

ESTABLISHED PROGRAM TO
STIMULATE COMPETITIVE RESEARCH (EPSCoR)
Advancing Geographic Diversity in STEM



nsf.gov/epscor

NSF GRANTED: Creative Solutions to Broaden Participation in New Ways

Alicia J. Knoedler, PhD
Head, Office of Integrative Activities
National Science Foundation

Overview

ESTABLISHED PROGRAM TO
STIMULATE COMPETITIVE RESEARCH (EPSCoR)
Advancing Geographic Diversity in STEM



nsf.gov/epscor

- Let's start with context and data
- Envisioning the Future of NSF EPSCoR
- Growing Research Access for Nationally Transformative Equity and Diversity (GRANTED)
- Idea Development Opportunity
- Take-aways and Encouragement

Organization of NSF

NSF is organized much like a research university:

Directorates : Colleges

Divisions : Departments/Schools

Programs : Research Programs/Projects

Office of the Director : University leadership

NSF Offices : University Offices

NSB: University Trustees/Regents/Supervisors



Office of Integrative Activities

ESTABLISHED PROGRAM TO
STIMULATE COMPETITIVE RESEARCH (EPSCoR)
Advancing Geographic Diversity in STEM

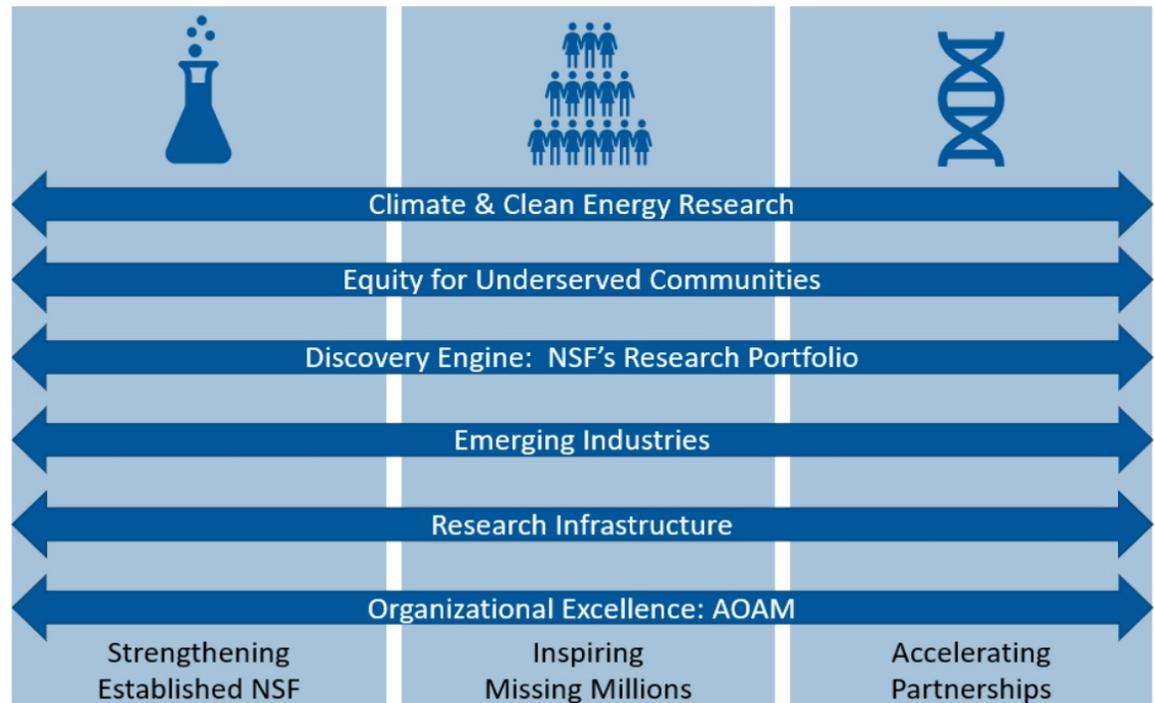


nsf.gov/epscor

- OIA was established in 1998, to improve performance challenges facing NSF and improve operational efficiency
- OIA is now a cross-cutting unit within NSF, supporting multidisciplinary programs like EPSCoR, MRI, Mid-scale Research Infrastructure, STC, GCR, HBCU-EiR
- OIA also supports activities important to NSF's mission: honorary awards; merit review process; evaluation and assessment of programs and outcomes; cross-cutting advisory committees; etc.
- OIA is one of the champions of broadening participation of underrepresented groups and underresourced institutions in STEM
- OIA is the primary steward of geographic diversity efforts at NSF

