#### **Editing Your Proposal**

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## What Does Editing do for your Proposal?



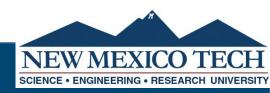
Before

After!

#### Keep in mind. . .

The best written proposal will not win money for a weak idea **BUT** 

Many good ideas are often not funded because the proposal is poorly written

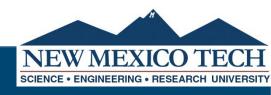


# Understanding the Program Goals, Priorities, and RFP Is Key for a Competitive Proposal

"A sound concept, but it does not fit our current funding priorities"

60% of all proposals are eliminated on first reading because the writer did not make an adequate project match or failed to follow directions

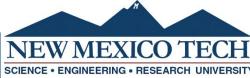




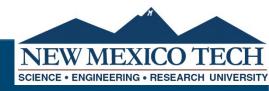
# Your Proposal Must STAND OUT from All the Others Being Reviewed by the Funding Agency

- Highlight your unique and innovative approaches to accomplishing your goals.
- Use technical terms judiciously, reviewers have different levels of expertise in subject matter
- Review each section of your proposal. Make certain your methods, management, timelines, budget, and evaluation pieces are on target, are connected, and are realistic
- Write clearly and concisely
- Style and format are as important as content
- Follow instructions on how to present information





Academic Writing versus Grant Writing	
Academic Writing	Grant Writing
Scholarly pursuit - Individual passion	Sponsor goals - Service attitude
Past Oriented - What has been done	Future Oriented - What should be done
Theme-centered - Theory and thesis	Project-centered – Activities
Expository rhetoric – Explaining	Persuasive rhetoric - "Selling"
Impersonal tone: Objective	Personal tone: Excitement
Individualistic	Team-focused: Feedback needed
Few length constraints	Strict length constraints
Specialized terminology	Accessible language



# Your Proposal Is a Sales Document Not a Scientific Or Scholarly Paper

Good proposal writing turns the scientific or scholarly model many authors know from their professional experience upside down. Rather than drawing conclusions from an array of details, proposal writing begins with a conclusion and arranges substantiating facts to support it.

#### **Scientific/Scholarly Writing**

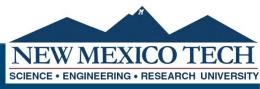
Scientific or scholarly writing starts with the details and subordinates main points.

#### **Proposal Writing**

Proposal writing starts with the main point and subordinates details.

