2024 EPSCoR PI Meeting: Programmatic Updates Leveraging EPSCoR Investments for Increasing Impact Day 2 Welcome (May 21, 2024)

Sandra Richardson Head, Research Capacity and Competitiveness Section Office of the Director | Office of Integrative Activities



NSF Established Program to Stimulate Competitive Research (EPSCoR)

Welcome to the 2024 EPSCoR PI Meeting!

#EPSCoRPI2024 and #EPSCoR2024

EPSCoR PI Meeting Agenda



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Tuesday, May 21, 2	024
8:00 – 8:45am	Light Refreshments
	Optional Meetings with EPSCoR Program Directors Advanced sign-up required, sign-up sheet located at registration table
8:45 – 9:00am	Greetings and Introduction Sandra Richardson, Research Capacity and Competitiveness, Section Head
9:00 – 9:30am	CHIPS & Science and Agency Priority Goal Updates Sandra Richardson, Research Capacity and Competitiveness, Section Head Alicia Knoedler, Office of Integrative Activities, Head Sylvia Butterfield, Deputy Assistant Director, Directorate for STEM Education
9:30 – 10:00am	NSF Budget Update Beth Blue, Branch Chief, Office of Budget, Finance, and Award Management, Budget Division
10:00 – 10:30am	Division of Grants & Agreements and Division of Institution & Award Support Update Cartia Brown-Morgan, Grants Management Specialist, Office of Budget, Finance, and Award Management, DGA Liz DeHart, Grant & Contract Cost Analyst, Office of Budget, Finance, and Award Management, DIAS
10:30 – 11:30am	 Breakouts: Leveraging NSF Investments for EPSCoR Jurisdictions Leveraging GRANTED for Expanded Capacity Building: Plenary Room Dina Stroud, Program Director, GRANTED Engaging with NSF Regional Innovation Engines for Impact in EPSCoR Jurisdictions: Room 2210 Dmitri Perkins, Program Director, TIP/ITE

- Mid-scale Research Infrastructure, R1 vs. R2: Room 2220

Tuesday, May 21, 2024

11:30am – 12:30pm LUNCH

12:30 – 1:30pm Focused Discussion Roundtables

1:30 – 2:30pm Directorate Open House Cafeteria: BIO, CISE, EDU, ENG Portrait Gallery: BFA, OIA, OISE Room W2160: GEO, MPS Room W2190, SBE, TIP

2:30 – 3:30pm Breakouts: Leveraging NSF Investments for EPSCoR Jurisdictions

- Leveraging GRANTED for Expanded Capacity Building: Plenary Room Dina Stroud, Program Director, GRANTED Alicia Knoedler, Office of Integrative Activities, Head
- Engaging with NSF Regional Innovation Engines for Impact in EPSCoR Jurisdictions: Room 2210
 Dmitri Perkins, Program Director, TIP/ITE
- Mid-scale Research Infrastructure, Management, Requirements, and Strategies: Room 2220
 Randy Phelps, Program Director, Office of Integrative Activities

Denise Pfeifer, Project Manager & Research Administrator, Boise State University

3:30 – 3:45pm Karen Marrongelle, NSF Chief Operating Officer

3:45 – 4:00pm National Conference Update and Farewell

Matt Andrews, Director, Nebraska EPSCoR Sandra Richardson, Research Capacity and Competitiveness, Section Head

Contact the FY24 EPSCoR Program Team

- General Inquiries: <u>nsfepscor@nsf.gov</u>
- E-CORE RII Inquiries: <u>EPSCoR-CORE@nsf.gov</u>
- E-RISE RII Inquiries: <u>EPSCoR-RISE@nsf.gov</u>
- EPSCoR Live! Inquiries: epscor-live@nsf.gov
- RCC Section Staff: <u>NSF Directory</u>
- Section Head (Sandra Richardson): srichard@nsf.gov

