



**National Science Foundation
ATE Grant Funding and
Mentoring Services**

MNTeSIG LIVE!

July 25, 2022

Greg Kepner & Mel Cossette

NSF ATE Grant Experience

Greg Kepner – 15 years

Principal Investigator

Midwest Photonics Education Center

Project

Co-Principal Investigator

Micro Nano Technology Education Center

National Center for Optics and Photonics Education

Project Evaluator

Mentor-Connect Mentor Fellow

MentorLinks Mentor



NSF ATE Grant Experience

Mel Cossette – 22 years



Principal Investigator

**Online Institutional Resource for Material
Science Technology Education**

Co-Principal Investigator


**Micro Nano Technology Education Center
And 2 other ATE Projects**

Project Evaluator

Mentor-Connect Master Mentor



ATE Collaboration

- **Micro Nano Technology Education Center**
 - **NSF DUE #2000281**
 - **Pasadena City College, Pasadena, CA**
 - **Mentor-Connect**
 - **NSF DUE #1840856**
 - **Florence-Darlington Technical College, Florence, SC**
 - **ATE Collaborative Outreach and Engagement Project**
 - **NSF DUE #1723419**
 - **Hillsborough Community College, Tampa, FL**
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Agenda

Part 1: Introduction to the NSF ATE Program

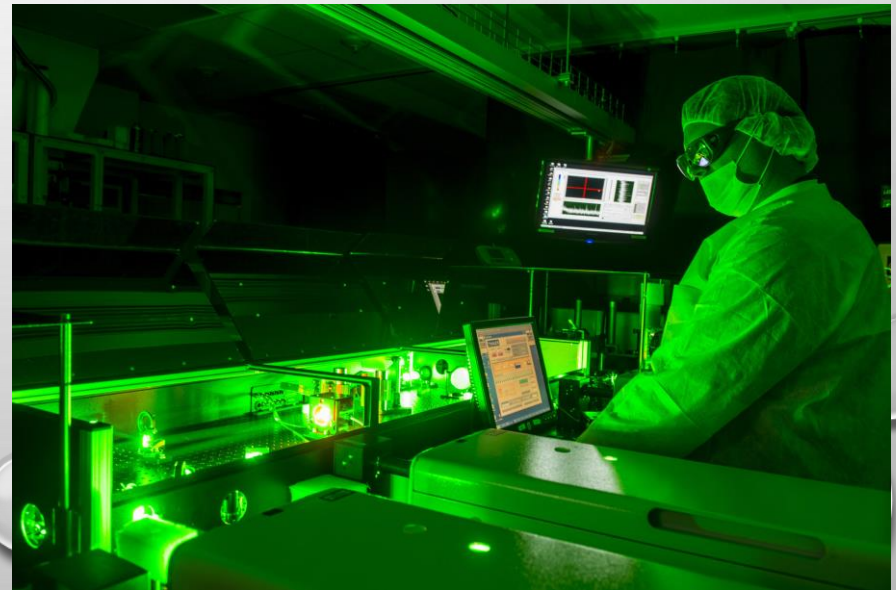
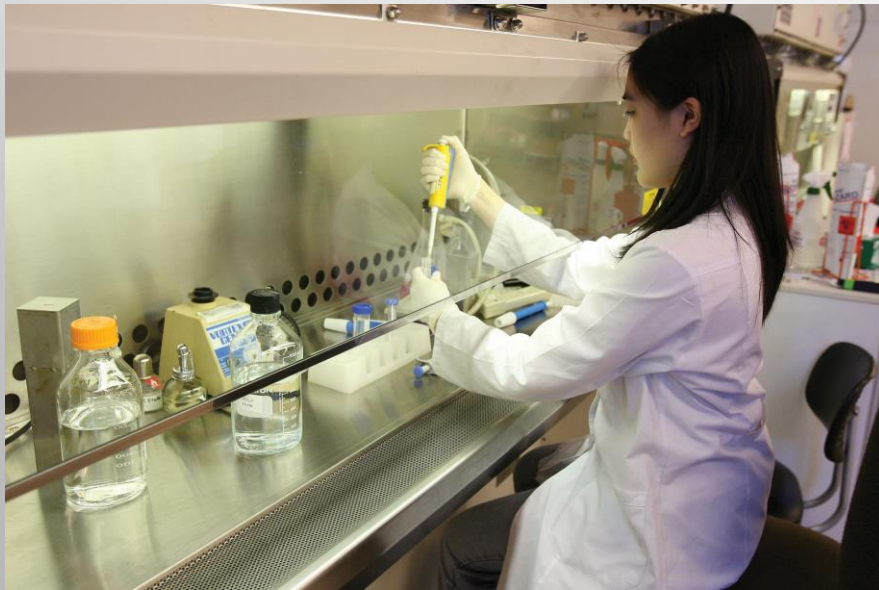
- **NSF ATE Grant Funding**
- **Small Projects for Institutions New to ATE**
- **ATE Solicitation – NSF 21-598**

Part 2: Mentoring Opportunities and Resources

- **Mentoring and Technical Assistance**
 - **Application/Selection Criteria & Deadlines**
 - **Success Rate**
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NSF ATE Program Focus

The education of highly qualified science and engineering technicians for the advanced technology fields that drive our nation's economy.



