Proposal Development Strategies and Best Practices: How Strategic Planning, Marketing, and Peer Reviews Can Greatly Improve Proposal Success

NORDP Panel, Friday May 2, 2015

Brian Ten Eyck, University of Arizona Marilyn Korhonen, University of Oklahoma Conrad Monson, Brigham Young University John Crockett, San Diego State University

### Agenda: Telling a Story

- "When diet and exercise are not enough..."
- Crafting the Story: Research Development Resources
- Marketing the Story: Strategic Pursuit
- Testing the Story: Peer Review

#### Proposal Development Strategies: Good Science is Not Enough

Brian Ten Eyck Assistant Dean, Research Development College of Engineering NORDP 2015



#### **Everyone reports to someone...**

"Congress has a responsibility to ensure that taxpayer dollars are spent wisely and are focused on national priorities." - Rep. Lamar Smith (R-TX) and Sen. Rand Paul (R-KY)

- Awards from Federal Agencies are under increasing pressure to demonstrate apparent value, or contribution to the public good
- Embed Context: explicitly tie your proposals to the Bigger Picture
  - Agency mission
  - National initiatives or priorities
  - Grand Challenges



## **Fascinate Reviewers**

"Sound scientific ideas and innovative research plans are necessary but *in*sufficient ingredients to submitting a winning proposal." - Brian Ten Eyck

- What you want to say is not enough! Consider what people hear...
- Anticipate the audience:
  - University Administrators
  - Reviewers are people too...
  - Keep your Program Officer on solid ground
- When competition increases, *differences* matter more than strengths



# **Convincing Faculty**

- *Differentiate* a proposal with strong management plans, innovative educational programs, brilliant information-laden graphics
- *Differentiate* a proposal by engaging readers with a good story that attends to the relevant context
- *Test for differentiation* prior to submission
- (and oh by the way, build all of this into the proposal development project plan!)





## **NORDP 2015** Strategic Approaches to Proposal Support

### Marilyn Korhonen, EdD, Associate Director University of Oklahoma - Center for Research Program Development and Enrichment

www.crpde.ou.edu

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Office of the Vice President for Research NORMAN CAMPUS AND NORMAN CAMPUS PROGRAMS AT OU-TULSA

# **Context: About CRPDE**

- Centralized program of the Office of the Vice President of Research
- Separate from the Office of Research Services, which submits proposals

#### Focus on Research Development/Enrichment

- Director/AVPR, 2 Associate Directors, Program Coordinator to support (4) ~1400 Faculty Members
- Optional, value-added service



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#### Proposal Review vs. Strategic Development

#### Research

- Innovative/Transformative ... Coherent ... Relevant
- Grounded in literature ... focused on a gap ... based on promising preliminary data/findings

#### Connections

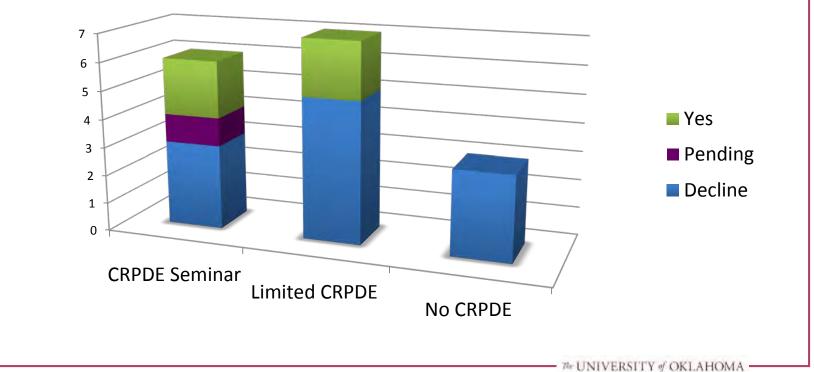
- Team... do you have one? Are you experienced together? Are you well suited to the research?
- Institution ... Areas of excellence, resources, prior related research
- Agency ... Alignment of purpose, prior funding, EPSCoR or other focus

#### • Story

- Cohesive and Targeted to the audience
- Captivating, especially the first page(s)
- Features benefits and beneficiaries

### Example of Power of Strategic Support

#### Comparative Success of NSF CAREER Applicants Based on CRPDE Engagement – 1st Year Implementation



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# Q

# Resources

 Providence College Grant Readiness Self-Assessment http://www.providence.edu/academic-

affairs/sponsored-research-and-

programs/Documents/GrantReadinessQA\_12191 3.pdf

 HRSA Tips for Proposals <u>http://www.hrsa.gov/grants/apply/writestrong/g</u> <u>rantwritingtips.pdf</u>

 Marilyn Korhonen <u>mkorhonen@ou.edu</u>/ersity#oklahoma-Office of the Vice President for Research Norman Campus and Norman Campus Programs at OU-Tulsa











Susan Dubbs, Center Administrator

Cindy Clark, Prog. Dev. Coord.