EPSCoR Outcome Indicators

EPSCoR GOAL #1: Catalyze research capability across and among jurisdictions

SHORT-TERM

	SHORT-TERM	MID-TERM	LONG-TERM Increased jurisdictional proposals/awards (NSF)
science Increas Patent	sed number of proposal submissions in jurisdiction e priority area(s). sed number highly cited articles. s awarded and cited. sed collaboration nationally and internationally.	 Increased federal and other research funding across jurisdictions. State science, technology and innovation (STI) policy for competitiveness. Increased citation rates of funded research. Increased human capital base (proportion of population with advanced degrees). Leadership in knowledge production in discipline and field. 	 Location preference for major national investments Increased federal research funding across jurisdictions Increased grant/foundation funding, proposal awards Broader awareness of quality S&T workforce Jurisdiction ranking in STEM degrees granted (BS, MS, PhD) Globally recognized research centers and degree programs State ranking in grant/foundation funding New/sustained National Research Council (NRC) members New/sustained Association of American Universities (AAU) members
		EPSCoR GOAL #2: Establish STEM professional development pathways	
• In kr	creased engagement of students in research owledge production.	 Increased # of STEM undergraduate degrees. STEM graduates hired in research, technology, and other comparable organization types within the jurisdiction. 	 Increased # of STEM graduate degrees. Higher quality S&T student, faculty, and workforce. Sustained research engagement of a diverse set of institutions. Improved network position of faculty researchers.
		EPSCoR GOAL #3: Broaden participation of diverse groups and institutions in STEM	
• N • N	ew, diverse, and high-quality students produced. ew, diverse, and high-quality faculty recruited.	 Scholarships/fellowships awarded to attract and retain groups underrepresented. Increased STEM interest and efficacy for individuals underrepresented in STEM. Higher quality S&T student body, faculty, and workforce. Increased number of nationally-recognized scientists. Increased retention rates for students and faculty. Improved racial and gender equality and inclusiveness. Increased STEM faculty retention, satisfaction, and perceived quality of life. 	 Improved DEIA efforts in state law, business, government, and universities. Improved research culture
		EPSCoR GOAL #4: Effect engagement in STEM at national and global levels	
•	Increased STEM graduate school acceptance and enrollment.	 Increased STEM graduation rates. Inclusion of undergraduate research experiences. Enhanced statewide support and allocability of resources for higher education. Increased retention rates for students and faculty. 	 Improved STEM pipeline in jurisdictions. Increased Carnegie ranking status across jurisdictions. Sustainable STEM graduation rates. Increased proportion of state institutions attracting new high-quality faculty and students. Higher education level of population in jurisdictions
		EPSCoR GOAL #5: Impact jurisdictional economic development	
• N • II	lew partnerships, including stakeholders. ncreased university/college engagement with industry.	 Degree-relevant job acquisition. Increased industry investment in university equipment and facilities. Active role of STI organization in facilitating university-institution partnerships and outcomes. Public support of universities and the public understanding of science. Increased federal and industry research funding. Carnegie ranking representations. New/proposed policies supporting STEM and academic research. Expansion of broadband access. 	 Sustainable technology transfer offices at institutions. Stable/increased budgets for education, research, university facilities. Growth of technology clusters. Alignment of state S&T plan to reinforce university-institution synergies. New businesses, products, and S&T services. Long-term R&D partnership with industry. Accelerated innovation and commercialization cycles. Industry spinoffs. Venture capital investment. Industry shift to knowledge, science intensive, high technology. Improved economic productivity and stability.

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New NSF Institutional Fact Sheets

https://tableau.external.nsf.gov/views/InstitutionFactsheet/InstitutionSnapshot?%3Aembed=y&%3Aiid=1&%3 AisGuestRedirectFromVizportal=y

niversity Of So lumbia, South Carolina		At Colu	mbia					Select University Of	South Ca	
RI: Non-Emerging Resea	arch Institution		Cu	rent EPS	CoR Sta	te:YES		As of Date	May 17,	, 2024
FY 2019-2023	- Fast Facts									
730 Proposals Evaluated	197 New Awa Fundeo		27% Funding Ra NSF 2023 avg.			\$96 M Award Obligati	1		216 and Co on Awai	
FY 2019-2023	- Awards by <i>I</i>	Managing	Directorate	and T	rends	5				
MPS 52	ENG 31	GEO 29	BIO CSE EDU ENG GEO MPS O/D		100	112	132	87	102	30%
CSE 37	EDU 16	SBE 11	SBE TIP		38	36	42		46	10%
	BIO 14	TIP 5			2019	2020	2021	35 2022	2023	0%

Award ID	Award Title	Award Date	Directorate	Total Intended Award Amount
1736150	RII Track-2 FEC-Genome to fitness: An Analysis of the Stress Response in Peromyscus	08/01/2017	O/D	\$3,898,499
2119654	RII Track 2 FEC: Enabling Factory to Factory (F2F) Networking for Future Manufacturing	09/16/2021	O/D	\$3,832,326
2300747	Supporting Rural STEM Middle School Teachers and Career Counselors in the Development of Effective STEM Content and	06/30/2023	EDU	\$2,817,700
2152896	LEAP-HI: A Data-Driven Fragility Framework for Risk Assessment of Levee Breach	08/03/2022	ENG	\$2,000,000
2038080	RTG: Mathematical Foundation of Data Science at University of South Carolina	06/22/2021	MPS	\$1,996,609