Why NSF ATE?



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- **Faculty development**
- **More students/graduates**
- **Greater diversity**
- **Industry partnerships**
- **New equipment**

NSF 21-598

Advanced Technological Education (ATE)

PROGRAM SOLICITATION
NSF 21-598

REPLACES DOCUMENT(S):
NSF 18-571



National Science Foundation

Directorate for Education and Human Resources
Division of Undergraduate Education

Full Proposal Deadline(s) (due by 5 p.m. submitter's local time):

October 14, 2021

October 06, 2022

October 05, 2023

NSF ATE Program

- **Institutions of Higher Education that award certificates and 2-year technology degrees**
- **2-year college faculty should have a leadership role on all projects**
- **2-yr, 4-yr institutions and high schools can be supported (Education Pathways)**
- **Partnerships with Industry and Workforce or Economic Development Entities encouraged**

ATE Technology Areas

- **Advanced Manufacturing Technologies**
- **Biotechnology**
- **Agricultural Technologies**
- **Energy and Environmental Technologies**
- **Engineering Technologies**
- **Information Technologies**
- **Micro and Nano Technologies**
- **Security Technologies**
- **Geospatial Technologies**
- **Autonomous & Emerging Technologies**



ATE Program Tracks

- **Small Projects for Institutions New to ATE**
 - **Projects**
 - **Consortia for Innovations in Technician Education**
 - **Applied Research on Technician Education**
 - **Centers and Resource Centers**
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Grant Activities

Projects or Small Projects for New to ATE

- **Program Development and Improvement**
 - **Professional Development for Educators**
 - **Curriculum Development**
 - **Educational Materials Development**
 - **CTE and STEM Teacher Preparation**
 - **Undergraduate Research Experiences**
 - **Internships, Apprenticeships, Work Experiences**
 - **Instrumentation Acquisition**
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Mentoring

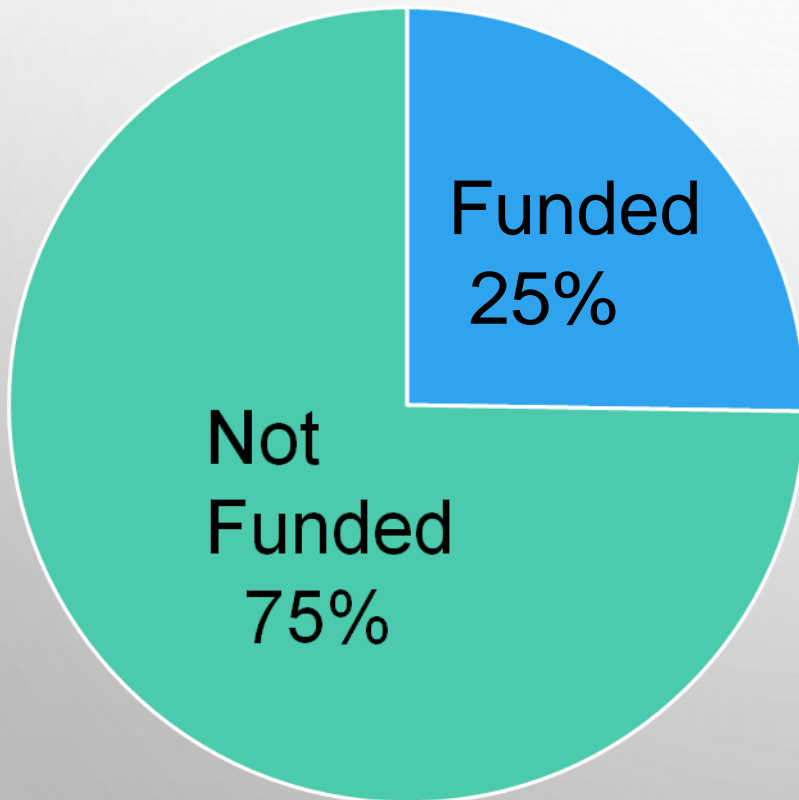
- **Mentor-Connect**
 - **Small Projects for Institutions New to ATE**
 - **Second Chance – submitted and not funded**
 - **Moving Up – higher level of funding**
 - **Co-mentoring – available for options above**
- **Micro Nano Technology Education Center**
 - **Project proposal mentoring**
 - **Co-mentoring with Mentor-Connect**
 - **Emphasis in Micro Nano Technology**

