

# Directorate for STEM Education



### **National Science Foundation**

Supporting basic research and education across all STEM disciplines since 1950

NSF supports 24% of all federally sponsored basic scientific research

### Overall funding rate for FY23 28%





### NSF Organization – 8 Directorates and 2 Offices Fund Science





### **NSF By the Numbers**





# Join the National Science Foundation

- Join NSF for a two-<u>three year</u> detail
- Assignees remain on the home institution's payroll in an active pay status while assigned to NSF.
- Salary and benefits continue to be administered by the home institution.



### Serve as a reviewer

- Send an e-mail to the NSF program officer(s) of the program(s) that fits your expertise
- Introduce yourself and identify your areas of expertise
- Let them know that you are interested in becoming a peer reviewer



### **Funding Search**

You can find active funding opportunities on this page. Or, access archived opportunities or search funded awards.

Search			All fields 🗸	Q Search	0
804 results					
Filter by					
Award type	~	Directorate/Division			~
Limited submissions	~	Education level			~
Exclude Dear Colleague Letters	Show only NSF-wic opportunities	le and cross-directorate	Show only programs Broadening Participa		١SF



### Search NSF Funded Projects

- Abstract
- Program Officer

Recipient Information							
Incipal Investigator First Name		🕕 Organization 🔍 🔍					
Institute		() State	Select one				
Last Name		(1) Zip Code					
Include Co-Principal Investigator in name search		① Country					
		<b>U</b>	Select one				
Program Information							
NSF Organization  Sele	ect one 🗸		ches both program element and program				
🕕 Element Code		reference names and codes.					
0 A	nv 🖲 All	🕕 Program 🔍					
① Reference Code							
0 A	ny 🖲 All						
		Program Officer					
Additional Information							
(1) Keyword		HINT: Data prior to 1976 may	be less complete.				
HINT: The Keyword field searches on the title and abstract only.    Active Awards    Expired Awards      Search Award Title Only    I) Original Award Date    From    To							
		Select one					
Award Number  Sele	ect one	() Start Date	From To				
From	То	Select one					
		① End Date	From To				
Award Amount	ct one	Select one					
Sele							
August Tratement							
Award Instrument  Sele	xct one						
Award Instrument  Sele	sct one V	Reset					





Directorate for STEM Education



- 1. Cross-Directorate
- 2. NSF-Wide
- 3. H-1B Visa Fee Funded
- 4. Stewarded by DUE and EES
- 5. Co-Managed with another Directorate
- 6. On behalf of OSTP
- 7. NSF-Wide stewarded by EES

Division of Research on Learning in Formal & Informal Settings (DRL)	Division of Graduate Education (DGE)	Division of Undergraduate Education (DUE)	Division of Equity for Excellence in STEM (EES)					
EDU Core Research (ECR) <sup>1</sup> , Building Capacity in Science Education Research (ECR: BCSER) <sup>1</sup>								
Racial Equity in STEM Education (EDU Racial Equity) <sup>1</sup>								
	STEM Education Postdoctoral Research Fellowships (STEM Ed IPRF and OPRF) <sup>1</sup>							
	Faculty Early Career Devel	opment Program (CAREER) <sup>2</sup>						
Advancing Informal STEM Learning (AISL)	CyberCorps®: Scholarship for Service (SFS)	Advanced Technological Education (ATE)	Increasing the Participation and Advancement of Women in Academic Science & Engineering Careers (ADVANCE) <sup>7</sup>					
National Artificial Intelligence Research Institutes <sup>5</sup>	Graduate Research Fellowship (GRFP) <sup>2</sup>	Improving Undergraduate STEM Education: Education and Human Resources (IUSE: EDU)	Alliances for Graduate Education and the Professoriate (AGEP)					
Computer Science for All (CS for All: RPP) <sup>5</sup>	Innovations in Graduate Education (IGE)	Improving Undergraduate STEM Education: Hispanic Serving Institutions (HSI: ELPSE & HSI: ETSE) <sup>4</sup>	Centers of Research Excellence in Science and Technology (CREST)					
Discovery Research PreK-12 (DRK-12)	NSF Research Traineeship Program (NRT) <sup>2</sup>	NSF Scholarships in STEM (S-STEM) <sup>3</sup>	Historically Black Colleges and Universities Undergraduate Program (HBCU-UP)					
Innovative Technology Experiences for Students and Teachers (ITEST) <sup>3</sup>	Secure and Trustworthy Cyberspace (SaTC) <sup>5</sup>	Robert Noyce Teacher Scholarship Program (NOYCE)	Improving Undergraduate STEM Education: Hispanic Serving Institutions (HSI: ELPSE & HSI: ETSE) <sup>4</sup>					
Research on Innovative Technologies for Enhanced Learning (RITEL) <sup>5</sup>		National STEM Teacher Corps Pilot Program (STEM Teacher Corps)	Louis Stokes Alliances for Minority Participation (LSAMP)					
		IUSE: Innovation Two-Year College STEM Education (ITYC)	NSF's Eddie Bernice Johnson Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering (INCLUDES) <sup>7</sup>					
The r	Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST) <sup>6</sup>							
The most up-to-date information is on the <u>nsf.gov/edu</u> website.			Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM <sup>)6</sup>					
			Tribal Colleges and Universities Program					

