



**ATE-CENTERS**

# Final Tips for a Competitive Proposal

April 19, 2018

Webinar will begin at 3pm ET



# Webinar Details

- For this webinar you will be in listen only mode using your computer or phone
- Please ask questions via the question window
- This webinar is being recorded – you will be sent a recording link

## Brought To You By:

**CCTA** | CENTERS COLLABORATIVE FOR TECHNICAL ASSISTANCE

With Additional Support by the ATE Collaborative Impact Project

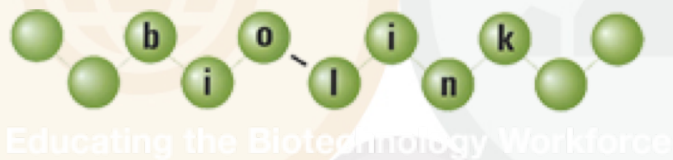
**ATECENTERS**

Disclaimer: This material is based upon work supported by the National Science Foundation under Grants # 1205077 and # 1261893. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

# The CCTA is led by



- **National Center for Convergence Technology (CTC)** at Collin College in Frisco, TX (lead)
- **South Carolina ATE National Resource Center (SCATE)** at Florence Darlington Technical College in Florence, SC
- **Florida ATE Center (FLATE)** at Hillsborough Community College in Tampa, FL
- **Bio-Link Next Generation National ATE Center for Biotechnology and Life Sciences (Bio-Link)** at City College of San Francisco in San Francisco, CA



# CCTA Purpose

- Respond to a request from the Department of Labor (DOL) to the NSF to have ATE Centers provide technical assistance services to DOL TAACCCT grantees
- Activities relevant for DOL grants, NSF grants and workforce-oriented programs of all kinds
- Deliverables
  - Topical webinars on existing and new solutions
    - Live/recorded with attendee Q&A
  - Identify and document best practices
  - Host convenings

# Poll #1: Your Affiliation

- A. I am involved with an NSF grant
- B. I am involved with a TAACCCT grant
- C. Both
- D. Neither

# Poll: How many people are listening with you?

- A. None
- B. 1
- C. 2
- D. 3 or more

# Today's Presenters



**Dr. Elizabeth Teles**  
NSF Program Director;  
Division of Undergraduate  
Education, ATE and S-STEM



**Dr. Ann Beheler**  
Principal Investigator (PI);  
National Convergence  
Technology Center (CTC);  
Centers Collaborative for  
Technical Assistance



**William A. Alter III, Ph.D.**  
Special Projects Coordinator;  
Viticulture and Enology  
Science and Technology  
Alliance (VESTA)  
Missouri State University