Quyen Wickham, Interdisciplinary Research Consultant

7hr UNIVERSITY of OKLAHOMA

Alicia Knoedler, Director & AVPR

> Associate Directors



Marilyn Korhonen



Todd Fuller

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# Successful Proposal Development Starts with Effective Pre-Proposal Activities

Conrad B. Monson, Ph.D. Research Development Specialist Conrad\_monson@byu.edu



### Think Like a Marketer

- See things from the **customer's point of view**
- A proposal is not about you or your needs, it is about the funder's needs... you're project should make the funder successful
- You want an emotional response to your ideas from your potential funders... excitement, keen interest, compelling, "I've got to have it now" ... not boredom, confusion, or even anger





Boeing's UCAV and F-35 prototypes – the power of emotion in contract decisions

Ultimately, funding decisions are emotional decisions... make sure your proposal generates positive emotions



#### Even "Objective" Review Panels Respond Emotionally

- "The problem statement, **such as it is**, is too global, showing no relationship to reality with no potential solution being indicated or even possible."
- "This problem has been studied to death. I'm surprised the writer doesn't know this."
- "It is almost impossible to understand what the author wants to study or what the main theme is. The problem is **full of jargon and totally unclear as stated**."
- "I cannot ascertain what approach the researcher will take in examining the problem as outlined."
- "The writer has a **flair for the dramatic**. The world will not collapse if we do not fund a study of students' daydreams."



(Actual comments made by NIH reviewers)

#### Take a Long-Term Approach to Securing Funding

#### What can industry teach?

- Develop a habit of long term research planning that includes lots of customer contact (active in professional organizations, review panels, publications, funder plans, etc.) and a <u>real</u> plan
- Know about upcoming funding opportunities and funder objectives as they are being developed ... can you shape the funders thinking, shape the RFP?
- Create a win strategy
- Well in advance of writing, identify proposal resources



### Develop A "Research" Acquisition Plan

- There are lots of Business Acquisition Plans (BAP), models and templates that could be adapted to improve research funding capture for academics
- The BAP to the right is similar to one a large Aerospace company uses to secure R&D funding for small to large (e.g., hundreds of millions \$) projects

	Phase	Activities				
	Long Term Positioning	Contacts     Develop/Execute Action Plans				
0	Opportunity Assessment	Customer making funding decisions     Assess				
	Opportunity Pursuit	•Customer open to suggestions • Develop win strategy (including SWOT, P <sub>win</sub> )				
	Pre-Proposal Preparation	<ul> <li>Develop Organization and Procedures</li> <li>Assess</li> <li>Designate Capture lead</li> <li>Update Win strategy</li> <li>Develop Proposal design</li> </ul>				



### Perform SWOT Analyses



**Positive** (helps meet objectives)

**Negative** (detrimental to objectives)

SWOT analyses can identify strengths to highlight, weaknesses to mitigate, opportunities to capitalize on and threats to counter



## Calculate a P<sub>win</sub>

- Develop Criteria from the Solicitation
- Evaluate criteria
  - Assign "values" (including weightings) from Solicitation requirements
  - Determine elements that make up criteria from SWOT, similar analyses, "Go-No Go" information

	Max Possible	Your	Competitor	Competitor			
Criteria	Score	Proposal	А	В			
Prog Management	200	160	180	140			
Tech Approach	200	120	140	170			
Tech Risk	200	120	100	100			
Realistic Cost	200	140	120	180			
Past Performance	200	130	60	180			
Total	1000	670	600	770			
	Your Pwin = 67	0.33					
	Competitor A	Competitor A Pwin =					
	Competitor B	0.38					

An Example of One Way to Calculate P<sub>win</sub>

- For industry, typically need a P<sub>win</sub> > 0.5 and/or a P<sub>win</sub> > competitors to proceed with proposal
- For academic research, competitor comparison may be less important (multiple awards, no defined product as an outcome)





### The "Go-No Go" Decision

Factors to consider in deciding whether or not to develop a proposal for a particular funder

- Timely knowledge of opportunity
- Customer/funder relationship
- Competition
- Funding reality
- Clear solicitation that is a good fit with your research interests
- Resources available to develop the proposal
- Favorable P<sub>win</sub>