National Science Foundation

(TCUP)

### NSF EPSCoR Graduate Fellowship Program (EGFP)



EDU

**Directorate for STEM** 

Education

https://new.nsf.gov/funding/opp ortunities/faculty-early-careerdevelopment-program-career

Supports institutions in EPSCoR jurisdictions providing funding for graduate fellowships for new or continuing students who received the distinction of NSF Graduate Research Fellowship Program (GRFP) Honorable Mention within the last three years.

Directorate for STEM Education



**SUPPORT** and **PROMOTE** activities that seek to strengthen STEM education for **underserved communities**, broaden their participation in the workforce, and add to our knowledge base about programs of inclusion.





### Division of Equity for Excellence in STEM (EES)

https://www.nsf.gov/div/ index.jsp?div=EES

Directorate for STEM Education



ARC Network: www.equityinstem.org

Join to access resource library and get information about equity in higher education.

### ADVANCE: Organizational Change for Gender Equity in STEM Academic Professions

The ADVANCE program **addresses systemic gender-based inequities** impacting STEM faculty with systemic change strategies.

**Goal:** To broaden the implementation of evidence-based systemic change strategies that promote equity for STEM faculty in academic workplaces and the academic profession. The NSF ADVANCE program provides grants to enhance the systemic factors that support equity and inclusion and to mitigate the systemic factors that create inequities.

### Types of NSF ADVANCE grants available and deadlines

### For Institutions of Higher Education (IHE):

- Catalyst 2-year self-assessment grant, proposals accepted any time
- Adaptation 3-year institutional change project, due first Wednesday in November, annually
- Institutional Transformation 5-year innovative institutional change project with research, preliminary proposals required and accepted any time

#### For non-profit organizations:

- Adaptation 3 to 5-year project with one organization to scale up proven equity strategies, due first Wednesday in November, annually
- **Partnership** 3 to 5-year project with more than one organization to scale up proven equity strategies, due first Wednesday in November, annually

Directorate for STEM Education



### Alliances for Graduate Education and the Professoriate (AGEP)

NSF 21-576 — Deadline: February 11, 2025 (preliminary proposal (required))

- Goal: To increase the number of minority faculty in STEM.
- Advancing academic STEM career pathway models and systemic institutional change.
- Alliances promote equity and the professional advancement of doctoral candidates, postdoctoral researchers and faculty in STEM academic careers.



Directorate for STEM Education

EDU



https://new.nsf.gov/funding/opp ortunities/louis-stokes-alliancesminority-participation

### Louis Stokes Alliances for Minority Participation (LSAMP) NSF 24-563 – Deadline: November 15<sup>th</sup>, 2024

- Supports innovative, evidence-based recruitment and retention strategies at the undergraduate (including community college) and postbaccalaureate levels
  - --Undergraduate funding opportunities: Bridge-to-the-Baccalaureate (B2B), STEM Pathways Implementation-Only (SPIO) and STEM Pathways Research Alliances (SPRA)
  - --**Postbaccalaureate funding opportunities:** Bridge-tothe-Master's (BD-Master's) and Bridge-to-the-Doctorate (BD-Doctoral)
  - --Alliance Development Grants (Planning)



Programs that cut across the directorate and beyond



Directorate for STEM Education



https://new.nsf.gov/funding/opp ortunities/inclusion-acrossnation-communities-learners

https://www.includesnetwork.or g/home

### NSF's Eddie Bernice Johnson Inclusion Across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering (INCLUDES) NSF 22-622 – Deadline: Fourth Tuesday in October

The NSF INCLUDES program supports broadening participation efforts at scale through collaborative infrastructures.

