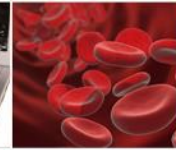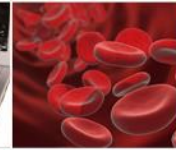# CAREER Proposals: Common Mistakes and Practices

Division of Chemical, Bioengineering, Environmental, and Transport Systems (CBET)

Directorate for Engineering

Presented by: Raj Mutharasan

Program Director, Nano-BioSensing

Finding the Appropriate Program

- **Check list of currently funded programs**

  - Use FastLane (www.fastlane.nsf.gov)

  - Read titles and abstracts on the website
  - READ Program Descriptions, *they do change*

- **Find a fit**

  - Contact program director

  - Prepare a one-page abstract

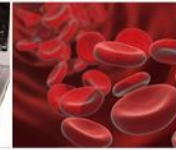 - Specify appropriate program on cover sheet in addition to CAREER

Common Mistakes in Preparing a CAREER Proposal

- **Ignoring rules (e.g., Updated Grant Proposal Guide, January 2017)**

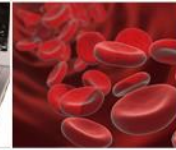https://www.nsf.gov/pubs/policydocs/pappg17_1/index.jsp

Always read the solicitation

- **Deadline: 5:00pm submitter's local time**

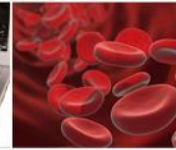- **Rushing and waiting until the last minute - poor proofreading, no internal review**

Common Mistakes in Preparing a CAREER Proposal

- **Failing to project that the proposed work will be the basis for a long-term, successful faculty career**

- **Overlooking that education, mentoring, teaching, outreach are part of a successful academic career**

- **Failing to integrate education/outreach activities in a meaningful and sensible way to research activities**

Common Mistakes in Preparing a CAREER Proposal

- **Failing to include any assessment of educational activities.**

- **Failing to get out of the PhD and Postdoc advisors' scientific shadows.**

- **Treating the CAREER proposal as a regular unsolicited proposal, rather than a proposal that envisions the start of an independent long-term academic research trajectory.**
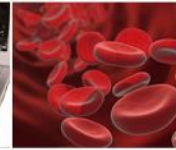
Common Mistakes in Preparing a CAREER Proposal

- **Making the proposed work (research and education) too broad or too narrow**

- **Proposing an impossibly large amount of work rather than an amount of work that will be appropriate and well-received**

- **Repeating words without substantiating them (e.g., "innovative", "novel", "fundamental", "transformative", "first time ever", etc.)**

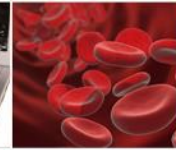# Common Mistakes in Preparing a CAREER Proposal

- **Failing to express a compelling scientific question and a clear, reasonable research plan to answer this question**

- **The proposed research is incremental (e.g., proposal reads like a parametric study or a development activity)**

- **The educational plan is ordinary (e.g., teach a class, educate students)**

Help Yourself ….

- **Seek support from your department and university.**

- **Understand literature gaps in research and education.**

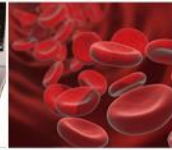- **Do not be unrealistically ambitious.**

- **DO NOT INCLUDE APPENDICES** - Without prior written approval from the appropriate NSF Assistant Director, proposals with appendices will be Returned without Review (RWR). Note that such approvals are rarely granted (see Chapter II.A of the GPG).

- **Single page collaboration letters.**

CAREER Proposal Preparation and Submission Checklist

https://www.nsf.gov/pubs/2017/nsf17537/nsf17537.htm

CAREER PROPOSAL COMPLIANCE CHECKLIST
For Proposals Submitted in 2015 (CBET)

All CAREER proposals must be checked for compliance with the CAREER Solicitation (NSF 15-555) and the GPG prior to review. This checklist includes only compliance checks specific to CAREER proposals. It is **not** necessary to upload electronic copies of this document to the Electronic Jacket record.

NO EXCHANGE OF PDF FILES OR RESUBMISSION IS ALLOWED AFTER THE DEADLINE DATE EXCEPT IN RESPONSE TO A REQUEST FROM NSF TO CORRECT TECHNICAL PROBLEMS WITH PDF CONVERSIONS.

Proposal #:	PI:	Institution:

Checklist (items listed indicate the compliant condition)   **Action** if Non-Compliant

Submisson Date/Time:	Action
☐ Time stamped (Inside FastLane) by 5:00 PM local time on due date (July 22 for ENG)	☐ Return Without Review (RWR) after conferring with the Directorate Representative (DR)

Cover Page:

Cover Page	Action
☐ Program Solicitation used is NSF 15-555 (required to allow self-certification of eligibility)	☐ If not submitted to NSF 15-555, confer with Directorate Representative for advice
☐ Title begins with "CAREER:"	☐ Add "CAREER:" in ejacket
☐ There are no co-PIs listed on the cover page	☐ If co-PIs are listed, process as RWR

Budget:

☐ 5 year duration; $500K minimum in BIO, ENG, and PLR; $400K minimum otherwise	☐ Review proposal, revise budget if award is planned
☐ No support for senior personnel in primary or subaward budget (Category A)	☐ Review proposal, revise budget if award is planned

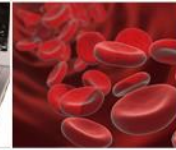|	
Supplementary Documentation: ☐ <mark>Departmental letter is included (check single-copy documents section, appendix section, and end of Project Description if missing from Supplementary Documentation section).</mark>	☐ If letter is in the incorrect section, use Inside FastLane utility to move it to Supplementary Documentation section prior to sending out for review OR ☐ If letter is missing, process as **RWR** after conferring with Directorate Representative
☐ No inappropriate materials (manuscripts, letters of recommendation, etc.) have been included (Note: Single-sentence statements of collaboration are allowed)	☐ Remove inappropriate documents

Proposal COMPLIANT with CAREER solicitation and GPG/Divisional Requirements   Initials/Date_____

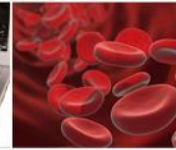Proposal is NOT COMPLIANT with the CAREER solicitation   Initials/Date_____

Comments/Action:

Results from Prior Support

I received an NSF award two years ago on a topic completely unrelated to my current CAREER proposal.