Mentor-Connect Resources

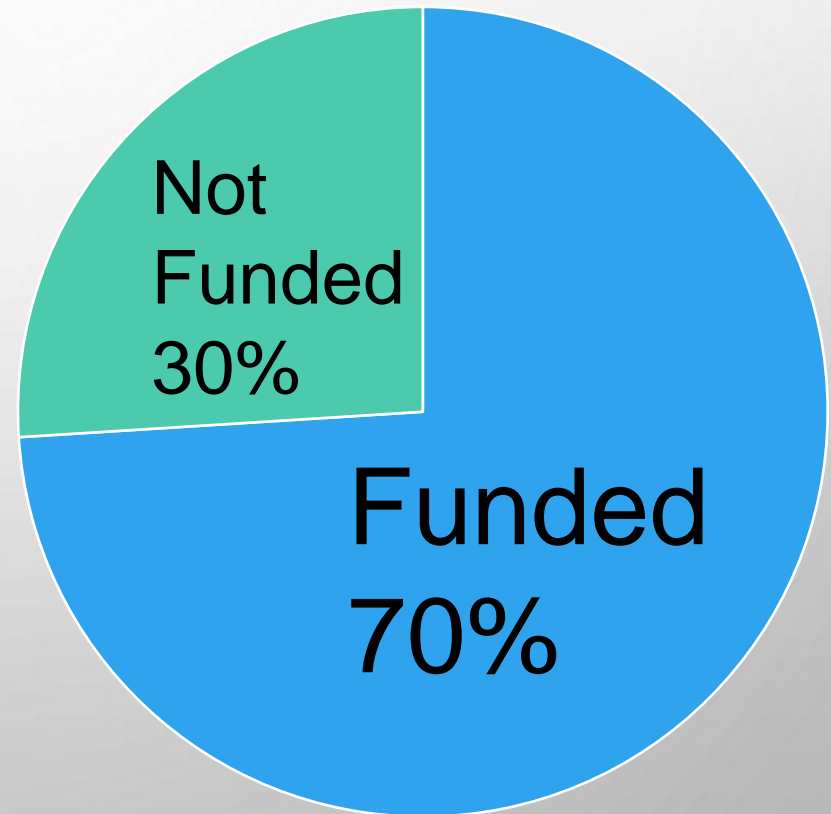
- **Small Projects for Institutions New to ATE**
- **Individual Mentoring**
- **Technical Assistance**
- **Webinars & Tutorials**
- **Workshops**
- **Help Desk – Just-in-time answers**
- **Online Resource Library**
- **NSF Funding Process Guidance & Start-up Help**
- **Leadership Development**

Why Mentor-Connect?

NSF Average
Funding Rate




Mentor-Connect
Average Funding Rate





Mentor-Connect Eligibility

- **No ATE grant funding in the past 7 years**
 - **Branch campus with an Academic Officer**
 - **STEM or CTE 2-year college faculty**
 - **Technician Education**
 - **One team application per eligible college**
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How to Apply

- Go to www.Mentor-Connect.org
- Select: “Get a Mentor”
- Complete application package
- Available on July 1
- Deadline in 2nd week of October
- Electronic application and college affidavit
- 150 word personal statement of interest
- 500 word proposal description



MNT-EC Co-Mentoring

- **Mentoring for Micro/Nano related proposals**
 - **Micro/Nano Technology**
 - **Materials Science Technology**
 - **Photonics Technology**
 - **Manufacturing Technology**
 - **Engineering Technology**
 - **Biotechnology**
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MNT-EC Mentoring Services

- **Review Micro/Nano related proposals**
 - **Provide feedback and recommendations**
 - **Subject matter expertise**
- **Guidance on:**
 - **NSF ATE Solicitation 21-598**
 - **PAPPG**
 - **NSF New Awardee Packet**
 - **NSF onboarding process**

MNT-EC Mentoring

- **Apply at micronanoeducation.org**
 - **Select “Educators”**
 - **Select “Mentoring”**
 - **Select “New to ATE”**
- or**
- **Select “Micro/Nano Related Proposals”**
- **Select “Project Proposal Application”**
- **Application opens on January 1**



NSF ATE Resources

MNT-EC www.micronanoeducation.org

Mentor-Connect www.mentor-connect.org

NSF ATE www.nsf.gov/ATE



Questions?

Greg Kepner – greg@micronanoeducation.org

Mel Cossette – mel@micronanoeducation.org

Elaine Craft - Elaine.Craft@fdtc.edu

Elaine is the Principal Investigator for Mentor-Connect.

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