Key Principles:

- Broadening Participation in STEM
- Enabling Sustainable Change in Systems
- Scaling Up Outcomes in Ways That Advance Equity
- Building Collaborative Infrastructure



Directorate for STEM Education



### Computer Science for All (CSforAll: RPP)

Supports partnerships and research that helps equip high school teachers to teach computer science, K-8 teachers to incorporate computer science and computational thinking in their classes, and school districts to create computing pathways across all grades.

Goal: To provide *all* U.S. students the opportunity to participate in Computer Science and Computational Thinking education in school at the K-12 level.

- High school teachers: preparation, professional development (PD) & ongoing support for CS teachers to teach rigorous courses,
- K-8 teachers: the instructional materials and preparation they need to integrate CS/CT into their teaching,
- Schools and districts: resources needed to define & evaluate pathways in CS & CT,
  &
- Research about the learning & teaching of introductory computer science.



Directorate for STEM Education

### EDU Core Research (ECR)



ecrcore

### Funds:

- Foundational Research that has potential implications for STEM education interventions and policies
  - Track I Research on STEM Learning and Learning Environments
  - Track II Research on Broadening Participation in STEM
  - Track III Research on STEM Workforce Development



Directorate for STEM Education



https://new.nsf.gov/funding/opp ortunities/ehr-core-researchbuilding-capacity-stem-education

### EDU Core Research (ECR): Building Capacity in STEM Education Research (ECR:BCSER)

- Supports activities that enable early and mid-career researchers to acquire expertise and skills to conduct rigorous fundamental research in STEM education.
- Welcomes proposals from new and more seasoned faculty and investigators from academic as well as non-academic organizations



### 



development-program-career

**Supports early-career faculty** who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization.

- NSF-wide activity supporting early-career faculty with potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization.
- Single PI project (5 years) and PI must meet eligibility requirements (e.g., assistant professor, tenure-track or equivalent can only submit 3 times)
- EDU appropriate research qualifies



### EDU F Directorate for STEM Education (

# https://new.nsf.gov/funding/opp

https://new.nsf.gov/funding/opp ortunities/racial-equity-stemeducation-ehr-racial-equity-0

# Racial Equity in STEM Education (Racial Equity)

Supports projects addressing systemic racism and promoting racial equity in STEM education.

Goal: To support bold, ground-breaking, and potentially transformative projects addressing systemic racism in STEM.

- Proposals should
  - Advance racial equity in STEM education
  - Center the voices of those most impacted by systemic racism.
  - Be led by, or developed and led in authentic partnership with, individuals and communities most impacted by the inequities caused by systemic racism.

Directorate for STEM Education



https://new.nsf.gov/fundi ng/opportunities/sciencetechnology-engineeringmathematics-0

### STEM Education Postdoctoral Research Fellowships (STEM Ed IPRF)

Supports professional development activities for postdoctoral fellows to position them for careers as STEM education research scholars and to develop their expertise in STEM education research design and methods.

# Goal: Build the national capacity to conduct STEM education research by funding early-career scholars.

 Postdoctoral fellowship projects designed to enhance the research knowledge, skills, and practices of STEM Education research by recent doctoral graduates in STEM, STEM Education, Education, and related disciplines.

Directorate for STEM Education



https://new.nsf.gov/fundi ng/opportunities/sciencetechnology-engineeringmathematics-1

### STEM Education Organizational Postdoctoral Research Fellowships (STEM Ed OPRF)

Supports the development of <u>cohorts</u> of postdoctoral fellows (2-4) as they engage in ongoing research, to develop independent research and to implement an independent professional development plan under the guidance of an experienced sponsoring researcher.

# Goal: Build the national capacity to conduct STEM education research by funding early-career scholars.

 Postdoctoral fellowship projects designed to enhance the research knowledge, skills, and practices of STEM Education research by recent doctoral graduates in STEM, STEM Education, Education, and related disciplines.

