

# Proposal Elements and Guidelines for Submission

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Tuskegee University

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# The submitter's three jobs

- Identify the right funding opportunity
- Conceptualize a fantastic project
- Write a persuasive proposal in 15 pages



# Actually ~100 pages

- Cover sheet 'signed' by AOR
- Summary and Narrative (1+15p)
- References cited
- Biosketches (2p ea.)
- Budget(s) (1p per year + 1) and Budget Narrative(s) (3p max)
- Current and Pending Support
- Facilities and Resources
- Data Management Plan (2p)
- Postdoc Mentoring Plan (1p)
- Other Supplemental Documents **ONLY** as allowed



# Finding funding opportunities

- Prior awards
- Drill down through our organization
- Look at individual solicitations
- Bring ideas to a program officer







National Science Foundation  
WHERE DISCOVERIES BEGIN

QUICK LINKS

SEARCH



HOME

FUNDING

AWARDS

DISCOVERIES

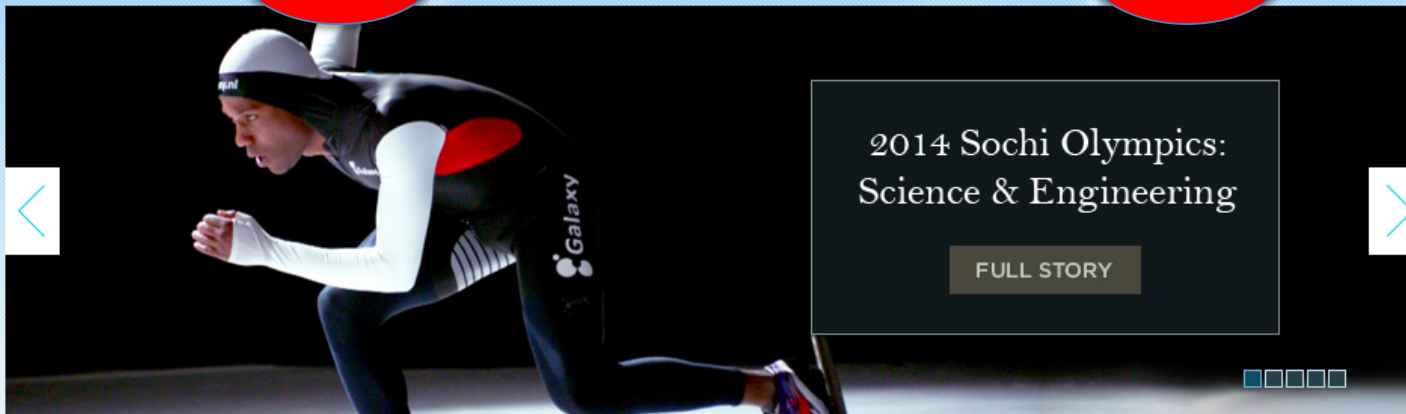
NEWS

PUBLICATIONS

STATISTICS

ABOUT NSF

FASTLANE



Advancing the Sciences

Funding & Supporting

Inspiring & Educating

HIDE



New compounds discovered that are  
hundreds of times more mutagenic  
January 6, 2014




Atlas Mountains in Morocco are  
buoyed up by superhot rock, study  
finds  
January 2, 2014




# Finding Funding Opportunities on the NSF Website: [www.nsf.gov](http://www.nsf.gov)

[HOME](#)

FUNDING   AWARDS   DISCOVERIES   NEWS   PUBLICATIONS   STATISTICS   ABOUT NSF   **FASTLANE**


 **National Science Foundation**  
Directorate for Education and Human Resources (EHR)

**QUICK LINKS**

SEARCH 

**EHR HOME**   EHR FUNDING   EHR AWARDS   EHR DISCOVERIES   EHR NEWS   ABOUT EHR

**Research on Learning in Formal and Informal Settings (DRL)**



**DRL Home**

**Funding Opportunities**

News

Events

Discoveries



Publications

**Research on Learning in Formal and Informal Settings (DRL)**

EHR has established a new **Research Program**. Proposals are encouraged that help synthesize, build and/or expand research foundations in four core areas. See the announcement at:

