

# MENTOR-CONNECT TUTORIAL

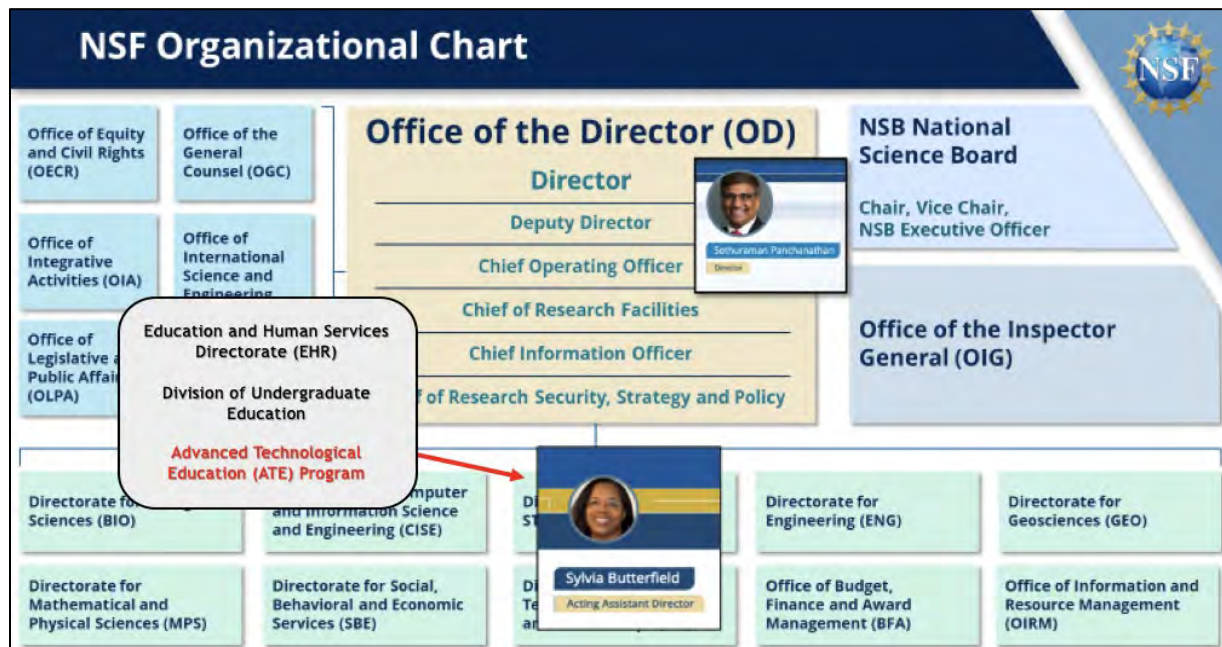
## NSF ATE PROGRAM OPPORTUNITIES & MENTOR-CONNECT ORIENTATION



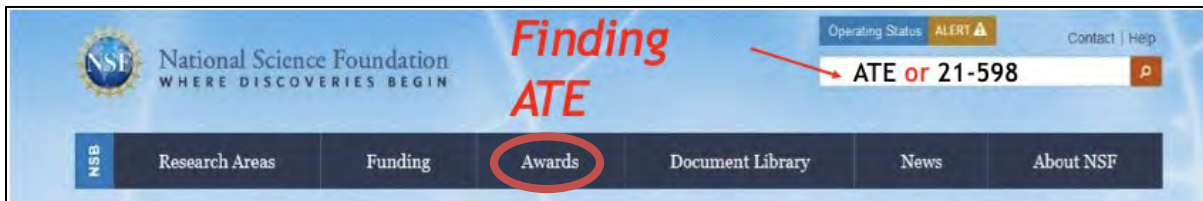
**This tutorial** reviews the topics discussed in a Mentor-Connect webinar, conducted in August 2022 and available as a recording in the resource library at <http://library.mentor-connect.org>. The first presentation in the webinar focused on National Science Foundation funding opportunities, specifically grants available to community colleges through the Advanced Technological Education (ATE) Program. The second covers help that is available to prospective grantees through the ATE-funded Mentor-Connect project.

