

CAREER Grants webinar

Sponsored by CADRE -the DR K-12 network for NSF

Panelists:

Alicia Alonzo, Michigan State University

Tina Grotzer, Harvard University

Karen King, National Science Foundation

Gloriana González Rivera, University of Illinois at Urbana-Champaign



Community for Advancing
Discovery Research in Education

CAREER Program Overview

Karen D. King
Program Director
February 24, 2015



Overview

- Tips for preparing a CAREER proposal
- Cautions for preparing a CAREER proposal
- Proposal writing including budget development
- Proposal submission



Research or Development Topic

- Think of the research idea first, the proposal will come from the project idea
- Distinguishing characteristics in tension in a research and development project:
 - Focused vs. Extended
 - Novel vs. Grounded
 - Feasible vs. Challenging
 - Near-Term Results vs. Long-Term Prospects



Project Planning

- Work within your own planning style, but **PLAN BEFORE YOU WRITE!**
- Start from your research idea or question and where you want to be at the end, then fill in the middle
 - What do we already know on this topic? What has already been developed and tested?
 - What resources are (or could be with funding) at your disposal – people, facilities, equipment, supplies?
 - What are your goals for the project when you are done?



More Project Planning

- Draft a month-by-month timetable
 - Be realistic about your time and that of others to devote to the project
 - Are the most important activities receiving the bulk of the time?
 - Maintain some flexibility
 - Remember factors that are out of your control (e.g., scheduling of major meetings)



Decide if this is a CAREER project

- Is there a part of this that **you** can do?
 - As the sole PI and senior personnel?
 - Do you have the requisite expertise?
- Do you have a reasonable 5-year plan?
 - What if the first year does not go the way you imagined/hypothesized?
- Will you have interim products?
 - What are your papers after each year?



Even More Project Planning

- How much will this cost?
- Major cost considerations:
 - Personnel including PI, graduate students, post docs, undergraduate students, consultants
 - Materials and supplies – get realistic quotes from vendors
 - Travel – including personnel travel to do the work (e.g., meeting with others) and for dissemination (e.g., presenting at conferences)
 - Indirect Costs



Grant Proposal Guide (GPG)

- Generic guidance for preparation of proposals for all programs
- Criteria for reviewing proposals
- Describes the award process, procedures for requesting continued support, and administrative details
- Program solicitations take precedence over GPG for specific requirements
- For CAREER, you must respond to both the CAREER solicitation and the program solicitation



Proposal Writing

- Audience is KEY!
 - Writing to reviewers and program officers
 - Audience is in your broad domain, but may not be in your subspecialty
 - Focus on what you are going to do
 - Make sure the most important things receive the most space



Sections of the Project Description

- Your research topic and its significance
- Review of the literature - foundations
- Project design for research and education efforts, specifically including
 - What you are going to do
 - Who you are going to meet with
 - When you are going to do the work
 - Motivation for why these are the right things to do
- Dissemination
- Specifically address integration of Research and Education!



Evaluation

- The Merit Review Elements require you to have a mechanism to assess success for both Intellectual Merit and Broader Impact
- Sound evaluation will HELP your project become better
- Evaluation should focus on how the project is working, why the projects is working that way, and identify places to make it better
- Evaluation should also be responsive to the project's needs
- Use an advisory committee well
 - Integrate this group into your evaluation plan so that they can provide feedback at key points in your work plan



Budget

- Contact the Sponsored Research Office early and often
- Remember Indirect Costs
- Budget and project description should match
 - PI and senior personnel time should reflect the effort on the project
 - Limited to 2 months across ALL NSF awards
 - Justification required for more than 2 months
 - Graduate students and undergraduate students
 - Post docs require a Post-doc mentoring plan
 - Remember to budget for fringe benefits
 - New rules on direct costs for clerical support



Budget continued

- **Non-personnel Budget costs**

- Equipment is only for equipment that costs more than \$5000
- Travel must be itemized per trip, can include local costs
- Participant support – “stipends or subsistence allowances, travel allowances, and registration fees paid to or on behalf of participants or trainees (but not employees) in connection with NSF-sponsored conferences or training projects.”
 - The number of participants to be supported must be entered in the parentheses on the proposal budget.
 - Indirect costs (F&A) are not allowed on participant support costs.
- Other direct costs
 - Materials and Supplies
 - Publication Costs
 - Consultant Services
 - Subawards



A Good Proposal

A good proposal is based upon a sound idea, is well expressed, clearly describes the approaches to be used to pursue the idea, evaluates the findings, and disseminates the results.



Proposal Submission

- All proposals are ultimately submitted by your SRO
- If at all possible, use FastLane system (<http://www.fastlane.nsf.gov>)
- DO NOT wait until the last minute (see two bullets above)
- All notifications will be available to you via FastLane



CADRE is the DR K-12 network
for NSF.

Visit our website
cadrek12.org

for a recording of this webinar
and a copy of these slides.



Spotlight on Early Career in STEM Education R&D

Features:

- a *Brief on Early Career Researchers and Developers in the DR K–12 Program: Needs, Supports, and Recommendations*
- a Virtual poster hall of DR K-12 CAREER projects
- a Podcast on mentoring: a mentor/mentee discuss what worked well
- a Sample postdoctoral mentoring plan
- Information on the CADRE Fellows program

Stay tuned for more Spotlight features, including several short videos on mentoring discussing tips, challenges and strategies.