[EHR Core Research \(ECR\)](#)  
(NSF 13-555) Posted April 12, 2013

**Programs and Funding Opportunities**

Key:  [Crosscutting](#) |  [NSF-wide](#)

[Advanced Technological Education \(ATE\)](#)

[Advancing Informal STEM Learning \(AISL\)](#)





## Find Funding

### A-Z Index of Funding Opportunities

### Recent Funding Opportunities

### Upcoming Due Dates

### Advanced Funding Search

### Interdisciplinary Research

### How to Prepare Your Proposal

### About Funding

## Proposals and Awards

### Proposal and Award Policies and Procedures Guide

#### Introduction

#### Proposal Preparation and Submission

#### • Grant Proposal Guide

#### • Grant Application Guide

#### Award and Administration

#### • Award and Administration Guide

### Award Conditions

### Other Types of Proposals

### Merit Review

### NSF Outreach

### Policy Office

### Related

## Research on Learning in Formal and Informal Settings

# Innovative Technology Experiences for Students and Teachers (ITEST)

## STEM Learning and Research Center

The STEM Learning and Research (STELAR) Center builds capacity and magnifies the results of ITEST projects to deepen the impact of the ITEST program. To learn more about STELAR, the ITEST program, and current and past ITEST projects, please visit <http://stelar.edc.org/>.

## CONTACTS

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## DUE DATES

Full Proposal Deadline Date: February 11, 2014

Full Proposal Deadline Date: November 6, 2014

# Some important notes

- Solicitations come and go. Some are multi-year, some are not but recur anyhow, many change names
- Solicitations will always have a minimum of 90 days to submit but may not have more
- Most solicitations follow the fiscal year, due in late fall or spring
- Just because NSF has funded a certain kind of work in the past doesn't mean we have money for it in the future





# Conceptualize a fantastic project

- Any part of the project that you can do before the funding arrives, you should do before submitting the proposal (locate partners, design studies, do preliminary design work, submit IRB, etc.)
- You will necessarily have thought through more detail than you may be able to express
- Your project must contribute to the knowledge base; typically mere evaluation is not enough
- You **MUST** align with the solicitation if you are submitting to one



# Conceptualizing your project: Common issues

- **Fit with program**  
Must match program goals
- **Clarity and specificity**  
Should have important decisions made, plans laid out
- **Research and development**  
Methods must match questions, build on literature, and contribute to knowledge
- **Expertise and collaboration**  
You need to incorporate expertise appropriate to the contributions you want to make, both in project and in proposal
- **Innovation and impact**  
You should be addressing an important problem, and not reinventing the wheel



# Write a persuasive proposal

- By the end of page 1, the reviewer needs to know what you will do (roughly)
- The activities alone are not persuasive; you need an argument for why those activities lead to desired outcomes in both intellectual merit and broader impacts
- Ensure the expertise of your team is adequate to do the work and their expertise is reflected in your proposal
- Build trust in the reviewers that what you can't fit in the page limit is within your grasp
- You **MUST** follow the rules of the solicitation if you are submitting to one, and the GPG in any case





# Write a persuasive proposal: Help the reviewers

- Make what they are looking for easy to find, using the language of the review criteria and headings to highlight the elements of the project description
- Don't assume that all reviewers will know the jargon of your discourse community or commonly used acronyms
- Consider how your proposal will read both when reading start to finish and when a reviewer skims to look for certain elements



# Write a persuasive proposal: Common problems

- Ignoring requirements stated in the solicitation or the Grant Proposal Guide
- The “Trust Me” approach: provide citations or evidence for critical assertions made, and detailed plans that can be evaluated
- The oversell of yourself or your project; take a neutral tone and let the evidence speak
- Pages of general, vague, or rambling narrative without precision and details
- Overemphasis of rationale for the project at the expense of methodology and details of what will actually be done



# Before You Begin Writing

- Do your homework
  - Familiarize yourself with the NSF website
  - Print and read the Grant Proposal Guide (GPG)
  - Read the solicitation carefully multiple times
  - Check the NSF Awards Search Page
  - Visit the Website of the resource center or network for the relevant program.
  - Read sample proposals; ask funded PIs politely
- Talk to NSF Program Officers about your ideas
  - POs may ask you to send a 1-2 page summary in advance.