NSF's 3 Pillars

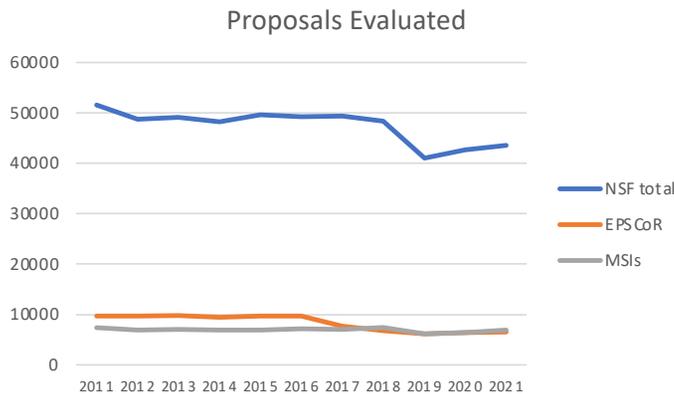
- Strengthening Established NSF
- Bringing the “Missing Millions” into the STEM Workforce
- Accelerating Partnerships



Always read the Overview in the NSF Budget Request: https://www.nsf.gov/about/budget/fy2023/pdf/01_fy2023.pdf

NSF by the Numbers

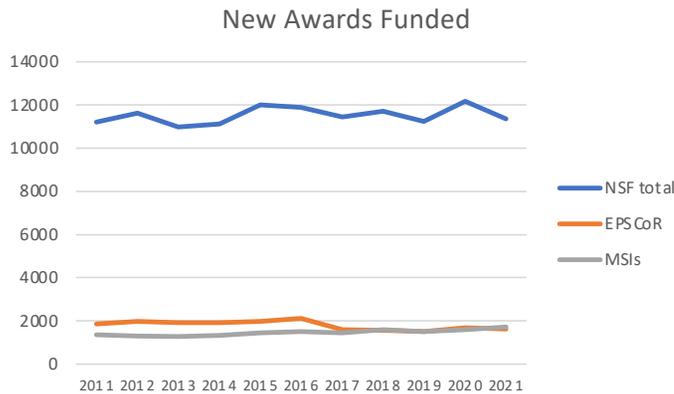
With an annual budget of \$8.5 billion (FY 2021), we are the funding source for approximately 25 percent of all federally supported basic research conducted by America's colleges and universities.



Recently, all proposal submissions and evaluations have dropped.

Institutions in EPSCoR jurisdictions account for 15% of proposals evaluated by NSF

MSIs account for approximately 16% of proposals evaluated by NSF



Number of new awards – ups and downs for total NSF

Institutions in EPSCoR jurisdictions account for 14% of new awards funded

MSIs account for approximately 15% of new awards funded

FY21 Funding rates for all of NSF (26%) and institutions in EPSCoR jurisdictions (25%) and MSIs (25%) are not significantly different

Approximately 16% of NSF funded institutions are in EPSCoR jurisdictions and 13% of NSF funded institutions are MSIs