### NSF Program Opportunities

Dr. Celeste Carter, Lead Program Officer for the ATE Program, used the chart below to explain how the foundation is organized. The supported disciplines are represented by the directorates shown in green at the bottom of the chart. The ATE Program is in the Division of Undergraduate Education within the Education and Human Resources Directorate (EHR). That is about to change. As of October 1, EHR will be named the Directorate of STEM Education. The directorate will also soon see a personnel change, when the Acting Assistant is replaced by Director James Moore.



It is easy to find information about the ATE Program if you know where to look! Just go to the NSF home page ([www.nsf.org](http://www.nsf.org)) and enter ATE (or the ATE Solicitation number, 21-598) in the search engine.



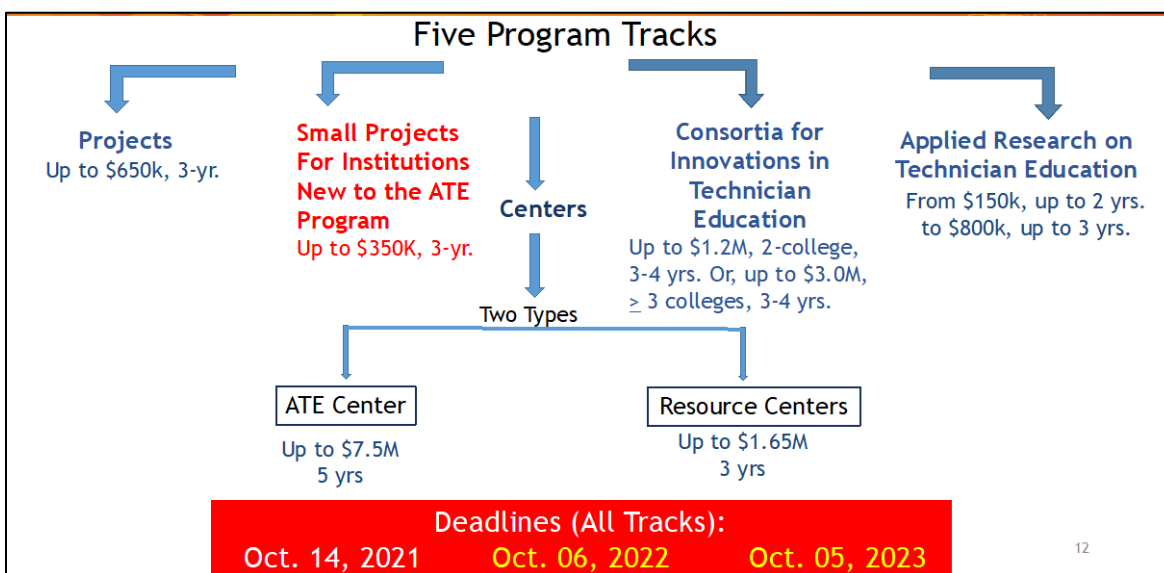
Note the tabs on the home page that give you access to various kinds of information. The Awards tab will be especially useful if you are considering developing a grant proposal, since it will enable you to search for relevant projects that have already been funded.

**The ATE Program** was established in 1992 by the recently reauthorized Science and Advanced Technology Act, in order to support the development of a “skilled technical workforce.” This is the portion of the workforce that works in science, technology, engineering and math that does not necessarily need a 4-year degree, but needs industry-specific skills, competencies and knowledge. The ATE focus on advanced technologies is explicitly stated in its goal to “support the education of highly qualified science and engineering technicians for advanced-technology fields that drive the nation’s economy.”

The requirements are straightforward:

- Community college faculty must have leadership roles in all projects.
- While the main focus is technician education at community colleges, technician education pathways from grades 7-12 to 2-year and 4-year institutions are also eligible for support (as long as they are not focused on broader STEM education or college-transfer).
- Funded projects must focus on meeting workforce needs. To that end, partnerships with local industries are essential, and collaborations with workforce investment boards and economic development agencies can be invaluable. Such relationships will connect your project to the “regional ecosystem” of your industry and help you to understand both employment and growth patterns.