Directorate for STEM Education



https://new.nsf.gov/funding/opp ortunities/workplace-equitypersons-disabilities-stem-stem

### Workplace Equity for Persons with Disabilities in STEM and STEM Education

Supports fundamental, applied, and translational research that advances knowledge and practice about diverse, equitable, inclusive, and accessible STEM and STEM education workplaces and postsecondary training environments for persons with disabilities.

Funds projects that:

- Study barriers and solutions to diversity, equity, inclusion, and accessibility in STEM and STEM education workplaces and training settings for persons with disabilities;
- Apply intersectional social identity perspectives to investigate characteristics and conditions of STEM and STEM education workplaces and training environments that limit and/or improve diversity, equity, inclusion, and accessibility for persons with disabilities;
- Conduct use-inspired and solution-oriented translational research about diverse, equitable, inclusive, and accessible STEM and STEM Education workplaces and training settings for persons with disabilities.

### **EDU** Directorate for STEM Education

### **Research Experiences for Undergraduates**



development-program-career

Supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation.

The typical REU Site hosts 8-10 students per year. The typical funding amount is \$100,000-\$155,000 per year

Directorate for STEM Education

### **Research Experiences for Teachers in Engineering and Computer Science**



https://new.nsf.gov/funding/opp ortunities/faculty-early-careerdevelopment-program-career

### Supports summer research experiences for K-14 educators

that foster long-term collaborations between universities, community colleges, school districts and industry partners.

### Other Programs and Funding Opportunities

### Proposal and Awards Policy Procedure Guide

The PAPPG is updated regularly and provides

- Information for Proposal Preparation and Submission Guidelines
- Award, Administration and Monitoring Processes for Funded Projects
- It is named the NSF XX-1, e.g. in 2024, it is NSF 24-1; the next one will be NSF 25-1.

https://new.nsf.gov/policies/pappg/24-1

PROPOSAL AND AWARD POLICIES AND PROCEDURES GUIDE





Effective January 30, 2023 NSF 23-1 OMB Control Number 3145-0058

Follow Proposal and Award Policies and Procedures Guide (updated annually)

### **Conference Proposal**

- Supports conferences in special areas of science and engineering that bring experts together to discuss recent research or education findings
- Expose other researchers or students to new research and education techniques.
- A conference proposal will be supported only if equivalent results cannot be obtained by attendance at regular meetings of professional societies.



### Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences LEAPS-MPS

- <u>Purpose</u>. To help launch the careers of pre-tenure faculty in MPS fields
- Intent. To initiate viable independent research programs for researchers attempting to launch their research careers in MPS supported fields.



### MCA Mid-Career Advancement

**WHO:** Scientists and engineers at the **Associate Professor rank (or equivalent)** with at least 3 years at that rank

 Pilot Track in BIO and GEO extends eligibility to Full Professors (or equivalent) at Primarily Undergraduate Institutions (PUIs) only

WHY: To ensure that PIs remain active in cutting-edge research at a critical career stage replete with constraints on time that can impinge on research productivity, retention, and career advancement.

WHAT: An opportunity to substantively enhance and advance the PI's research program and career trajectory through synergistic and mutually beneficial mentored partnerships.



Follow Proposal and Award Policies and Procedures Guide (updated annually)

### Rapid Response Research (RAPID)

- Used when there is a severe urgency with regard to availability of or access to, data, facilities or specialized equipment,
- Quick-response research on natural or anthropogenic events and similar unanticipated occurrences.



Follow Proposal and Award Policies and Procedures Guide (updated annually)

### Rapid Response Research (RAPID)

- Used when there is a severe urgency with regard to availability of or access to, data, facilities or specialized equipment,
- Quick-response research on natural or anthropogenic events and similar unanticipated occurrences.