Question: Do I need to include the results in the *Results from Prior Support* Section of the proposal?
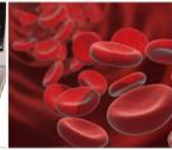
Answer

Yes! The Grants and Proposal Guide (GPG) states:

If any PI or co-PI identified on the project has received NSF funding (including any current funding) in the past five years, information on the award(s) is required, irrespective of whether the support was directly related to the proposal or not.
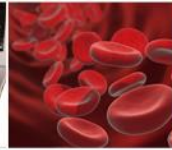
Results from Prior Support

I received an NSF award three years ago and it is no longer active.

Question: Do I need to include the results in the *Results from Prior Support* Section of the proposal?
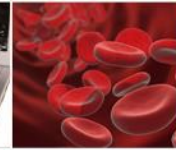
Answer

Yes! The Grants and Proposal Guide (GPG) states:

If any PI or co-PI identified on the project has received NSF funding (including any current funding) in the <u>past five years</u>, information on the award(s) is required, irrespective of whether the support was directly related to the proposal or not.
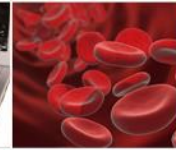
Results from Prior Support

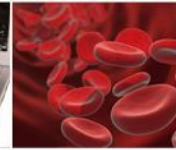I was PI or co-PI on two (or more) NSF awards over the last four years.

Question: Do I need to include the results from each and every award in the *Results from Prior Support Section* of my CAREER proposal?

Answer

You should report the results from the award most closely related to this proposal. The Grants and Proposal Guide (GPG) states:
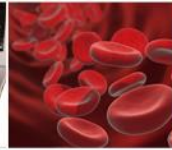
In cases where the PI or co-PI has received *more than one award* (excluding amendments), they need <u>only</u> *report on the one award most closely related* to the proposal. Funding includes not just salary support, but any funding awarded by NSF.

Results from Prior Support

I was co-PI on an NSF award two years ago but did not receive salary support.

Question: Do I need to include the results in the *Results from Prior Support* Section of the proposal?
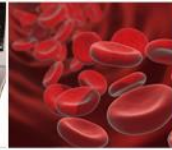
Answer

Yes! The Grants and Proposal Guide (GPG) states:

If any PI or co-PI identified on the project has received NSF funding (including any current funding) in the past five years, information on the award(s) is required…
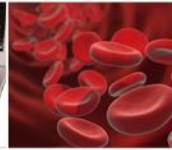
Funding includes not just salary support, but any funding awarded by NSF!

Results from Prior Support
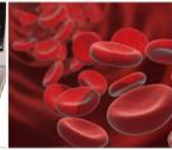
What <u>MUST</u> I include in this section?

- NSF award number
- Award amount
- Period of support
- Award title
- Summary of the results
- Publications resulting from the NSF award
- Evidence of research products

Results from Prior Support

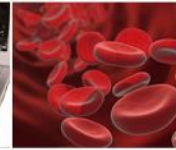**The following information MUST be provided:**

- the NSF award number, the title of the project, amount and period of support;

- a summary of the results, including accomplishments;

- **The results must be separately described <u>under two distinct headings</u>, *Intellectual Merit* and *Broader Impacts*;**

- the publications resulting from the NSF award;

- evidence of research products and their availability, including, but not limited to: data, publications, samples, physical collections, software, and models, as described in any Data Management Plan; and

- if the proposal is for renewed support, a description of the relation of the completed work to the proposed work
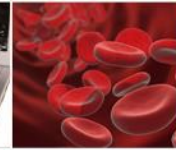
Results from Prior Support

What's the maximum number of pages that I can use to describe the *Results from Prior Support*?

- 1 page
- 2 pages
- 5 pages
- 7 pages
- No maximum

Answer

What's the maximum number of pages that I can use to describe the *Results from Prior Support*?

- 1 page
- 2 pages
- 5 pages
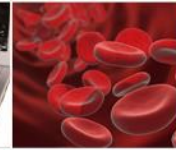- 7 pages
- No maximum

Results from Prior Support

What section of the proposal contains the _"Results from Prior Support"_ Section?

- Project Summary
- Project Description
- Supplementary Documents
- Data Management Plan
- Budget

Results from Prior Support

What section of the proposal contains the *"Results from Prior Support"* Section?

- Project Summary
- Project Description
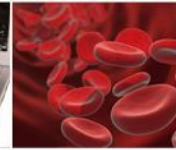- Supplementary Documents
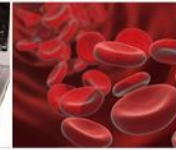- Data Management Plan
- Budget

Results from Prior Support

I'm running out of space in my *Project Description*. My previous NSF award is still active.

Question: Can I provide this information in the Current and Pending Support Section of the proposal?

Answer

No! You should list the award in the Current and Pending Support Section of the proposal; however, the additional details MUST be provided in the *Results from Prior Support* Section of the Project Description.

Failure to provide this information will result in your proposal being returned without review.