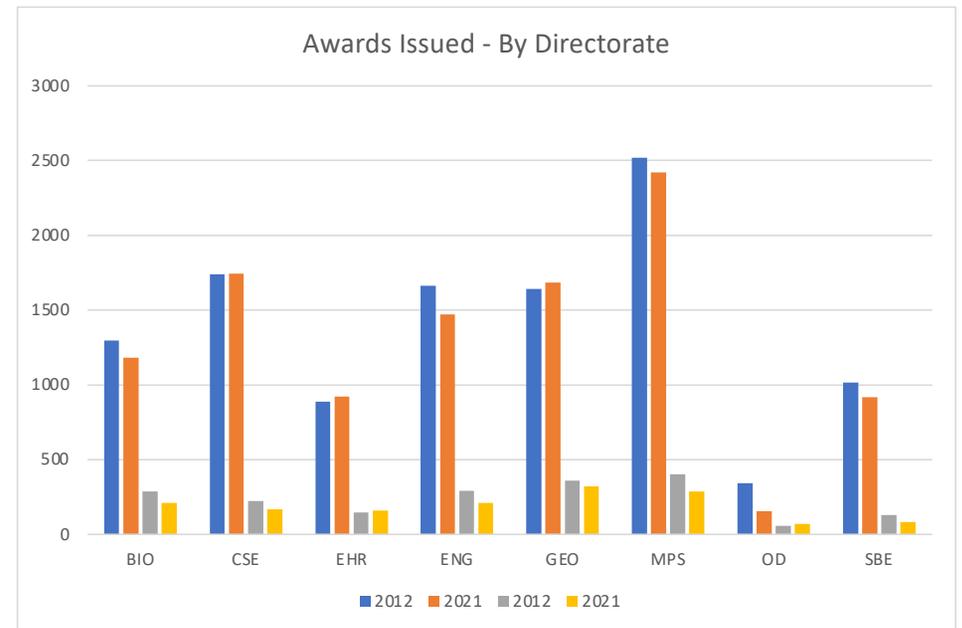
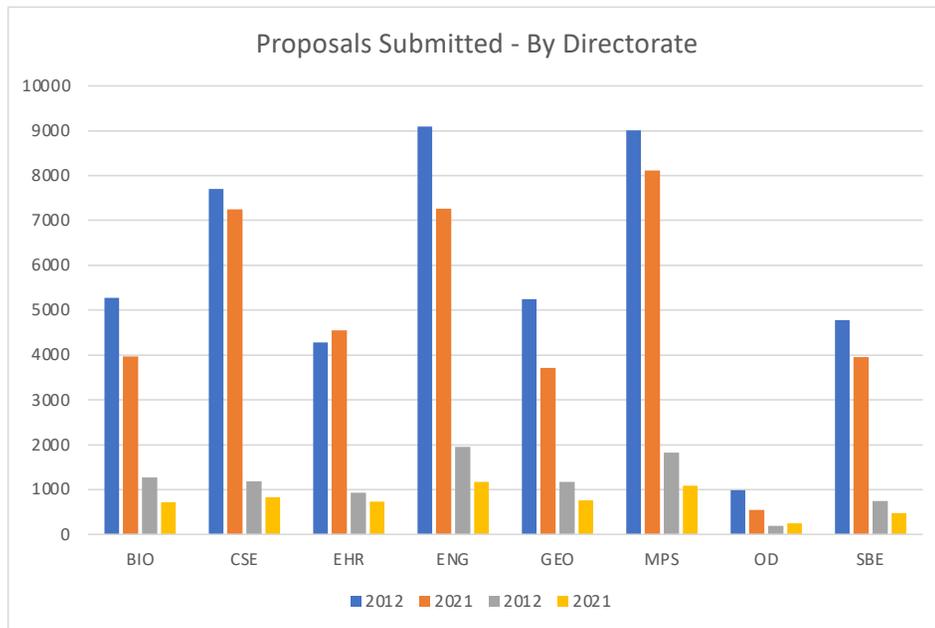
Award obligations to institutions in EPSCoR jurisdictions represent approximately 13% of NSF's award portfolio and MSIs represent approximately 12%



<https://beta.nsf.gov/about/about-nsf-by-the-numbers>

Check out the new app for IOS/Android

Directorate Support of EPSCoR Jurisdictions



Institutions in EPSCoR jurisdictions are represented by gray (FY12) and yellow (FY21) bars

In general, EPSCoR jurisdictions account for 11-21% of proposals and 9-19% of awards from directorates

MSIs within EPSCoR Jurisdictions

In FY 21, 16% of the proposals evaluated by NSF were submitted by investigators at Minority Serving Institutions

- 10% of those submissions came from MSIs in EPSCoR jurisdictions (nearly 30% of the Nation's MSIs are in EPSCoR jurisdictions)
- 11% of the awards to MSIs were awarded to MSIs in EPSCoR jurisdictions (59 MSIs received new awards in FY21)
- The funding rate for MSIs in EPSCoR jurisdictions is 28% (compared to 25% for MSIs in general and all institutions in EPSCoR jurisdictions)
- In FY21, \$138.24 million was awarded to MSIs in EPSCoR jurisdictions. This represents 14% of award obligations to all MSIs and 13% of award obligations to all institutions in EPSCoR jurisdictions. It also represents just 2% of the award obligations made by NSF in FY21.
- NSF would like to see more proposals submitted and more awards made to MSIs, especially those in EPSCoR jurisdictions. In 2021, investigators in EPSCoR jurisdictions submitted 33% fewer proposals than in 2012



Emerging Research Institutions

Defined within the CHIPS and Science Legislation

Emerging Research Institution (ERI): *an institution of higher education with an established undergraduate or graduate program that has less than \$50,000,000 in Federal research expenditures*

- How many ERIs – as available from NCSES HERD data (e.g., FY20)
 - Over **500 ERIs** in the U.S. and approximately **112 ERIs** in EPSCoR jurisdictions (23% of the ERIs)
 - Nearly **160 non-ERIs** in the U.S. and **39 non-ERIs** in EPSCoR jurisdictions (25% of the non-ERIs)

Authorization of an **increase in funding for institutions in EPSCoR jurisdictions:**