Follow Proposal and Award Policies and Procedures Guide (updated annually)

### EArly-concept Grants for Exploratory Research (EAGER)

- Used to support exploratory work in its early stages on untested, but potentially transformative, research ideas or approaches.
- This work may be considered especially "high risk-high payoff"



# **Postdoctoral Support**

- Postdoctoral Research Fellowships in Biology
- Mathematical Sciences Postdoctoral Research Fellowships
- SBE Postdoctoral Research Fellowships
- <u>Atmospheric and Geospace Sciences Postdoctoral Research</u> <u>Fellowships</u>
- Office of Polar Programs Postdoctoral Research Fellowships
- Ocean Sciences Postdoctoral Research Fellowships
- NSF Astronomy and Astrophysics Postdoctoral Fellowships
- EAR Postdoctoral Fellowships (Earth Sciences)

# Science and Technology Centers: Integrative Partnerships

 Supports large-scale, long-term projects that focus on creating new scientific paradigms, establishing new scientific disciplines and developing transformative technologies while engaging the full spectrum of diverse talent that society has to offer.

• Preliminary proposal required: Due November 20, 2024

### Infrastructure Capacity for Biological Research (Capacity)

- Supports the implementation of, scaling of, or major improvements to research tools, products, and services that advance contemporary biology in any research area supported by the Directorate for Biological Sciences at NSF.
- The Capacity Program focuses on building capacity in research infrastructure that is broadly applicable to a wide range of researchers in three programmatic areas:
- Cyberinfrastructure,
- Biological Collections,
- Biological Field Stations and Marine Laboratories

#### Industry-University Cooperative Research Centers Program

- IUCRCs help industry partners and government agencies connect directly and efficiently with university researchers to achieve three primary objectives:
  - 1) Conduct high-impact research to meet shared and critical industrial needs in companies of all sizes;
  - 2) Enhance U.S. global leadership in driving innovative technology development, and
  - 3) Identify, mentor and develop a diverse, highly skilled science and engineering workforce.
- Preliminary proposal required: Due March 12, 2025

#### Major Research Instrumentation (MRI) Program

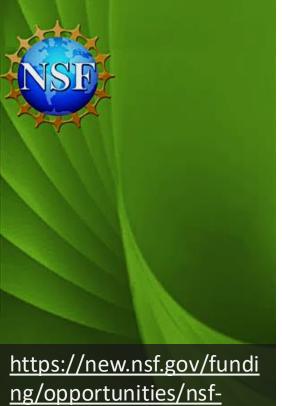
• Supports requests for up to \$4 million from NSF for the development or acquisition of multi-user research instruments that are critical to the advancement of science and engineering.

### Mid-scale Research Infrastructure-1

• Projects may have a total project cost ranging from \$4 million up to but not including \$20 million.