**Several funding options** are available in the ATE Program. Applicants select one of the five tracks shown below and follow the guidelines posted in the current solicitation on the NSF website. The Small Projects for Institutions New to ATE (Track 1) is for colleges that have not had an ATE grant for the past 7 years (or ever).



Trac 1 was established to provide an entry point to funding for colleges without prior ATE experience. Funding in all other tracks is far more competitive, and applicants who have received ATE funding previously have strong advantages.

ATE Projects (Track 2) are projects with budgets up to \$650,000. ATE Projects are typically larger in scope than New-to-ATE projects. The ATE Center tracks are for applicants who are recognized for significant achievement with previous projects and prepared to support advanced technical education at community colleges nationally. Consortia for Innovations in Technician Education is a new track that brings institutions together for collaboration across technical specializations to develop innovative strategies to meet identified workforce needs. Applied Research in Technician Education is another funding option within ATE. Awards typically are made to experienced researchers working in collaboration with one or more 2-year colleges to study some aspect of technician education.

**The best place to start.** If you are considering your first NSF grant application, the place to start is with Track 1, *Small Projects for Institutions New to ATE* track. This opportunity provides funding for program development/enhancement in all areas of advanced-technology education that address skilled workforce needs. Projects are funded up to \$350,000 for three years and may include enhancement of existing programs or development of a prototype that can be expanded in a larger ATE Project. ATE encourages innovation through original ideas and also through adoption and adaptation of successful work at other institutions. A real advantage as an applicant in the New-to-ATE track is that, since each track has its own review process, you are not competing with the more experienced applicants in other tracks.

**When you ready for a larger grant** (or your institution is not small-project eligible), consider the ATE Project track, which offers up to \$650,000 for three-year projects that may focus on:

- Program development, implementation and improvement,
- Professional development for educators,
- Curriculum and educational materials development,
- Teacher preparation for technical education,
- Adaptation and implementation, or
- Instrumentation/equipment acquisition with curriculum updates (for established programs).

**Funding rates** for NSF grant proposals depend on the available funds, the number of proposals received, the funding track, and the quality of the proposals. The first step in the funding process is a review of your proposal by a panel of your peers. Proposals are ranked from excellent to poor, and the available funds, which vary from year to year, determine how many can be funded. Currently the funding rate across NSF is 26%, which is somewhat higher than the average for the past several years.

### **Advice to prospective grantees:**

- Follow the guidelines for proposal development in the Proposal & Award Policies & Procedures Guide (PAPPG). Be sure to use the current version (NSF 22-1).
- Read the current ATE solicitation (NSF 21-598) very carefully.
- Choose the program track that meets your needs and suits your level of grant writing/project management experience.
- Start developing your proposal early! It takes longer than you may think.
- Have a faculty-driven concept and work plan. Faculty involvement is key to a successful proposal.
- Get help! Advice is available from ATE Program Officers, who will be glad to provide feedback on a 1-2 page synopsis of your proposal idea; from ATE-funded mentoring projects (like Mentor Connect) and from the Principal Investigators (PIs) of ATE Projects and Centers.

## Mentor-Connect Orientation

Mentor-Connect is an ATE Project housed in the South Carolina Advanced Technological Education (SCATE) Center at Florence Darlington Technical College College, in Florence SC. Leadership and support are provided by the team in the photos below. The Mentor-Connect orientation was presented by PI Elaine Craft, Co-PI Emery DeWitt, Co-PI/Mentor Pamela Silvers, and Senior Personnel/Mentor Osa Brand.