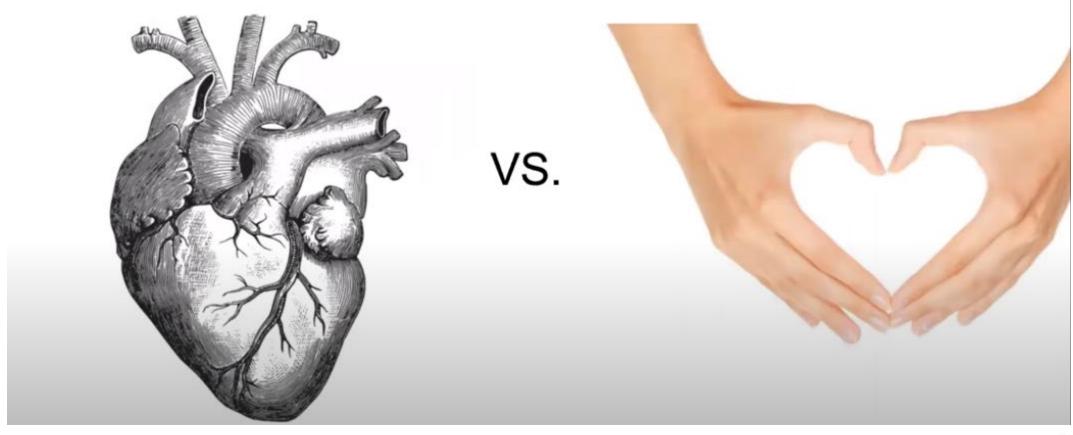


**Details** 



### **Academic Writing**

# **Grant Writing**



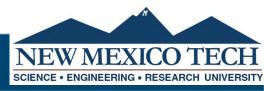
#### Write to Your Reviewers

- ➤ DO NOT write the application for yourself, unless you plan to fund it yourself
- ➤ You MUST convince an entire review panel, the program officer, and the funding agency
  - Reviewers have varied experience
  - First-time reviewers to veterans
  - Subject matter experts to generalists with minimal knowledge in the field

Limited time for reading your proposal

Review many proposals

Do not have time to find information that is not well organized, clear, visual, or highlighted



#### **How Do Reviewers Read Proposals?**

- Reviewers approach to your proposal is similar to how you approach reading a technical paper Reviewers attempt to understand complex information quickly and clearly and, most importantly, to determine whether or not the value of the proposal warrants a closer reading
- Reviewers look for shortcuts that help them do an "end run" around organizational structure of the document in a non-linear way
- This approach helps to more quickly determine whether or not there is value to be gained from continued reading

http://www.sciencemag.org/careers/2016/03/how-seriously-read-scientific-paper



#### PROJECT SUMMARY/ABSTRACT (FIELD 7 ON THE FORM)

The project summary/abstract is a summary of the proposed activity suitable for distribution to the public and sufficient to permit potential reviewers to identify conflicts of interest. It must be a self-contained document. Provide the name of the applicant, the project title, the PI and the PI's institutional affiliation, any coinvestigators and their institutional affiliations, the objectives of the project, a description of the project, including methods to be employed, and the potential impact of the project (i.e., benefits, outcomes). A sample is provided below:

#### Project Title

A. Smith, Lead Institution (Principal Investigator)
 A. Brown, Institution 2 (Co-Investigator)
 A. Jones, Institution 3 (Co-Investigator)

Text of abstract

The project summary must not exceed one page when printed using standard letter-size (8.5 inch x 11 inch) paper with 1-inch margins (top, bottom, left and right) with font not smaller than 11 point. To attach a Project Summary/Abstract, click "Add Attachment."

If an application is recommended for award, the project summary will be used in preparing a public abstract about the award. Award abstracts and titles form a Government document that describes the project and justifies the expenditure of Federal funds in light of the DOE and SC mission statements at https://energy.gov/mission and https://science.osti.gov/about/.

- Do not include any proprietary or sensitive business information.
- DOE may use the abstract to prepare public reports about supported research.

#### DOE TITLE PAGE

(PART OF PROJECT NARRATIVE ATTACHED TO FIELD 8 ON THE FORM)

The application narrative must begin with a title page that will not count toward the project narrative page limitation. The title page must include the following items:

- The project title
- Applicant/Institution:
- Street Address/City/State/ZIP:
- Postal Address:
- Lead PI name, telephone number, email:
- Administrative Point of Contact name, telephone number, email:
- FOA Number: Include the FOA number printed on the cover of this FOA.
- DOE/SC Program Office: Isotope R&D and Production
- DOE/SC Program Office Technical Contact: Dr. Ethan R. Balkin

Important Instructions to the Sponsored Research Office of Submitting Institutions: SC

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10/24/22, 8:40 AM NSF Small Business Innovation Research Phase II (SBIR)/ Small Business Technology Transfer (STTR) Programs Phase II (SBI...

of proposals in nearly all technical areas.

NSF proposals are confidential and will only be shared with a small number of reviewers and NSF staff (as appropriate). All of these individuals have agreed to maintain the confidentiality of the proposal content. Proposals to NSF do not constitute a public disclosure. If selected for a Phase II award, a company will be prompted to write a publicly available project summary and an abstract that summarizes the intellectual merit and broader impact of the project.