# Contacting program officers

- Generally better to email rather than call
- Face-to-face or phone meetings are just as good, no need to travel to DC
- Don't mass email—multiple POs may work on a program, talking to many creates redundant work
- Be prepared to say what you're asking for: advice on where to submit an idea, feedback on a one-pager to a program, procedural advice or answers to specific questions
- Consider the Policy office for legal/policy
- Recognize that program officers are *busy*
- Consider volunteering to review (send a CV right near a program deadline)



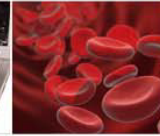
# Possible Timeline

- 12-6 months ahead: identify opportunities from prior years, read award abstracts and outcome reports
- 6 months ahead: send 1 pager to program officer (optional) and begin discussing with any partners
- 3 months ahead: read final solicitation carefully. Alert sponsored projects office
- 1.5 months ahead: share draft proposal for feedback with colleagues. First draft of budgets.
- 2 weeks ahead: upload everything except narrative, if possible; ensure subcontract paperwork done
- 1 week ahead: final edits by PI, partners, and sponsored projects; mop up any last supporting docs
- Day before due date: submit if possible





WHERE DISCOVERIES BEGIN



# Project Description Should Include...

- 15 page maximum
- Project overview
- Project goals and objectives
- Summary of effectiveness and impact of prior support
- Explanation of principles that guided the project design, informed by the literature
- Detailed work plan with a timeline
- Qualifications of key personnel who will be coordinating the project
- Anticipated results
- Research plan (if appropriate)
- External review or evaluation process
- Dissemination plan





WHERE DISCOVERIES BEGIN

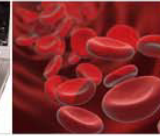


# What Makes This Project Important?

- How is it innovative or potentially transformative?
- How will it advance knowledge and move the field forward?
- What are the anticipated outcomes or products of this project?
- Who will be interested in these outcomes, and how will you target dissemination of findings to them?
- How might these products or findings be useful on a broader scale?



WHERE DISCOVERIES BEGIN

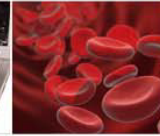


# What Have You And Others Done?

- Describe the theoretical and research basis on which the proposal is based.
- How has the prior research influenced this project?
- Discuss how the proposal is innovative and different from similar projects.
- If you have previously been funded by NSF for similar work, provide evidence about the **effectiveness** and **impact** of that work.



WHERE DISCOVERIES BEGIN



# Who Will Do the Work?

- Briefly describe the expertise of the persons included on the proposal and why they are needed:
  - Education researchers and evaluators
  - Teachers
  - STEM-related content experts
- Upload two page bios for all senior personnel
- Don't forget the mentoring plan if Post-Docs are involved.





WHERE DISCOVERIES BEGIN

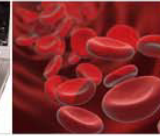


# Expertise

- Successful projects generally involve interdisciplinary teams. In all cases, proposals must describe the expertise needed for the work, how this expertise is incorporated in the project, and who is responsible for each component.
- Projects typically include STEM education researchers, development experts, experienced teachers, STEM researchers, statisticians, psychometricians, informal learning experts, and policy researchers, as appropriate.



WHERE DISCOVERIES BEGIN

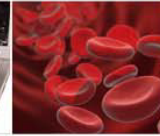


# Broader Impacts

- How well does the project advance discovery and understanding while promoting teaching, training, and learning?
- Does the activity broaden participation of underrepresented groups?
- Will the activity enhance research and education infrastructure?
- Will results be disseminated broadly?
- What may be the activity's benefits to society?



WHERE DISCOVERIES BEGIN



# How Will Others Learn About The Project?

- Plan specific strategies for **Dissemination** of products and/or findings to researchers, policy makers, practitioners, and other relevant constituency groups. Identify the relevant groups.
- Applicants are encouraged to bring the same levels of insight and creativity to the dissemination aspect of their proposal as they do to their educational research and development design.



WHERE DISCOVERIES BEGIN



# Help the Reviewers

- Make what they are looking for easy to find, using the language of the review criteria and headings to highlight the elements of the project description.
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