FY23	FY23	FY25	FY26	FY27	FY28	FY29
15.5%	16%	16.5%	17%	18%	19%	20%

It all starts with more proposals



NATIONAL SCIENCE FOUNDATION

NSF has an Agency Priority Goal (APG) to increase the number of proposals from underrepresented investigators and underserved institutions by 10% by the end of September of 2023

<https://www.performance.gov/agencies/NSF/apg/goal-1/>

Improve representation in the scientific enterprise

GOAL LEADERS



Alicia Knoedler

Office Head

Office of Integrative Activities (NSF)



Sylvia Butterfield

Assistant Director (Acting)

Directorate for Education and Human Resources (NSF)

TO ACHIEVE

Improve representation in the scientific enterprise by making changes that will lead to an increase in proposal submissions from underrepresented and underserved applicants and communities.

By September 30, 2023, NSF will increase both the number and proportion of proposals received from underrepresented and underserved 1) investigators and 2) institutions by 10 percent over the FY 2020 baselines.



Envisioning the Future of NSF EPSCoR

Broadening Participation Focus Area

R7. Proactive Inclusion Strategies:	R8. Access and Opportunity:
<p>NSF should be accountable for the formation of diverse teams of researchers via partnerships between EPSCoR jurisdictions and researchers from underrepresented groups in all pre- and post-award facets of the NSF EPSCoR program, such as inclusion in panels, committees, commissions, and review boards. NSF EPSCoR researchers, especially those from underrepresented groups, need greater inclusion on NSF panels and advisory committees.</p>	<p>NSF should enhance geographic diversity by providing greater infrastructure support for Tribal Colleges and Universities (TCUs), Historically Black Colleges and Universities (HBCUs), Hispanic-Serving Institutions (HSIs), and other MSIs and PUIs, including Two-Year Colleges (TYCs), to engage in research efforts and enhance collaborations with external partners. Support must also include technical assistance to address gaps in research administration, funding of brick-and-mortar research facilities, institutional and interinstitutional research collaborations, and establishment of innovative mentoring partnerships. In addition to providing support, EPSCoR must shift to tracking impactful outcomes to inform subsequent support.</p>



Growing Research Access for Nationally Transformative Equity and Diversity (GRANTED)

- Focuses on strengthening the Nation's research enterprise
- Mitigates the barriers to competitiveness and enhance research capacity at emerging and underserved research institutions
- FY 2023 funding focuses on growing research enterprise support at minority-serving institutions
- **Proposed Supported Activities**
 - Enhance research administrative support and infrastructure
 - Support research administration leadership
 - Partner with national and regional professional societies



Growing
Research
Access for
Nationally
Transformative
Equity
and Diversity
(GRANTED)



Idea Generation Opportunity

- Discuss at your tables consider the following questions:
- Of what you know about your institutions and/or those in your jurisdictions:
 - What type of **support is needed to submit 10% more proposals** to NSF within a year?
 - What type of **support is needed to manage increases in the number of awards and the size of awards?**
 - What sorts of **barriers** exist to **submitting** more proposals and **receiving** more awards?
 - If your jurisdiction could receive funds to develop a **central hub for research enterprise support and services**, supporting all IHE in your jurisdictions, what would you prioritize and why?
- Write down your ideas on the pads on your tables
- After several minutes of idea generation, we will hear a few ideas

The NSF logo is a blue globe with the letters 'NSF' in white, surrounded by a yellow sunburst pattern. It is positioned in the bottom right corner of the slide, overlaid on a decorative graphic of a network or molecular structure in shades of blue and purple.

NSF

As a leader/champion in an EPSCoR jurisdiction....

- Generate new ideas and submit proposals
 - In 2021, investigators in EPSCoR jurisdictions submitted 33% fewer proposals than in 2012
 - Legislative emphasis to provide more resources to EPSCoR jurisdictions; more proposals make it easy to justify the need for more resources
- Pursue resources to catalyze idea generation and broaden networks
 - EPSCoR workshops
 - Conferences (see PAPPG)
 - Research Coordination Networks (RCNs)
- Communicate with NSF EPSCoR Leadership and Program Directors –
Do not be shy!

The NSF logo is a blue globe with the letters 'NSF' in white, surrounded by a yellow sunburst pattern. It is positioned in the bottom right corner of the slide, overlaid on a decorative graphic of a network of blue and purple lines.

**ESTABLISHED PROGRAM TO
STIMULATE COMPETITIVE RESEARCH (EPSCoR)**
Advancing Geographic Diversity in STEM



nsf.gov/epscor

Thank you!

Alicia J. Knoedler
aknoedle@nsf.gov

