and following the instructions;
2. Establishing a grant team;
3. Constructing a research plan within the scope; and
4. Assembling the required technical and supportive documents to complete the package.

There’s a request for proposal (RFP). It contains the instructions. You create the checklist from the list of required elements in the RFP. You move step by step according to the timeline. And hurrah! You’ve got a grant package. Some take longer than others; some are larger than others (more pages, more ancillary documents). And there are a variety of factors that impact the efficiency of the process. Nonetheless, to answer this specific query about my *organizational style* I turned to ‘best practices’ (BP) to educate myself on how other research development professionals approach large, complex proposals. I sought nuggets of BP wisdom among recent conference presentations, professional blogs, and published articles.
DEFINITIONS FIRST

The first thing I found was that the terms “large” and “complex” abide further breakdown:

- **Fields** differ. Hence, the complexity factor(s) may be the grant(s) inter-, cross-, and trans-disciplinary nature.
- **Institutional structure** varies. Hence, the complexity factor(s) may be the grant(s) cross-departmental and/or multi-institutional nature.
- **Package requirements** are numerous. Hence, the complexity factor may be the necessity to include an integrated team and/or multiple projects with (a) complex elements, (b) large budget/cost sharing, and/or (c) unique peer review criteria.

Up until this point, I hadn’t spent much time reading best practices articles. I must admit that as a science-trained individual, I’ve had to turn my attitude around on my path to becoming more ‘grant professional.’

**BP AS SOP**

Thinking of a BP as a standard operating procedure (SOP) gives it a certain ‘scientific’ appeal. The importance of technical SOPs in the laboratory is well known among scientists. It’s not that academic scientists have a lot of SOPs. In fact, **reproducibility of data** has formally been recognized as an issue; scientists could use a few more SOPs to save time, samples, frustration – and lost data opportunities. The same applies to organizing grant submissions to net a *reproducible process* with a high quality product. One selling quality of BP documents for grant professionals would be their “how-to” potential. Really though, grant BPs are often more like an *outline or overview* of an SOP. Hence, one of my disappointments in BP sources is that they tell you what you should do, but not necessarily, in detail, *how.*

**BP AS GUIDANCE**

Indeed, BPs on large, complex proposals *do* present recommendations – *guidance* – for tackling the organization of a grant submission. Insights into the breakdown of the process abound (see: Dressler et al. NCURA Mag. 2013; XLV (2): 19). A whole new perspective on the contribution of the field of ‘research development’ to strategic grant planning is being offered by the growth of the ‘Science of Team Science.’ Again it’s quite appealing for a scientist to believe that you can create structure by examining the parts and ordering them into bins. Yet BPs often do *not* help you to resolve the vexing situation when the process is NOT working. Deadlines are being missed. Power struggles are witnessed. Passive-aggressive behavior and lack of know-how (and inability to admit ignorance) frequently jam up the grant timeline.

It’s my mentality to be realistically skeptical—and to look for the pitfalls. It’s what the BP documents *minimize or leave out altogether* that are valuable to evolving your own style for tackling large, complex grants.
PERSONALITIES LAST

My answer to how I would handle large, complex grants ultimately came not from BP reading, but from my experience and intuition. The tricky part of putting together any grant package is identifying a team—and understanding how it will gel. It’s actually the institutional setting(s) that you have to get to know. Who does what? And even better, who knows how to do what grant tasks? With every grant opportunity, you have to gauge the strengths of people.

I was never one to study personality theory. I always had a pretty sharp idea of what I was about. So why take a Meyers-Briggs personality test? I had myself all figured out! What I didn’t have figured out was how other personalities shape how a grant submission is put together. BPs offer myriad conceptual approaches from which to pick, many deriving from business or engineering, namely: Project Management, Business Acquisition Plan, and others. Regardless of the required components of a grant on your agenda— or the process you choose to attack it—try to put leadership, management, and other organization theories to the test in an academic setting (see: here). Still, you might have to seek out some “personality psychology” resources to resolve the biggest challenges of putting together large, complex proposals (see: True Colors, Emergenetics).

For every new grant submission, assume you are starting at zero with the team. Assume nothing. Except that Team Zero needs delineation. Best practices will help you along. Whether you’re at the pre-pre-planning (scientific collaboration, strategic planning), pre-planning (strategizing to submit, making “Go-No Go” decision), or proposal development (responding to an RFP) stage. But you have to go back to your intuition and personal experience with the composite institutions to break the grant down into the team designees, not just the document list.

Success in getting a particular award is complex. Success in putting together a quality grant package and meeting the deadline— regardless of the grant size and complexity— comes down to the grant team. And, ultimately, to relationships and to personalities.

Once you kick off the process, repeat the mantra “Be Flexible” 20 times. Then you’ll be ready for Team Zero.2.