Directorate for STEM Education

#### Graduate Research Fellowship Program (GRFP) NSF 23-605 – Deadline: October (Multiple)

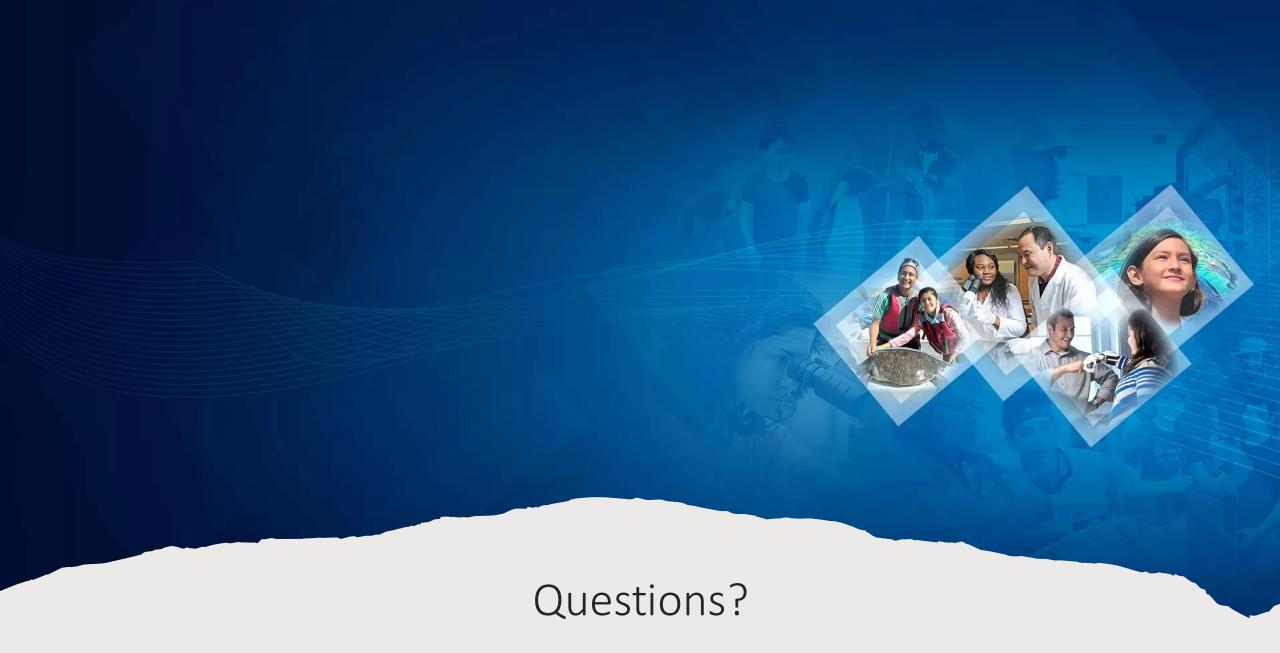


Goal: Support outstanding graduate students as they prepare to serve as the nation's future STEM scholars and leaders

- Supports research-based master's and doctoral degreeseeking students in eligible fields of study
- Current annual stipend is \$37K, plus \$16K cost of education allowance
- In FY2024, >14,000 applications were processed with approximately 2,000 awards

https://new.nsf.gov/fundi ng/opportunities/nsfgraduate-researchfellowship-program-grfp

https://www.nsfgrfp.org/



Directorate for STEM Education



**INVESTS** in the improvement of STEM learning for people of all ages by promoting innovative research, development, and evaluation of learning and teaching across all STEM disciplines in formal and informal learning settings.







### Division of Research on Learning in Formal and Informal Settings (DRL)

National Science Foundation

https://www.nsf.gov/div/ index.jsp?div=DRL

Directorate for STEM Education

### Advancing Informal STEM Learning (AISL) NSF 22-626 – Deadline: January 8, 2025



stem-learning-aisl

- Seeks to fund:
  - Research and practice, with continued focus on investigating a range of informal STEM learning experiences and environments that make lifelong learning a reality.
  - Proposals that center equity and belonging, and further the wellbeing of individuals and communities who have historically been and continue to be excluded, underserved, or underrepresented.
  - High-quality plans to generate knowledge through research, evaluation, and practice.

Directorate for STEM Education



https://new.nsf.gov/funding/opp ortunities/discovery-researchprek-12-drk-12

### Discovery Research PreK-12 (DRK-12)

NSF 23-596 – Deadline: November 13, 2024

- Seeks to significantly enhance the learning and teaching of STEM fields by preK-12 students and teachers, through research and development of STEM education innovations and approaches.
- Goal: to catalyze research and development that enhances all preK-12 teachers' and students' opportunities to engage in high-quality learning experiences related to the sciences, technology, engineering, and mathematics (STEM).
- Awards made across all facets of formal PreK-12 STEM education.

Directorate for STEM Education



https://new.nsf.gov/funding/opp ortunities/innovative-technologyexperiences-students

#### Innovative Technology Experiences for Students and Teachers (ITEST) NSF 22-585 – Deadline: August 09, 2024

- Goal: To advance educational innovations that motivate and prepare PreK-12 learners for computationally-intensive industries of the future.
  - Engage students in technology-rich learning to develop disciplinary and/or transdisciplinary STEM content knowledge, including skills in data literacy and evidence-based decision-making and reasoning;
  - Prioritize the full inclusion of groups who have been underrepresented and/or underserved in the STEM and information and communication technologies (ICT) workforce;
  - Motivate students to pursue appropriate education pathways to technology-rich careers; and
  - Leverage strategic and community partnerships to expand education pathways in communities through public and private partnerships

Directorate for STEM Education **STRENGTHEN** STEM education at two- and fouryear colleges and universities by improving curricula, instruction, laboratories, infrastructure, assessment, diversity of students and faculty, and collaborations.





### Division of Undergraduate Education (DUE)

https://www.nsf.gov/div/ index.jsp?div=DUE

Directorate for STEM Education



https://new.nsf.gov/funding/opp ortunities/advancedtechnological-education-ate

### Advanced Technological Education (ATE)

NSF 21-598 – Deadline: First Thursday in October

- The ATE program focuses on the education of technicians at two-year community and technical colleges.
- Focusing on the education of highly-qualified science and engineering technicians for advanced technology fields that drive our nation's economy.
- Improving STEM education of science and engineering technicians with a focus on two-year public community and technical colleges.