#### Summary

Marketing and other pre-proposal practices and tools and careful proposal planning can be used to help improve research funding capture



# SDSU's Grants and Research Enterprise Writing (GREW) Fellowship – the Mock Review Exercise

John S. Crockett jcrockett@foundation.sdsu.edu



### Roadmap

- Comments on Faculty Development Workshops
- Format of GREW Fellowship
- Design of Mock Review Exercise
- Results
- Things I thought of but didn't do, and things I wish I did

#### Comments

- Faculty development is a competitive sport
- Impacts are poorly measured
  - Placebo effect
  - Reporting bias
- Hard to be innovative
- Incentives for success and publicity

### The GREW Fellowship

- \$3,000 and a trip to DC for participation
- Tenured and tenure-track faculty only
- Competitively awarded
- 4 x 4-hour sessions
- Session 1: Preparing to Write
- Session 2: Writing Strategies
- Session 3: Writing the Proposal Sections
- Session 4: Mock Study Section

### **Mock Study Section - Mission**

- Re-create the emotional conditions of an actual review section
  - Anxiety
  - Scarcity of time
  - High stakes
  - Limitations of subject matter knowledge
  - Self-doubt
- Why?
  - Reviewing is a great way to learn to write competitive proposals, but junior faculty often aren't invited or don't feel qualified
  - Write to the reviewers

#### Components

- Assignment
- RFP
- Review Instructions

#### **Important Information**

Proposals will be considered from all areas of science and engineering.

#### **Program Title:**

**Research Project Plans** 

#### Synopsis of Program:

The Research Project Plan program (RPP) is an SDSU-wide program that supports intellectual activities across all science and engineering disciplines. RPP seeks to catalyze the development of new research projects on campus through collaborative evaluation and the exploration of new collaborative research.

#### Cognizant Program Officer(s):

Please note that the following information is curi Due Date: Variable – Please look closely

- John Crockett, telephone (619) 594-317 Assignment:
- Susan Carter, telephone (209) 228-4695, #1

#### Due Date: December 5

Please prepare a 5-page Research Project Plan (RPP) based on the provided "Mock" RFP. Please treat this exercise as you would any normal response – develop a Go/No-Go matrix for the RFP, elicit feedback or communicate with the listed program officers, develop drafts using Free-Writing techniques, or use any other approaches or techniques you feel will allow you to articulate a competitive Research Project Plan. For questions relating to this assignment, your instructors/Program Officers will provide guidance to you that will be in-line with the attitudes of actual Program Officers.

Please bring FOUR (4) printed copies of your RPP to the workshop on December 5.

#2

Due Date: December 1

Please submit no fewer than three, and no more than seven key words, along with a Title for your Research Project Plan to the Program Officers

#### Review Sheet: GREW Fellows Research Project Plan Important! Please Read Before Beginning Your Review!

In evaluating this proposal, you are requested to provide detailed comments for each of the Merit Review Criteria described below. Following each criterion is a set of suggested questions to consider in assessing how well the proposal meets the criterion. Please respond with substantive comments addressing the proposal's strengths and weaknesses. In addition to the suggested questions, you may consider other relevant questions that address the RPP criteria (but you should make this explicit in your review). Further, you are asked to address only those questions which you consider relevant to the proposal and that you feel qualified to make judgments on.

Your Summary Rating should be based **only** on the SIGNIFICANCE and INVESTIGATORS sections of the RPP. However, we encourage you to comment on the APPROACH, INNOVATION and ENVIRONMENT sections as time and your expertise permit.

When assigning your summary rating, remember that the criteria need not be weighted equally but should depend upon either (1) additional guidance you have received from the GREW program or (2) your own judgment of the relative importance of the criteria to the proposed work. Finally, you are requested to write a summary statement that explains the rating that you assigned to the proposal. This statement should address the relative importance of the criteria and the extent to which the proposal actually meets the criteria.

#### 1. Significance:

Does the project address and important problem or a critical barrier to progress in the field? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or disciplinary practice be improved? How will successful completion of the aims change the concepts, methods, technologies, or services that drive the field? Will the proposed program significantly advance the overall quality of research and the research environment at the applicant institution? Will the proposed program have the potential to enhance the research competitiveness of the investigators at the institution?

#### 2. Investigator(s):

Is the PI well suited to the project? If Early Stage Investigators or New Investigators, or in the early stages of independent careers, do they have appropriate experience and training? Will the PI have the environment and institutional support necessary to be responsible for the resources committed for the research program?