Elaine Craft  
Principal  
Investigator



Emery DeWitt  
Project Manager/  
Co-Principal  
Investigator



Rick Roberts  
Managing Director  
SCATE/  
Mentor-Connect Co-PI



Pamela Silvers  
Co-Principal  
Investigator/Mentor



Osa Brand,  
Senior Personnel/  
Mentor



Dennis Faber  
Senior Personnel



Ellen Hause  
Senior Advisor



Liz Teles  
Senior Advisor



Jon Anderson  
Financial/Accounting  
Program Assistant  
Mentor-Connect/SCATE

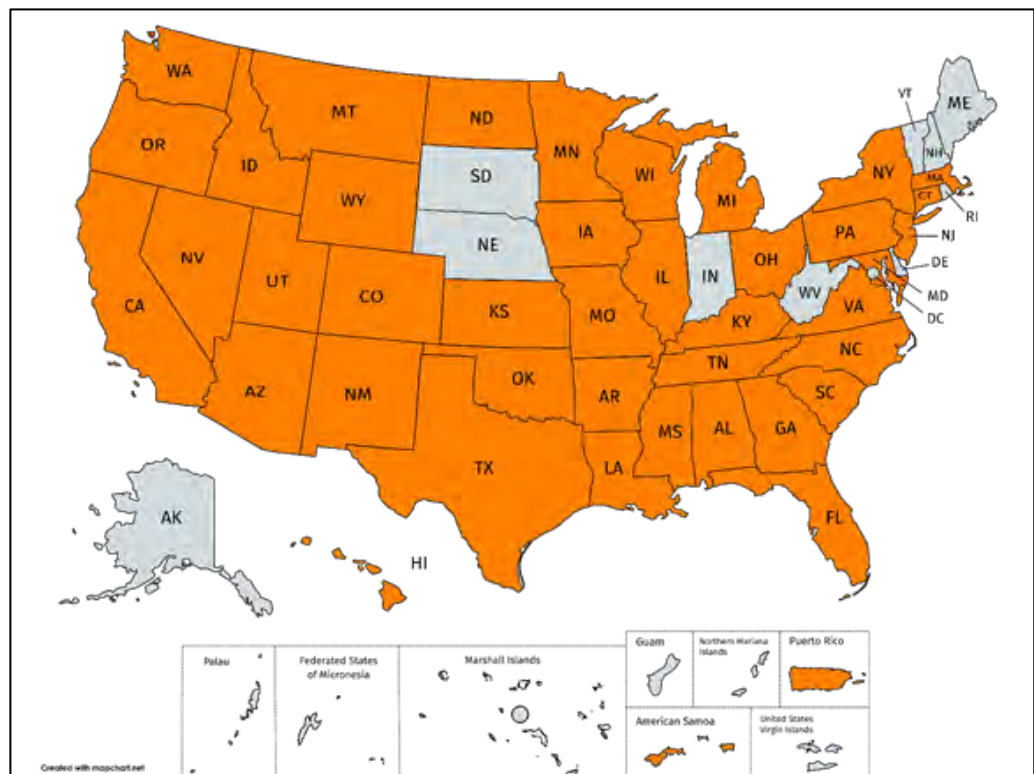


David Hata  
External Evaluator

**Outreach:** Over the past 10 years, Mentor-Connect has provided individualized mentoring for teams from 210 colleges in 42 states (shown in the map below), including Hawaii and two US territories – Puerto Rico and American Samoa.

Our participants include 383 faculty and 221 grant professionals and administrators.

We are currently accepting applications for Cohort 11. We hope that you will apply!



## Success rate:

- 68% of Mentor-Connect applicants are accepted into a cohort.
- 86% of our cohort teams have submitted NSF ATE proposals.
- 71% of the submitted proposals have been funded (in the Small Projects for Institutions New to ATE funding track).

The 71% funding rate is very high compared with overall NSF funding, which is currently 26% but until very recently averaged under 20 percent for early-career faculty and under 25 percent for later-career faculty. In general, ATE funding rates in all tracks average about 30%, which is higher than the overall NSF rate. ATE does not publicize funding rates for the different tracks, but the New-to-ATE rate is higher than that of the other tracks because the competition is limited within the track to colleges qualifying as new to ATE. The funding rate for Mentor-Connect participants is higher still, because they have the advantage of expert mentoring!

Mentor-Connect is supported by ATE to help ensure your success with ATE funding, not only in developing your first grant proposal, but also as you navigate the funding process and set up your project. While this webinar focuses on New-to-ATE mentoring, know that we are prepared to provide support when you are ready to submit another more advanced proposal in the ATE Project track through our Moving-Up mentoring program. Should your New-to-ATE or an ATE Project proposal be declined, we have a Second-Chance mentoring program that will help you revise it.