Directorate for STEM Education



https://new.nsf.gov/funding/opp ortunities/improvingundergraduate-stem-educationdirectorate

### Improving Undergraduate STEM Education: Directorate for STEM Education (IUSE: EDU)

NSF 23-510 – Deadlines: Third Wednesday in January and July

Supports projects to improve STEM teaching and learning for undergraduate students, including studying what works and for whom and how to transform institutions to adopt successful practices in STEM education.

- Promoting discovery of new evidence-based interventions to improve undergraduate STEM teaching and learning.
- Transforming institutions and STEM communities through the adoption and implementation of best practices in undergraduate STEM teaching and learning.
- Supporting diversity and inclusion in STEM by advancing knowledge and adoption of effective STEM education for all.



Directorate for STEM Education

## IUSE: Innovation in Two-Year College STEM Education (ITYC)

NSF 23-584 – Deadline: Second Wed. in December



stem-education/nsf23-584/solicitation

Supports approaches to advancing inclusive and equitable STEM education practices at two-year institutions.

- Center students in the effort to advance innovation, promote equitable outcomes and broaden participation for all students in STEM education at two-year colleges
- Enhance the capacity of two-year colleges to harness the talent and potential of their diverse student and faculty population through innovative disciplinary, multi-department, and college-wide efforts
- Track 1: A Focus on the Academic Experiences of Two-Year College Students
- Track 2: Leveraging Institutional Strengths and Innovation



Directorate for STEM Education

#### NSF Scholarships in STEM (S-STEM) NSF 24-511 – Deadline: First Tuesday in March



https://new.nsf.gov/funding/opp ortunities/nsf-scholarshipsscience-technology-engineering Supports institutions of higher education to fund scholarships for academically talented low-income students and to study and implement a program of activities that support their recruitment, retention and graduation in STEM.

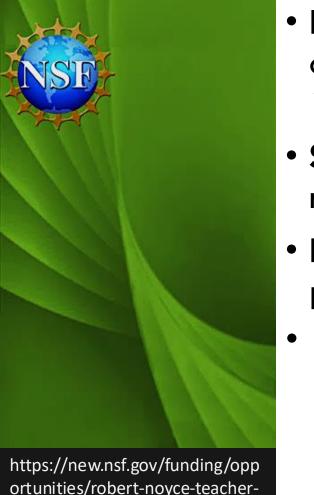
- Addressing the need for a high-quality scier STEM disciplines.
- Providing grants to institutions to support the low-income, academically talented students unmet financial need.



#### EDU rectorate for STEM

Directorate for STEM Education

### National STEM Teacher Corps Pilot NSF 24-577 – October 1, 2024



scholarship-program-0

- Elevate STEM teacher profession recognizing a diverse cadre of outstanding STEM educators that advance equity in PreK-12.
- Select STEM Teacher Corps members to serve as professional models to which all teachers can aspire.
- Reward teachers for their accomplishments & elevate their public profile.
- **Support** the professional development of STEM teachers, including support for teachers certified in non-traditional or alternative methods.



#### **EDU** Directorate for STEM Education



https://new.nsf.gov/funding/opp ortunities/robert-noyce-teacherscholarship-program-0

### Robert Noyce Teacher Scholarship Program (NOYCE) NSF 23-586 – Last Tuesday in August

- The NOYCE program recruits and prepares STEM undergraduates and professionals for teaching careers.
- Addressing the critical need for highly effective K-12 STEM teachers and teacher leaders by recruiting, preparing, and retaining talented STEM undergraduates and professionals for teaching careers.
- Researching effectiveness and retention of STEM teachers in high-need school district.
- Research experiences in STEM settings for pre-service and in-service teachers
- Track 4- Research Track.



