Kiss of Death Mistakes in Grantsmanship

October 8, 2018

Survey Drawing

K-Club Special

Emory CFDE Scholarly Writing & Publishing Fund

- *Up to $2,500 for hiring editorial support or a writing coach.*
- *Applications are accepted on an open basis until the fund is exhausted, or August 1, 2019, whichever comes first.*

The Emory University Center for Faculty Development and Excellence (CFDE) offers the Scholarly Writing and Publishing fund, a grant program designed to help faculty seeking professional editorial support for projects in development across a range of serious scholarly works, including grantwriting, book manuscripts, article manuscripts, and digital scholarship.

Today's panelists

Lou Ann Brown, PhD
Professor, Neonatology
Emory University Dept. of Pediatrics
Director, Office of Postdoctoral Education

Janet Gross, PhD
Grant Writing Consultant and Course Director for the
Emory MSCR Grant & Scientific Writing Class

H. Trent Spencer, PhD
Jean R. Amos Cell and Gene Therapy Chair
Director of Cell and Gene Therapy
Emory University, Dept. of Pediatrics

Also, some content and comments previously contributed by-
M. Neale Weitzmann, Ph.D.
Emory University School of Medicine and
The Atlanta VA Medical Center

Outline of today's session

- Setting the stage
  - Today's content is presented in the context of the feedback received via the NIH application review process
  - Brief overview of the NIH application review process

Outline of today's session

- Setting the stage
  - Today's content is presented in the context of the feedback received via the NIH application review process
  - Brief overview of the NIH application review process

- Panel discussion
  - Case studies/examples of reviewer comments
  - Advice on if/how to address

Overview of the review process

1. Submit your grant application to grants.gov
2. Processed by Center for Scientific Review
3. Assigned to a Study Section
4. Assigned to primary, secondary, and tertiary reviewer
5. Those reviewers assess strengths and weaknesses, assign scores in several areas, and provide written reviews supporting their scores.
6. If your application is "discussed" (typically the top ~50%), the assigned reviewers present their initial scores, the strengths and weaknesses, and will discuss and sometimes even debate the impact of your study.
7. At the conclusion of this discussion, all reviewers in the room score your application.
8. A Scientific Review Officer assigned to the study section creates a written summary of the discussion highlighting key points of the discussion.

Overview of the review process

1. Submit your grant application to grants.gov
2. Processed by Center for Scientific Review
3. Assigned to a Study Section
4. Assigned to primary, secondary, and tertiary reviewer
5. Those reviewers assess strengths and weaknesses, assign scores in several areas, and provide written reviews supporting their scores.
6. If your application is "discussed" (typically the top ~50%), the assigned reviewers present their initial scores, the strengths and weaknesses, and will discuss and sometimes even debate the impact of your study.
7. At the conclusion of this discussion, all reviewers in the room score your application.
8. A Scientific Review Officer assigned to the study section creates a written summary of the discussion highlighting key points of the discussion.

Clues Hidden in the Written Reviews

- All applications (whether discussed or not) will receive a written review from the primary, secondary, and tertiary reviewers that will outline their perceived weaknesses, which may reveal "kisses of death"
- The applications that are discussed will benefit from a written account of the discussion called the "Discussion Summary" that may reinforce or even reveal more "kisses of death"

Decision Point

To resubmit or not resubmit? That is the question…

1. Must decide if criticisms and weaknesses are addressable.
2. If you decide they are, you must decide both how to address them and how to convince and satisfy the reviewers that they have been addressed.

Responding to reviewers – Do's and Don'ts

Do not

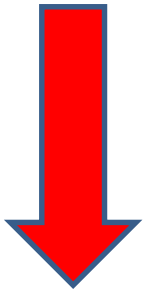
- Lecture the reviewers or study section for missing something or not understanding your point of view
- Be argumentative or even say, "I respectfully disagree"
- Attempt to flatter or effusively thank the reviewers or study section

Do

- Try to understand the reviewer's point of view
- Adopt a "the customer is always right" mentality
- Set emotion aside, be respectful and polite
- If your grant was discussed, robustly address the discussion summary as this usually contains the issues driving the impact score
- Use data and credible references to substantiate your opinion and statements

Review Criteria (for a K)

1. The Candidate
2. Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring
3. Research Plan
4. Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)
5. Environment and Institutional Commitment to the Candidate



Impact Score

Side note – K versus R review criteria

K Grant Review Criteria	R Grant Review Criteria
The Candidate	Significance
Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring	Investigator
Research Plan	Innovation
Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)	Approach
Environment and Institutional Commitment to the Candidate	Environment

Reviewer Comments - Example 1

"*There is no evidence in the application that the mentor has sufficient research funds that will be available to complete the work described during the proposed interval of funding.*"

"Despite her excellent credentials, the lead mentor is not the recepient of an active NIH research grant."

	1	The Candidate
	2	Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring
	3	Research Plan
✓	4	Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)
✓	5	Environment and Institutional Commitment to the Candidate

Example 1 – strategies to address

- It needs to be made clear that there will be some sort of research funds to draw upon to support the mentee doing some actual research.
- Identify a co-mentor for the award, but note, that the main mentor is usually the NIH funded mentor.
- A co-mentor approach is even better if that person already has a collaboration with primary PI. Meaning the research plan needs to be written as a collaborative project engaging both mentors in meaningful ways.

Reviewer Comment - Example 2

"The problem is not well defined, documented, or understandable."