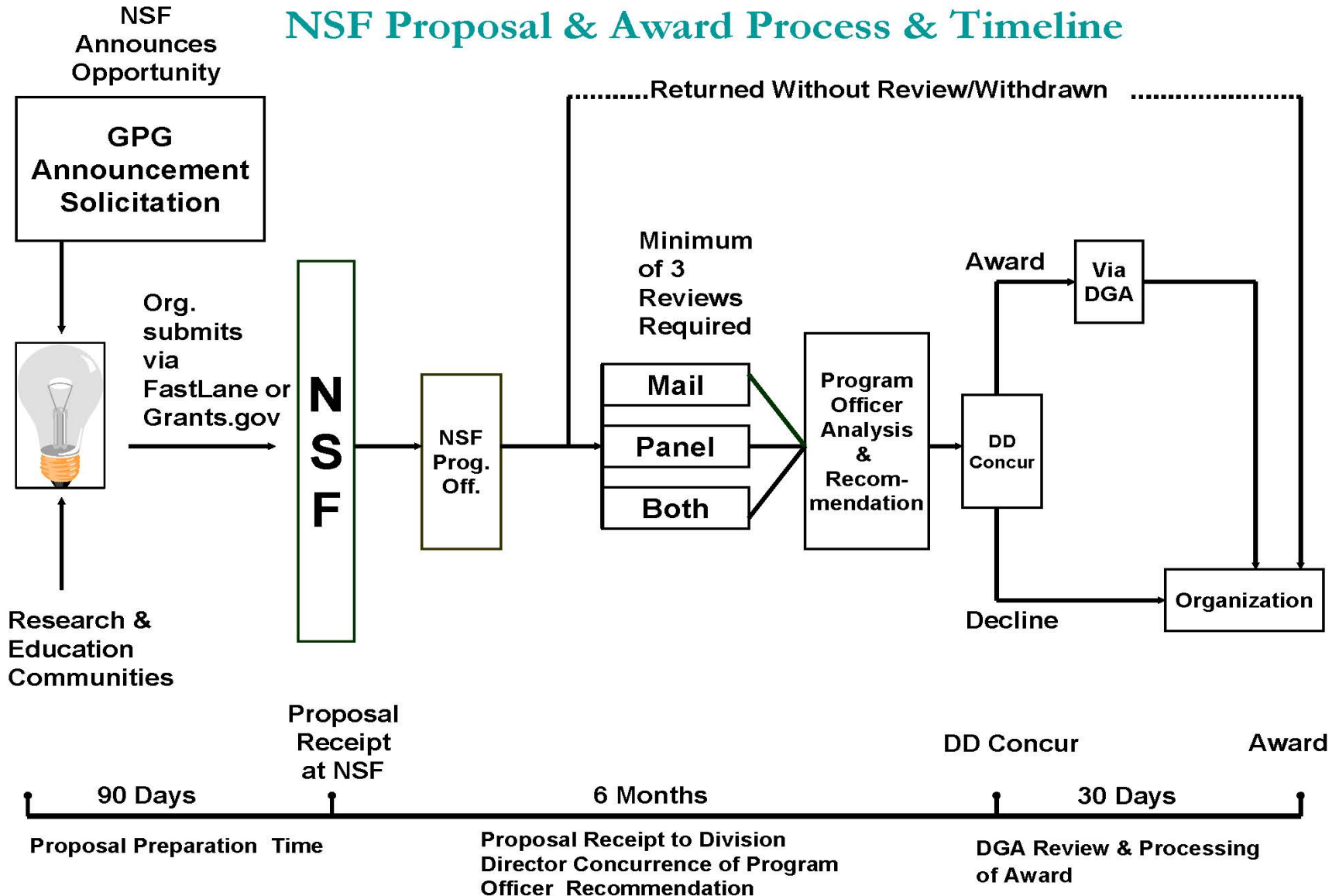


# Peer Review Panel

- About 6 peer reviewers from education and industry (e.g., two-year and four-year faculty, industry representatives) meet together face to face
- Reviewers review about 12 proposals (likely representing variety of technology areas)
- Reviewers may or may not be from your technology area and may or may not be familiar with your type of community college



# NSF Proposal & Award Process & Timeline



# Five Review Elements Part I

1. What is the potential for the proposed activity to:
  - a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit (IM)); and
  - b. Benefit society or advance desired societal outcomes (Broader Impacts (BI))?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?

# Five Review Elements Part 2

3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team, or institution to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?

# Some Specific Review Criteria for ATE

(Examples – See ATE Solicitation for more)

- Does the project have the potential for improving student learning in science or engineering technician education programs? (IM)
- Has an assessment of workforce needs been conducted? (BI)
- Does the project promote diversity in the technical workforce? (BI)



# Project Summary

The first thing reviewers read. A first impression is really important.

- Limited to one page maximum.
- Consists of three parts
  - Overview – Overall, what is the project designed to accomplish? Who will do it? Why? Who are the collaborators?
  - Intellectual Merit - What are the major goals and activities?
  - Broader Impact – How will this project benefit society beyond the college itself? How will you know?