**Mentoring:** Our mentors have years of experience writing ATE grants and managing funded projects, but they all remember what it was like to be new to NSF and ATE grants. They are eager to give back to the ATE community by sharing what they have learned with those who are new-comers. You can count on solid support from your mentor, by phone, email, teleconferencing (e.g., Zoom), and in-person at the Winter and Summer Workshops. Mentoring will focus on strengthening your proposal topic, refining your ideas and strategies, developing the components of the proposal, addressing NSF and ATE requirements, and locating relevant resources and identifying people who can support your proposed project.



This photo shows a group of 2022 mentors.

You will start the collaboration with your mentor by considering some critical topics, like the extent to which your project addresses workforce needs, whether it will have adequate industry support, and whether the scope is realistic in terms of college resources and ATE funding limits. Then you will develop a logical structure for the proposal. As you begin the writing process, your mentor will be able to guide you as you put your ideas into words. All of our mentors know what reviewers look for, and they are familiar with ATE expectations, not only with respect to proposal development but also regarding the rules and regulations for proposal submission. If you are going through the process for the first time, you will be glad to have the support of a mentor who knows what to do and how the system works!

**Leadership Development:** Participating in Mentor-Connect will not only help you compete for ATE grant funding but also enables you to develop as a leader at your college. Valuable leadership skills develop from problem-based learning throughout Mentor-Connect participation as you develop plans, prepare proposals, and prepare to implement projects.

This experience expands faculty roles beyond the classroom and other normal faculty responsibilities in ways that support lasting leadership contributions in and beyond academics. We have a good in-house example of such leadership development – several of participants in our earlier cohorts who have successfully completed funded ATE projects are now among our mentors. Should you be interested in becoming a mentor once you have implemented two or more successful ATE-funded projects, we will be happy to have you apply for a Mentor Fellows internship! (We use internships to prepare mentors by having them shadow and collaborate with an experience mentor for a year.)

**Cohort structure:** A cohort of 20-24 college teams is selected in October each year. Selection is based on an application that includes an idea for an ATE project that will enhance technician education at your institution. Each team includes two STEM faculty and may also include a grant professional and an administrator.



### **Benefits:**

- An ATE-experienced mentor assigned to each team
- A 3-day grant-writing Winter Workshop
- Technical assistance webinars & tutorials
- One-day Summer Workshop
- Participation in the High-Impact Technology Exchange Conference (HI-TEC)
- Online resource library
- “Help desk” support
- Financial support
  - Travel to in-person workshops
  - Stipends for faculty participants
  - HI-TEC registration

### **Mentor-Connect expectations:**

- Participate as a team.
- Fully engage in training & mentoring activities.
- Provide feedback to evaluate your mentoring experience.
- Submit an ATE proposal.

**Eligibility:** Mentor-Connect welcomes applications from 2-year technical and community colleges in two categories. The first category is made up of colleges that are eligible for - and plan to submit - New-to-ATE proposals. Recall that one of those requirements is that they have not have received an ATE grant award in the past 7 years (or ever). The second category, which represents a new opportunity, is for colleges whose proposal will be developed by faculty who are new to ATE. If your college is new to ATE or the STEM faculty members who will work on the proposal are new to ATE, Mentor-Connect Cohort Mentoring is available. New-to-ATE colleges will prepare Track 1 proposals. New-to-ATE faculty will prepare Track 2 proposals since the college is not eligible for Track 1 funding.

**Application Requirements:** Each application must be based on an idea for an ATE grant proposal that meets workforce needs for skilled technicians.

A cohort team must include 2 STEM faculty who teach future technicians. They will serve as the PI and Co-PI of their proposed project. Administrators may serve as faculty team members if they also teach in relevant college programs. Adjuncts who serve as relatively permanent faculty may also participate as one of the two team members. The qualifications of the faculty are based on expertise in their fields, not on their degrees. Do not assume that PIs must have PhDs or even a bachelor's degrees, as long as they can document their expertise and teaching experience and explain their ability to lead the proposed projects.