NSF requires that all proposals Include Biographical Sketches and Current and Pending Support documents using a new format specific for NSF SBIR/STTR proposals. For SBIR or STTR proposals, follow the guidance provided in Section V.A of this solicitation (Proposal Preparation and Submission Instructions). Step-by-step guidance can also be found here.

#### Significant Revisions Made Since the Last Solicitation:

- The NSF SBIR and STTR Phase II solicitations have been combined into a single document.
- The new, combined solicitation presents three Phase II submission windows rather than four.
- A new required format has been instituted for Biographical Sketches and Current & Pending Support documents in NSF SBIR/STTR proposals.
- Letters of commitment from consultants and subawardees should be included in the "Other Supplementary Documents" section, rather than the Budget Justification.
- The project Budget Justification and subaward Budget Justifications are now limited to five pages.

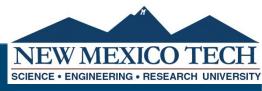
For the purpose of this solicitation, the following definitions apply:

- Funding Agreement: As used in this solicitation, the funding agreement is a Fixed Amount Cooperative Agreement

   a legal instrument of financial assistance between NSF and an awardee, consistent with 31 USC 6302-6305 and
   as noted in the NSF Proposal & Award Policies Guide (PAPPG) Introduction, Section D ("Definitions & NSF-Grantee
   Relationships").
- Small Business Concerns (SBCs): SBCs are independently owned and operated businesses that are not
  dominant in the field of operation. For this solicitation, firms qualifying as a small business concern are eligible to
  participate in the SBIR/STTR program (see Section IV. "Eligibility Information" of this solicitation for more details).
  Please note that the size limit of 500 employees includes affiliates. The firm must be in compliance with the SBA
  SBIR/STTR Policy Directive and the Code of Federal Regulations (13 CFR 121).
- SBIR/STTR Data: As defined by the SBA SBIR/STTR Policy Directive, SBIR/STTR Data is all Data developed or
  generated in the performance of an SBIR or STTR award, including Technical Data and Computer Software
  developed or generated in the performance of an SBIR or STTR award. The term does not include information
  incidental to contract or grant administration, such as financial, administrative, cost or pricing or management
  information.
- SBIR/STTR Data Rights: As noted in the SBA SBIR/STTR Policy Directive, the Federal Government may, use,
  modify, reproduce, perform, display, release, or disclose SBIR/STTR Data that are Technical Data within the
  Government; however, the Government shall not use, release, or disclose the data for procurement, manufacturing,
  or commercial purposes; or release or disclose the SBIR/STTR Data outside the Government except as permitted
  by paragraph 10(B) of the SBIR/STTR Policy Directive's Data Rights Clause or by written permission of the
  Awardee.
- Research and Development (R&D): broadly defined in 2 CFR § 200.8, but specified for the NSF SBIR/STTR program as follows:
  - the application of creative, original and potentially transformative concepts to systematically study, create, adapt, or manipulate the structure and behavior of the natural or man-made worlds;
  - the use of the scientific method to propose well-reasoned, well-organized activities based on sound theory, computation, measurement, observation, experiment, or modeling;
  - the demonstration of a well-qualified individual, team, or organization ready to deploy novel methods of creating, acquiring, processing, manipulating, storing, or disseminating data or metadata; and/or
  - the novel integration of new theories, analysis, data, or methods regarding cognition, heuristics, and related phenomena.
- Deep Technologies: technologies based on discoveries in fundamental science and engineering.
- Non-Dilutive Funding: financing that does not involve equity, debt, or other elements of the business ownership structure.
- Technical Risk: Technical risk assumes that the possibility of technical failure exists for an envisioned product, service, or solution to be successfully developed. This risk is present even to those suitably skilled in the art of the component, subsystem, method, technique, tool, or algorithm in question. If the new product, service, or solution is successfully realized and brought to the market, it would be difficult for a well-qualified, competing firm to reverseengineer or otherwise neutralize the competitive advantage generated by leveraging fundamental science or engineering research techniques.
- Technological Innovation indicates that the new product or service is differentiated from current products or services; that is, the new technology holds the potential to result in a product or service with a substantial and