## *Tips*

- IM and BI belong in the Project Summary and in the Project Description (must agree)
- Make sure your project addresses technician preparation, not transfer programs such as Computer Science and Engineering

## Tips

# Tips

1. Clarity in project summary is vital for making a good first impression.
2. Grammatical errors and/or extraneous characters in the project summary do not help your case and are easy to make. \*
3. Avoid the use of the possessive in the project summary (e.g., instead of “project’s focus”, use the focus of the project). \*
4. Explain what the targeted technician does
5. Include clear IM and BI in Summary (and Description)
6. Needs to outline of goals, objectives, and activities

\*The project summary is put into text boxes that allow only ASCII characters. “, ’, and bullets are replaced by question marks or some combination of ASCII characters that make it hard to read. “project’s focus” will come out as ?project? Focus ? Or worse something that looks like comic book cursing.

# Sample Sentences that Might be in the Overview

- This project at XYZ Community College is designed to collaborate with four industry partners including a, b, c, and d to develop an industry driven manufacturing technician program that will serve a range of industries that are increasingly becoming automated.
- Technicians are needed who can ... It will develop stackable credentials that are embedded in an associate degree with clear pathways to employment in high wage fields and/or a baccalaureate program.

# Sample Sentences that Might be in Intellectual Merit

- The project builds on a pilot effort at the institution that demonstrated ... and on materials and methods adapted from other ATE projects such as ...
- The overall goal of the project is to ... To accomplish this goal, the project has four primary student and industry focused activities: (a) Activity 1, (b) ...



# Sample Sentences that Might be in Broader Impacts

- The manufacturing industry in the region served by the college has transitioned from traditional models to advanced manufacturing, has a high rate of research and development investment, and is fueled by innovation. To serve these companies, the college will form a Business and Industry Leadership Team (BILT) that will work with the college to develop a program that serves regional employers. It is also designed to serve as a model for other community colleges that ..
- Because the college is a Hispanic Serving Institution, the project will include recruitment and retention activities that have been shown to be effective for these groups.
- Because 58% of the college population is female, but the manufacturing program is only 12% female, the project will use ...

# Project Description

- Has many parts – all covered in 15 pages
- Logic Model up front
- Results of Prior Support (if needed)
- Motivating Rationale (why project is needed)
  - Commitment from local and regional employers
  - Labor Market information
  - New, at least to your institution based on research of what other NSF grants have done and are doing
  - The need drives your good idea and the entire proposal creation
- IM and BI

# Project Description continued

- Goals, Objectives, Activities, Responsibility, Timeline
  - Includes collaboration with previous projects
- Management Plan
- Evaluation Plan
- Dissemination Plan
- Sustainability Plan

# Goals, Objectives, Activities, Timeline

- Goals, Objectives, Activities and Timelines
  - Refer to February, 2017 Webinar on what it means for goals to be SMART
- Brief and clear story with realistic timeline
- Show who is responsible for accomplishing each activity/objective/goal and when it is to be accomplished
- Explain which activities will support each objective and how

## *Tips*

- Could be a table with short narrative explaining each goal, objective, activity, timeline
- Quarterly timeline from award date provides flexibility and saves space

# Evaluation Plan Must be Clear

- Must be tied directly to project goals, objectives, and activities.
- Must not just provide accountability (did you do it?), but also impact and effectiveness (Did it work? Who did it benefit? How do you know?)
- How will you determine if your work was successful?
  - What kinds of data are projected to be gathered?
  - Who will do data gathering?
- Who will do the evaluation? Include Evaluator Name and Qualifications if possible, otherwise discuss how this person will be selected and supported.
- Include Evaluator in biosketches in Supplements

## *Tips*

Don't use only percents in your goals, but tie these to actual numbers. For example, a program now that only has 20 students and hopes to increase by 5% per year would mean only 1 additional student.