In addition to the two faculty, Mentor-Connect strongly recommends that a college administrator support the mentoring process by serving as an active member of the team. We also expect colleges that employ grant professionals to have them serve as team members for proposal development.

The colleges must make a commitment, via an affidavit from an administrator that is included with the application, to support team participation in Mentor-Connect and to submit the ATE proposal once it is developed.

**Teamwork encouraged:** Because they can reflect broader perspectives and expertise as well as strong college support, proposals written with the collaboration of administrators and grant professionals tend to be more successful than those which are developed solely by faculty. (Faculty voices must be heard loud and clear, however. Their knowledge of relevant technologies and instructional practices must come through in every proposal.) Mentor-Connect benefits for grant professionals and administrators who agree to work with the faculty during the year on proposal development include invitations to the winter and summer workshops (and eligibility for travel support); a separate Winter Workshop session; and access to mentor support and all Mentor-Connect resources (including the online resource library and the help desk).



**Winter Workshop:** The Cohort 11 winter workshop will be held in New Orleans, February 1-3, 2023. It includes individual work time with mentors and instruction that focuses on:

- Proposal structure & components
- When to do what
- Tips for proposal success
- NSF proposal review & funding processes
- Leadership skills development
- ATE expectations for ATE projects vs. small grants



**Summer Workshop:** The 2023 summer workshop will be held in conjunction with HI-TEC on July 25, the day before the conference begins. Participants will have proposal work time with their mentors and also address issues that they will be facing as they approach the final steps of proposal development. Mentor-Connect covers HI-TEC registration costs for the faculty team members to stay for the conference. HI-TEC offers excellent opportunities to learn about innovations in technology programs across the country.

### How to Apply to Mentor-Connect:

- Access the application package on [www.Mentor-Connect.org](http://www.Mentor-Connect.org) "Get a Mentor."
- Complete the electronic application and provide a college affidavit that guarantees support for the development and submission of the proposal.
- Contact us if you need assistance!
- **Submit by the Deadline - October 7, 2022**

**What you need to get started:** If you plan to apply to Mentor-Connect, you definitely need to have a desire to make a difference! Begin with an idea for enhancing technician education at your college, and make certain that industries in your service area have a need for technicians with the skills you plan to introduce.

### Selection Process:

- Up to 24 college teams are selected per Cohort. Cohort 11 participants will be notified on November 11, 2022.
- If you are not selected, you will receive
  - One-on-one consultation
  - Invitations to technical assistance webinars
  - Access to online resources
  - Possibly referral to other mentoring projects, as appropriate

### Selection Criteria:

- Application is complete.
- College **OR** team is new to ATE (i.e. has not received ATE funding in the past 7 years).
- Proposal idea is technician-focused and appropriate for ATE.
- The STEM faculty on the team
  - teach credit-based courses
  - have relevant expertise/experience



**Notification – What Next?** Be sure to read acceptance or decline letter thoroughly. Feel free to ask questions!

- If your application was accepted, register and prepare for winter workshop and quickly engage with your assigned Mentor.
- If it was declined, you will be offered one-on-one consultation that will provide guidance on how you might seek other appropriate mentoring options or how to use Mentor-Connect resources to proceed on your own.



### **Tips for ATE Success:**

- Apply to Mentor-Connect for mentoring assistance.
- Use our online resources, which cover all aspects of ATE proposal development.
- Participate in our webinars, which guide you through the proposal development process.
- Contact our help desk when you have questions.
- Apply for funding by submitting a well-written proposal.
- Join the amazing ATE Community!

Mentor-Connect can't guarantee that your grant proposal will be funded, but we can promise that you will benefit from our mentoring and from becoming part of the ATE community. We hope that you will join our next cohort!

**For more information:** Contact Mentor-Connect by phone at 843 676 8541 and by email at [mentor-connect@fdtc.edu](mailto:mentor-connect@fdtc.edu) or visit us at [www.mentor-connect.org](http://www.mentor-connect.org) or [Linked-in.com/MentorConnect](https://www.linkedin.com/company/MentorConnect).