	1	The Candidate
	2	Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring
✓	3	Research Plan
	4	Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)
	5	Environment and Institutional Commitment to the Candidate

Example 2 – strategies to address

- A common mistake made when a proposal is rushed or when the research for the idea has not taken place or is minimal.
- To define the problem, you must first conduct a needs assessment, which will yield data to help shape your proposal.
- Work on defining "the gap" that should be clearly stated in your specific aims page. This drives the impact score of your grant.
- Note, just because you can design experiments to address the gap, doesn't mean the grant will get funded; the gap must be important to address!
- If you wouldn't use your own money to fund the research (think taxes), then you may want to think about a different research problem to address.

Reviewer Comment - Example 3

"The specific aims do not match the problem statement and are not specific or measurable. Moreover, Aim two cannot be accomplished if Aim one is not successfully accomplished first."

	1	The Candidate
	2	Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring
✓	3	Research Plan
✓	4	Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)
	5	Environment and Institutional Commitment to the Candidate

Example 3 – strategies to address

- Work on your aims page more since Unclear significance = unfocused goals = unclear aims
- Your specific aims need rigorous review and vetting; ask your mentors and trusted colleagues to attend a chalk talk where you present your aims (bring tissues…)
- Interdependent aims = kiss of death to a grant application

Reviewer Comment - Example 4

"The amount of work is overambitious for the allotted time period of the proposed grant."

	1	The Candidate
	2	Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring
✓	3	Research Plan
✓	4	Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)
	5	Environment and Institutional Commitment to the Candidate

Example 4 – strategies to address

- #1 criticism of junior investigators - Too ambitious, too much work proposed so scale down
- Make sure your mentors gut check the amount of work proposed in the aims to assess if it is feasible
- Two rigorous Aims are plenty for a new investigator (and most senior ones).
- "You are risking disaster squeezing in three or having dozens of sub-aims! I have yet to review a good Four Aim proposal! Keep it simple!"

Reviewer Comments - Example 5

"It is not clear if the project described in the research plan originated from the candidate or is an extension of the mentors' work."

"It is unclear how this proposal creates an independent research trajectory."

"There is no logical next step for future research outlined."

✓	1	The Candidate
✓	2	Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring
✓	3	Research Plan
✓	4	Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)
✓	5	Environment and Institutional Commitment to the Candidate

Example 5 – strategies to address

- The research plan may be perceived to be too close to the mentor's – think about ways to demarcate.
  - Specify first/senior author publications in the Career Development Plan
  - Outline R01 grant submissions as single PI (not MPI with your mentor)
- The mentor's letter should make it very clear that the research will be owned by the mentee
- Clearly outline steps and the timeline for applying for independent research funding

Reviewer Comment - Example 6

"No preliminary data are presented."

✓	1	The Candidate
	2	Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring
✓	3	Research Plan
	4	Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)
	5	Environment and Institutional Commitment to the Candidate

Example 6 – strategies to address

- Show proof of concept data.
- Publish key foundational findings.

Reviewer Comment - Example 7

"It is unclear the percent time the candidate will dedicate to administrative and clinical responsibilities. The Institutional Commitment to the Candidate letter fails to specify."

	1	The Candidate
	2	Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring
	3	Research Plan
	4	Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)
✓	5	Environment and Institutional Commitment to the Candidate

Example 7 – strategies to address

- Must comply with the FOA requirements-
  - From the K23 FOA- "Candidates are required to commit a minimum of 75% of full-time professional effort (i.e., a minimum of 9 person-months) to their program of career development during the mentored phase. "
  - The letter of institutional commitment must specify this clearly
- The Career Development Plan should reinforce this clearly outlining frequency of all activities
- In fact, all aspects of the application can used to reinforce this commitment to research
  - Mentor letters
  - Your Biosketch
  - Budget justification

Reviewer Comment - Example 8

"The expert is telemedicine is off site (in California) and will interact by teleconference primarily, with only annual in-person meetings"

	1	The Candidate
✓	2	Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring
	3	Research Plan
✓	4	Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)
	5	Environment and Institutional Commitment to the Candidate

Example 8 – strategies to address

- Find local mentors
- Publish with remote mentors/experts before submitting K application
- Bolster frequency and quality of interactions in the career development plan
- Flip the weakness into a strength (teleconference training via teleconference mentoring!)

Reviewer Comment - Example 9

"There are extant weaknesses in the training plan where some training objectives are incremental over the skills the applicant already possesses."

	1	The Candidate
✓	2	Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring
	3	Research Plan
	4	Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)
	5	Environment and Institutional Commitment to the Candidate

Example 9 – strategies to address

- Make sure you define, “your hook,” for the K.
- Define specifically what you need more training and knowledge in to become an independent investigator and build your career development plan around that.

Reviewer Comment - Example 10

"A major concern is the lack of any control group in the research plan."

	1	The Candidate
	2	Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring
✓	3	Research Plan
✓	4	Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)
	5	Environment and Institutional Commitment to the Candidate

Example 10 – strategies to address

- Reevaluate research design
- Ask mentors to meet with you together to discuss as a group
- Engage a statistician on the mentor team

Reviewer Comment - Example 11

"The applicant has no first author peer review publications."

✓	1	The Candidate
	2	Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring
	3	Research Plan
	4	Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)
	5	Environment and Institutional Commitment to the Candidate

Example 11 – strategies to address

- Delay resubmission
- Work on publishing

Reviewer Comment - Example 12

"The specific roles that the PI will perform are not clearly stated, especially in terms of routine data collection and analysis."

"Part of the budget will be used to pay for a research coordinator who will carry out many of the duties that seem important to the candidate's own career development."

	1	The Candidate
✓	2	Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring
	3	Research Plan
	4	Mentor(s), Co-mentor(s), Consultant(s), Collaborator(s)
	5	Environment and Institutional Commitment to the Candidate

Example 12 – strategies to address

- Be thoughtful about the career development plan and how you will be trained and educated to meet your "gap"
- Any research staff hired should have a direct reporting relationship to you and daily oversight by you