# Other Attachments

- Data Management
  - How will you preserve what your grant creates?
  - How will it be archived?
  - How will you protect privacy of individuals?
  - How will you share anonymous data with other researchers?
  - Example: ATECENTRAL.ORG Appendix B of the ATE Central Handbook  
[https://atecentral.net/downloads/915/AC\\_Handbook4.3\\_8Jun2016.pdf](https://atecentral.net/downloads/915/AC_Handbook4.3_8Jun2016.pdf)
- Facilities Plan
  - Required facilities to implement your program or program changes
  - Explain critical people working on project where their involvement is part of their jobs

# Budget

- A budget is required for each year of the proposed project as well as a summary budget; budget must align with project description
- Total cannot exceed maximum for type of grant proposed (e.g., small, new \$225K; project \$600K)
- Indirect rate must match the college's approved indirect rate or if no rate is approved use 10% of the modified direct costs (no indirect on participant support, equipment over \$5000, or on amounts over \$25,000 for subawards)
- Budget justification narrative must carefully explain the numbers

# Supplemental Documents

- Commitment letters from Business & Industry and college
- Might have one example of a curricular product
- Might include example of evaluation survey

## *Tips*

- Do not use supplemental pages to provide information that should be in the 15-page project description
- Do not exceed 30 pages maximum
- ATE is unique in that supplemental documents are allowed

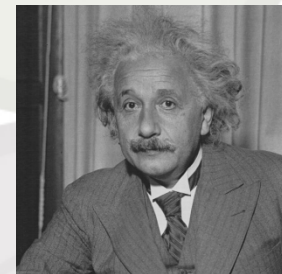




# How & When Words are Used Can Make a Big Difference in Proposal Success

- Establish Credibility
- Convey Importance of Your Project
  - Need
  - Approach
  - Expected Results
  - Potential Impact
- Answer Anticipated Questions

# You Have Only One Chance to Make a Good First Impression



# Characteristics of a Successful Proposal Writer

Scientist



Artist



Novelist



Salesperson



Teacher



# The Art of Proposal Writing



What To Say

Where To Say It

How to Say It

How to Put It on “Paper”



Read the Solicitation

Read the Solicitation

Read the Solicitation

Read the Solicitation

Read the Solicitation

***Make Sure it is the Current Solicitation***

# NSF – Proposal Preparation Instructions

Proposal must conform to the following requirements

- Page limits
- Font and size
- Line Spacing
- Margins
- Attachments
- Requirements apply to all uploaded sections of a proposal, including supplementary documentation.

Extracted from NSF 18-1 **Proposal & Awards Policies and Procedures Guide** - Chapter II, B.2

# Formatting Matters

Objectives of this project are in three categories: curriculum, professional development, building capacity and self sufficiency. 1. Curriculum - To validate and enhance existing viticulture and enology curriculum and develop new on-line courses driven by the skills and knowledge assessment of scientists and other experts from university-based research programs, the viticulture and enology industry, and state agriculture agencies. To create and implement an Associate Applied Science (AAS) degree level program with 1) an option in viticulture (grape growing) and 2) an option in enology (winemaking) that will be available to undergraduate on-campus and distance delivery education students. To create and implement two certificate programs in 1) viticulture and 2) enology that will be available to undergraduate on-campus and distance delivery education students. To establish on-line delivery mechanisms and networks that will ensure access to programs without displacement from the largely rural regions in which the grape and wine industry are located. To establish a broad network of viticulture and enology industry sites where students can obtain short-term and more extensive work experiences.

**Justified Text**

Objectives of this project are in three categories:

1. Curriculum

a. To validate and enhance existing viticulture and enology curriculum and develop new on-line courses driven by the skills and knowledge assessment of scientists and other experts from university-based research programs, the viticulture and enology industry, and state agriculture agencies.

b. To create and implement an Associate Applied Science (AAS) degree level program with an option in viticulture (grape growing) and an option in enology (winemaking) that will be available to undergraduate on-campus and distance delivery education students.

c. To create and implement two certificate programs in viticulture and enology that will be available to undergraduate on-campus and distance delivery education students.

d. To establish on-line delivery mechanisms and networks that will ensure access to programs without displacement from the largely rural regions in which the grape and wine industry are located.

e. To establish a broad network of viticulture and enology industry sites where students can obtain short-term and more extensive work experiences.