#### Instructions

- Each reviewer will be Primary Reviewer on one proposal and read two to three others (depending on the panel)
- Ratings and summary should be based ONLY on Significance and Investigators sections, although you are encouraged and welcome to comment on other sections (see review sheets)

#### Instructions - 2

- Review Criteria as outlined in the RFA
- Primary reviewer: starts review with a summary of proposal and then gives his/her review
- Other reviewers: discuss any areas where they disagree or want more information
- All score and modify comments as needed
- Score should match comments
- Primary reviewer writes a summary statement
- PO will also give you a summary statement

#### Timing of this review process

- 20 minutes to read your priority proposal and make comments
- 20 minutes to read the other proposals for familiarity
- 30 minutes panel discussion
- 30 minutes report out; Summary Reviews

		Poor	Fair	Average	Good	Excellent	Total	Weighted Average
Relevance of the to grant-getting	exercise	0.00%	0.00% D	0.00% 0	<b>10.00%</b> 1	<b>90.00%</b> 9	to	4.90
Appropriateness time spent	of the	<b>0.00%</b> Ø	0.00% D	<b>0.00%</b> 0	<b>10.00%</b>	90.00% 9	10	4.90
Relevance of the exercise Appropriateness								
of the time								

	Strongly Disagree	(no label)	Neither Agree nor Disagree	(no label)	Strongly Agree	Total	Weighted Average
This exercise improved my skills for grant-getting	0,00% 0	0.00% 0	<b>0.00%</b> 0	<b>10.00</b> % 1	90.00% 9	10	4:90
l understand why the instructor included this exercise	0.00% I	0.00% Ţ	<b>0.00%</b> ű	<b>11.11%</b> 1	88.89% E	ğ	4.89
		-					
This exercise							
This exercise improved my							

#### Q3 Do you have any other comments, questions, or concerns?

Answered: 5 Skipped: 5

#	Responses	Date
1	This was a major highlight of GREW.	1/5/2015 9:27 AM
2	Extremely helpful!	12/8/2014 9:25 AM
3	I don't think I can emphasize enough how helpful and relevant this was, EVERY new investigator should have an opportunity to do this, it was transformational in terms of actually moving me closer to being the independent investigator I want to be. It took me from just thinking I want to be to helping me lay some critical groundwork to actually getting that path going.	12/8/2014 7:54 AM
4	This was definitely the highlight of the workshop. You and Susan did an excellent job of simulating the review process. I definitely didn't imagine it this way. If you would have surveyed us before, I would have thought the whole 4 hour workshop would be dedicated to the review processnot the last hour. Condensing the time really added the pressure and put me into the "feeling crunched for time" mindset. I can't believe how much I learned from this exercise. It really drives the point across about how important it is to set up your proposal so it will reach out to the reviewers and grab their attention. It was a bit stressful, but the mock review was really fun! I think to help it run smoother, you should have us email our proposals a couple hours earlier, so you can have them printed or we can bring them to you the day before That way you can have all the packets made for each person instead of trying to trade proposals right before we started the exerciseak	12/6/2014 11:31 PM
5	This is a good opportunity for me to better know my fellow colleagues in the GREW fellowship. Their scholarly attitude and aptitude in providing professional critical review comments for the proposals earned my respect.	12/5/2014 7:39 PM

#### Observations

- Faculty wanted to discuss the process, not the results
- Faculty felt crunched for time
- Faculty were unable to help themselves from commenting on the methodology from their own disciplinary perspective
- Primary reviewers drove the conversation during the discussion

### Things I thought about

- Rank ordering
- Prizes
- Actual senior faculty panel session
- Subject Matter (real RFP, real proposal)
- Summary comments

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#### Use the Title and Abstract As Marketing Tools

- The title is the first thing a reviewer reads...it should catch the readers attentions
  - Emphasizes payoff/benefit
  - Is understood by a **broad spectrum** of audiences
  - States the major idea as quickly as possible with the modifiers following
  - Avoids jargon or vogue words, fillers
- After the title, the next (and for some, the only) part of the proposal a reviewer reads is the abstract/summary
  - Provides **first** impression and for some, **last** impression of your project
  - It must be compelling, interesting, exciting
  - Should be explicit (e.g., "The objective of this study is to ...") and use strong wording (e.g., "we will show the effects of..." and not "we intend to show...")
  - Has to be well crafted and thoughtful, concise and complete



*"If I had more time, I would have written you a shorter letter (Mark Twain's correspondence with a friend)"* 9

#### Summary

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