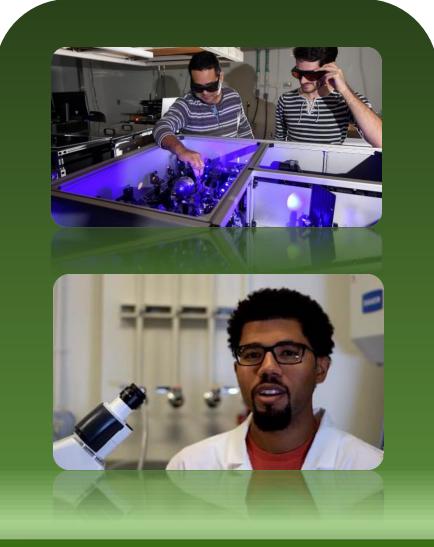


Directorate for STEM Education



MISSION: Enable and inspire an inclusive, equitable, and globally competitive U.S. STEM workforce by supporting students, research, scholarship, and innovations in graduate education.





### Division of Graduate Education (DGE)

https://www.nsf.gov/div/i ndex.jsp?div=DGE

Directorate for STEM Education

### CyberCorps®: Scholarship for Service (SFS) NSF 23-574 – Deadline: July 15, 2024



https://new.nsf.gov/fundi ng/opportunities/cyberco rps-scholarship-servicesfs-0 Supports scholarships in cybersecurity that require a service obligation following graduation equivalent to the length of the scholarship.

#### Goal: Increase the number and diversity of qualified cybersecurity professionals prepared to serve the cybersecurity mission of the government

- Aligns with NSF Statutory Mission to secure the national defense
- Institutions of higher education provide scholarships to undergraduate and graduate students pursuing degrees related to cybersecurity
- After graduation, scholarship recipients serve the cybersecurity mission of the government for a period equal to the length of their scholarship
- Partnership with Office of Personnel Management and the Department of Homeland Security
- 12-16 awards/year; ~\$2.5-\$4MM; 5-year duration

#### **EDU** Directorate for STEM Education

#### Secure and Trustworthy Cyberspace (SaTC) NSF 24-504 – Full proposal accepted anytime



https://new.nsf.gov/fundi ng/opportunities/securetrustworthy-cyberspacesatc Supports research addressing cybersecurity and privacy, drawing on expertise in one or more of these areas: computing, communication and information sciences; engineering; economics; education; mathematics; statistics; and social and behavioral sciences.

#### Goal: Protect and preserve the growing social and economic benefits of cyber systems while ensuring security and privacy

- Proposals managed in DGE respond to the SaTC-EDU Track focusing <u>on</u> <u>cybersecurity education and training</u>
- Projects develop evidence-based and evidence-generating approaches to improve cybersecurity education and workforce development at the K-12, undergraduate, graduate, and professional education levels.
- \$400-500k maximum award; 3-year duration

#### **EDU** Directorate for STEM Education

#### Innovations in Graduate Education (IGE) NSF 24-529 – Deadline: March 25, 2025



https://new.nsf.gov/fundi ng/opportunities/innovati ons-graduate-educationprogram Supports potentially transformative approaches to graduate education with a focus on preparing students in researchbased master's and doctoral degree programs for a range of STEM careers.

Goal: Encourage development and implementation of bold and potentially transformative approaches to STEM graduate education and training

- Supports piloting, testing, and validating innovative and potentially transformative approaches to STEM graduate education.
- Projects generate knowledge required for customization, implementation, and broader adoption.
- 6-10 awards/year; \$1MM maximum award; 5-year duration

Directorate for STEM Education



https://new.nsf.gov/fundi ng/opportunities/national -science-foundationresearch-traineeship

#### NSF Research Traineeship Program (NRT) NSF 21-536 – Deadline: September 6, 2024

## Goal: Prepare diverse cohorts of STEM graduate students for a range of STEM careers in high-priority interdisciplinary or convergent research areas

- Addresses workforce development, emphasizing broad participation
- Builds institutional capacity for convergent graduate education
- Strategic collaborations encouraged (private sector, nongovernmental organizations, government, national laboratories, field stations, teaching and learning centers, informal science centers, and academic partners)
- 18-20 awards/year; 5-year duration; Track 1: \$3MM; Track 2: \$2MM

# Interested in finding out more?NSF By the NumbersAward Abstract Search

Provides statistical and funding information for awards, NSF-funded institutions, funding rate, proposals evaluated, and obligations by fiscal year



https://new.nsf.gov/about/about-nsf-by-thenumbers Use search terms or other classifications to find out what has been funded in varying divisions, programs, or concepts



https://www.nsf.gov/awardsearch/