***Align to the Left and Sacrifice Space for “Readability”***



# Essential Components of a Proposal

Timely – Addresses Documented Needs

Innovative

Sustainable

Matches NSF ATE's Purpose

A

Winning  
Idea



# Readability of a Proposal

*Tips*

## Do

- Use an Opening Section to Grab Reviewer's Attention
- Use Short Sentences and Paragraphs
- Explain Technical Terms and Acronyms
- Use an Appropriate Tone and Tense
- Adapt the Language to Non-expert Reviewers
- Cite Relevant Works and Explain Relationships to Your Proposal

# Readability of a Proposal

## DON'T

- Use Jargon, Abbreviations or Acronyms Unless Absolutely Necessary
- Hide Your Important Points Behind Phrases
- Permit Spelling or Grammatical Errors
- Try and Impress the Reviewers with Your Command of the English Language



*Tips*

# Clear Word Meaning



*Tips*

- Choose Words that Best Describe Your Plan
- Display Confidence in Your Plan
- Display Strong Commitments to Your Plan
- Reduce Perception of Risk

# Should You Depend on Spell Check

Learning

vs.

Leaning

Message

vs.

Massage

Morale

vs.

Moral

Principle

vs.

Principal

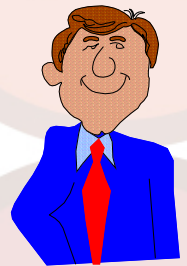
Public

vs.

Pubic

# Ensure that Your Proposal is Coherent

- Do Ideas Flow Logically?
- Do Paragraphs Link Together Within Each Section?
- Are Sections of Proposal Linked Together?



# Convincing

## Selling Your Project to the Reviewer

### Tips

- Lead with **substance**.
- Emphasize events or concepts that evoke a **connection** to technical education.
- Write in a way that conveys **passion** and efficacy of your organization to someone who doesn't know your project team.
- You also need to **prove** things, not just state them. Use hard statistics where possible to give an overview of the problem.



\* Adapted in part from Chieco, K. Private Funding for Criminal Justice Initiatives, NIJ Journal, July 1999, 1-26

# Keep It Simple in Telling Your Story

*Tips*

- Organize the Proposal
- Write to Communicate
- Make the Proposal Visually Appealing
- Use Charts, Tables and Figures to Clarify, Demonstrate and Paint a Picture
- Sell Your Ideas





# References

- Demonstrates Knowledge of Previous Work
- Accurately Cites Previous Work
- Makes Clear the Relevance to the Proposal
- Uses a Standard Format (e.g., APA\*)

\* <https://owl.english.purdue.edu/owl/resource/560/05/>

# Does the Proposal Say What You Want?

- Review Your Draft
  - Review the Solicitation / Program Announcement
    - Program Priorities in Current Solicitation
    - Proposal Guidelines in PAPPG
- Have Others Review Your Revised Draft(s)
  - Who Should They Be?
    - Project Team Members
    - “Tiger” Team

*Tips*



# Consider the Reviewers Who Have to Read Your Proposal





# How to Write a Great Proposal ... That Won't Get Funded

## *Tips*

- All commitment letters from industry are the same or virtually the same). Rather...
  - Let each industry partner prepare and sign a unique letter.
  - Prepare a commitment contract and summarize in the proposal with example in supplementary documents.
  - Convene industry meeting in advance and have them jointly sign.
- The need for project is based solely on national data. Rather...
  - Identify a regional group of industry partners with real jobs who commit to working with you.

# How to Write a Great Proposal ... That Won't Get Funded (Continued)

## *Tips*

- All funds are to support people who will be hired with few details about them. Rather...
  - Provide funds to faculty at the college who will do the bulk of the work and for their professional development.
  - If college policy allows, can be overload or summer support.
  - If PIs or other people working on the project are not getting funds, be sure to include on the Facilities form.