#### **Editing Tips**

- Proposal editing is more than fixing commas
- Think of your proposal as a sales document
- Make it easy for your reader to scan and understand your document
- Use headings and images
- Document design is important
- Other people catch edits we don't see in our own writing

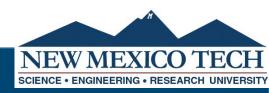


## **Editing Tips**





- Use spellcheck...but not exclusively
- Bold key phrases in paragraphs to draw the reader's eye
- Use "active voice" (The team conducted experiments) not "passive voice" (The experiments were conducted by the team)
- Ask someone else to review your document
- Make your document as "scan-friendly" as possible for reviewers
- Match the RFP- Look for a compliance "checklist"

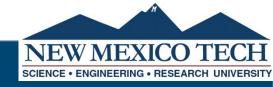


## **Define your Acronyms**

#### **ERA**

- eRA Commons
- Earned Run Average
- Electronic Research Administrator
- Equal Rights Amendment
- Economic Recovery Act
- Exchange Rate Agreement
- Emergency Roadside Assistance
- Embedded Remote Access
- ERA Real Estate





### **Use Images to Tell Your Story**

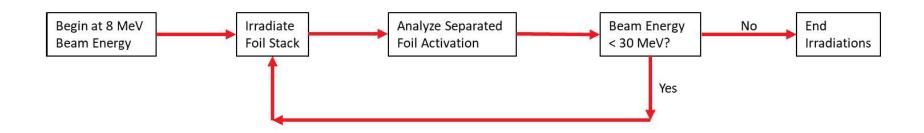
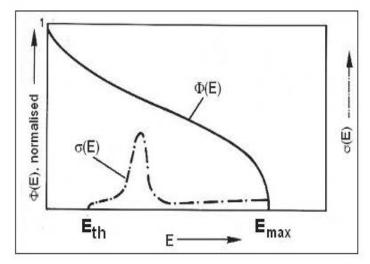


Figure 3: A schematic of the process of systematically measuring yields and excitation functions.



<u>Figure 1</u>: Bremsstrahlung continuum and photonuclear cross section:

E: Incident bremsstrahlung energy.

 $\Box$ (E): Energy-differential bremsstrahlung photon flux density.

 $\square(E)$ : Cross-section of the photoreaction.

 $E_{th}$ : Threshold energy of the photonuclear reaction.

 $E_{max}$ : Maximum energy of the bremsstrahlung continuum.



#### What is More Effective?

New Mexico Institute of Mining and Technology (NMT) is a small university with good enrollment and offers several programs, majors, and certificates. NMT has good research expenditures.

New Mexico Institute of Mining and Technology (NMT) is a public education, research, and service university focused in science, technology, engineering, and mathematics (STEM). A Hispanic-Serving Institution (HSI), NMT is a member of the Hispanic Association of Colleges and Universities and is classified by Carnegie as a Master's College & University – Small Program. Undergraduate enrollment at NMT for Fall-2022 was 1,218 degree-seeking students with 40% Hispanic enrollment and 31% female. Graduate enrollment was 472 degree-seeking students with 20% Hispanic and 41% female. The 2022-2023 annual national college rankings place NMT among the nation, #72 as top public university in America, #9 as the best Hispanic-Serving University in America and #34 in colleges with the best professors. US News and World Report ranked NMT as #5 in the top public college in the West and #107 as top performers for social mobility.