# How to Write a Great Proposal ... That Won't Get Funded (Continued)



*Tips*

- Insert a boilerplate evaluation plan without making it unique to the project or include the evaluation plan in the appendix. Rather ...
  - Tie the evaluation plan directly to your goals and objectives which were developed to be measurable.
  - If college policy allows, name the external evaluator in the proposal.
  - Use your college Institutional Research Office to help gather college data and support the external evaluator.
  - Include the evaluation plan in the body of the proposal.

# How to Write a Great Proposal ... That Won't Get Funded (Continued)



*Tips*

- Discuss other funding the project has had (e.g., TAACCCT or Title III) without discussing how this project will build on or leverage that funding.
- Assume that deadlines, font sizes, page limits, and other technical things are not enforced
- Have the college grants person be the PI

# How to Write a Great Proposal ... That Won't Get Funded (Continued)

## *Tips*

- Have the college Dean be the sole PI with no funds requested for their time, no information in the supplementary documents about their role relative to this project, and all funds going to people to be hired
- Target strictly transfer programs like engineering or computer science
- Propose improvements in core STEM programs like mathematics, physics, or chemistry without demonstrating how they impact technician education



# Last Thoughts: Plan Ahead for Proposal Creation



## Tips

- Successful Proposals require planning and sufficient time (about 3 months or more)
  - Send a 1 page summary to a program officer to review
  - Schedule regular working sessions with stakeholders
  - Schedule to create all the “parts” of the proposal (parts may be delegated)
  - Plan to have one person combine the “parts” of the proposal to ensure a single voice and tone
  - Plan to complete your whole draft proposal a month prior to due date
  - Have the proposal read and critiqued by people who are not on the team
  - Evaluate and incorporate their suggestions
  - Have the updated draft reviewed again before submission if possible

# Last Thoughts and Reminders: Read Solicitation and Use PAPPG

## *Tips*

- Read and re-read the current solicitation
- Outline specifics of the solicitation to guide your proposal development
- Judge everything you propose against the solicitation
- Solicitation trumps PAPPG
- Formatting matters – refer to PAPPG

# Reminder - Identifying Existing Awards

- Determine which projects and centers have or are doing work in your discipline area

<https://www.nsf.gov/funding/index.jsp> and enter your search words

- Access abstracts as appropriate
- Contact the PI's to identify points of collaboration and possibly gain their commitment to help with your work

# Enter The Proposal Early

- Enter various proposal parts as they are completed
- Good idea to begin entering sections early to ensure access to system
- Register the PIs or potential PIs early
- Authorized Organizational Representative (AOR) must review what was entered and formally submit – allow time



# What To Expect, Submission and After

- Due date is October 4, 2018 for ATE proposals
- All proposals must be fully submitted by 5pm local time on the due date, no exceptions
- Review panels typically meet in early December
- Program officers work with those proposals that reviewed well to get them funded
- BE PATIENT

# Resources

- PAPPG – Proposals and Awards Policy and Procedures Guide  
[https://www.nsf.gov/pubs/policydocs/pappg18\\_1/index.jsp](https://www.nsf.gov/pubs/policydocs/pappg18_1/index.jsp)
- Mentor-Connect Library  
<http://library.mentor-connect.org/>
- Centers Collaborative For Technical Assistance  
<http://www.atecenter.org/ccta>
- Logic Model  
<http://www.evaluate.org/?s=logic+model>

# Previous CCTA Webinars

- <http://www.atecenter.org/ccta>
  - Recorded webinars
  - Slides
  - Other support documents
  - Transcripts



# Questions?



***Join us in Miami!***



**July 23-26, 2018**



**[www.highimpact-tec.org](http://www.highimpact-tec.org)**

# Register for HI-TEC and DOL and NSF Workforce Convening

HI-TEC Conference July 25-26 in Miami, FL

[www.highimpact-tec.org](http://www.highimpact-tec.org)

Free follow-up **DOL and NSF Workforce convening** also  
focused on preparing competitive proposals

**Friday, July 27, 8:30 am -12:30 pm**

# Contacts

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<http://www.atecenters.org/ccta>

# WEBINAR SURVEY

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