#### We Know BAD Writing When We See It

- Writers try to "impress"
- Wordiness
- Too technical
- Jargon
- Complex



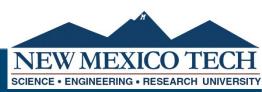


#### **BAD Writing Causes**

- Confusion
- Non-compliance
- Difficulty in scoring/evaluation
- Loss of credibility
- Bad writing costs you \$\$\$\$



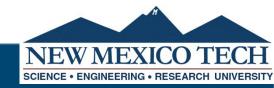
"It was a great read, except I collided with run-on sentences, tripped over broken English and got knocked about by a dangling participle."



# How Does BAD Proposal Writing Show Up?

- Poorly organized
- No "road maps"
- Boring to the reader/evaluator
- Confusing to the reader
- Painful to even look at
- Clutter





Using weak verbs

Jack and Jill went up the hill to get a pail of water.

Using unfamiliar words

Jack and Jill climbed up the hill to fetch an ewer of water.

Putting introductory phrases at the beginning to push the subject back

To fetch a pail of water, Jack and Jill climbed up the hill.



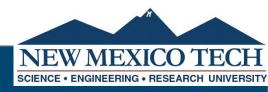
Putting the action at the end of the sentence

Jack and Jill, to fetch a pail of water, climbed up the hill. Putting modifiers as far away as possible from the words they modify

Jack and Jill climbed to fetch a pail of water up the hill.

Using passive voice

The hill was climbed by Jack and Jill so that a pail of water could be fetched.



Putting the doer at the end of the sentence

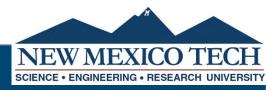
To fetch a pail of water, the hill was climbed by Jack and Jill.

Introducing false subjects

It was Jack and Jill climbed up the hill to fetch a pail of water.

Piling on the gobbledygook (fluff)

Jack and Jill ascended the acclivity to retrieve a vessel of Adam's ale.



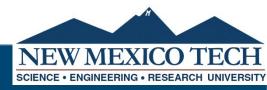
Turning verbs into nouns

Jack and Jill <u>did</u> the hill climb for the purpose of water retrieval. Using unnecessary technical jargon

Jack and Jill traversed the gradient to fetch an alembic vessel of H<sup>2</sup>O

Adding wordy phrases (fluff)

Jack, in the company of Jill, climbed their way up the hill for the purpose of fetching water in the approximate amount of a pail full.



Using multiple redundant words

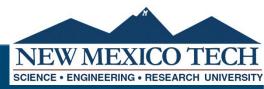
Both Jack and Jill climbed all the way to the top of the hill's summit to fetch a pail filled to its capacity with water.

Indiscriminately adding clichés

Jack and Jill, who need to introduction, climbed up the hill by leaps and bounds to fetch through their good offices a pail of water by hook or by crook.

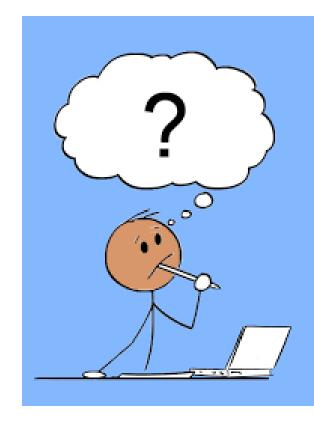
Stringing nouns together to form a subject

Jack and Jill water retrieval hill ascent was achieved.



#### Good writing can help us

- Receive higher evaluation scores
- Win more awards
- Establishes credibility
- Reduce confusion, rework, and waste
- Move the reviewer toward an award decision





#### **Better writing**

- Compels the reviewer/program officer to choose us
- Demonstrates value (value proposition)
- Answers "why us"
- Showcases your competitive advantage
- Is visually appealing
- Is consistent in messaging and tone (different sections are written in passive/active voice)





# The best proposal writing is easy to evaluate

- Addresses all requirements and evaluation criteria
- Is the proposal focused at all levels?
- Is the proposal easy to read and evaluate?
- Does the proposal tell "why you/us"
- Does the proposal validate every claim?