Most Recent Active Awards

Award ID	Award Title	Award Date	Directorate	Total Intended Award Amount
2401492	Collaborative Research: Investigation of Volcanism and Tectonics in the Bight Transform Region (55.5N-57.0N, Mid-	05/08/2024	GEO	\$390,747
2337634	Collaborative Research: Resolving the Contributions of Lattice Oxygen, Dioxygen, Acid Sites, Base Sites, and Redox Sites	05/08/2024	ENG	\$300,000
2344561	Unraveling novel roles for iron-sulfur cluster trafficking proteins in Fe-S cluster and cell envelope biogenesis	05/07/2024	BIO	\$1,117,707
2344737	Collaborative Research: Documenting Variations in the Southern Hemisphere Influence on the Western Pacific Warm Pool	05/01/2024	GEO	\$186,352
2403360	OAC Core: Enhancing Network Security by Implementing an ML Malware Detection and Classification Scheme in P4	04/17/2024	CSE	\$599,999



EPSCOR Nebinar

June 3rd, 4:00 p.m. to 5:00 p.m. EDT

Topic: NSF Office of Legislative and Public Affairs will discuss the new <u>NSF Policy on Brand Standards</u>, the NSF brand identity and how to apply its brand elements effectively. The proper procedures for use of NSF and EPSCoR logos will also be discussed.

How to Attend: Advance registration is required. <u>Click</u> <u>here to register</u>. Please use an institutional email address for registration.

Additional June EPSCoR Live! June 20th Topic: Exploring EPSCoR Ecosystems

General Requests

- Know your cognizant Program Officer (PO)
 - some projects will have new PO assignments beginning June
 - research.gov will always have most current info
 - Increment release based on PO review and approval of annual report
- Ensure your project's PI is receiving NSF EPSCoR email announcements, requests, and updates
 - Anyone can sign up for RCC and EPSCoR updates (sign up here) or go to nsf.gov/epscor
- Invite cognizant PO to jurisdictional All Hands Meeting
- Consider serving as a reviewer for EPSCoR and other NSF programs
- Nominate colleagues for membership on NSF federal advisory committees via the Federal Register Committee call
 - Visit the notice page on the Federal Register
 - Self-recommendations are accepted



Remember availability of NSF EPSCoR logos

NSF EPSCoR Logo





- **5 nodes**: 5 interconnected goals of EPSCoR: Catalyze, Establish, Broaden, Effect and Impact.
- Each node is a different color to represent the diversity of our jurisdictions.
- The pentagon represents the EPSCoR community as a homebase for EPSCoR's goals that are situated within the overall mission.

NSF EPSCoR Logo for 28 Jurisdictions





- The logos developed for the NSF EPSCoR program should be used widely and must not be deconstructed or altered.
- State logo variations are downloadable at https://nsf.widencollective.com/portals/5tl aweok/NSFEPSCoRLogos
- NSF will be using these logos when communicating about EPSCoR. Consistent use of these logos will help strengthen the EPSCoR brand and community.

CHIPS and Science Act Update

EPSCoR Provisions in CHIPS and Science Act (2022) Sec 10325. Expanding geographic diversity

• **Target 1** (CHIPS Sec 10325 a.3.A): Authorization of a gradual increase in percentage of NSF funding for institutions in EPSCoR jurisdictions.

FY23	FY24	FY25	FY26	FY27	FY28	FY29
15.5%	16%	16.5%	17%	18%	19%	20%

• **Target 2** (CHIPS Sec 10325 a.3.B): Authorization of a gradual increase in percentage of NSF funding of scholarships, graduate fellowships and traineeships, and postdoctoral awards to support institutions in EPSCoR jurisdictions.

FY23	FY24	FY25	FY26	FY27	FY28	FY29
16%	18%	20%	20%	20%	20%	20%

EPSCoR Provisions in CHIPS and Science Act (2022)

Target 3 (CHIPS Sec 10325 a.3.C): NSF will prioritize funding and activities that enable sustainable growth in the competitiveness of EPSCoR jurisdictions, including:

- (i) infrastructure investments to build research capacity in EPSCoR jurisdictions;
- (ii) scholarships, fellowships, and traineeships within new and existing programs to promote development of sustainable research and academic personnel;
- (iii) partnerships between eligible organizations in EPSCoR and non-EPSCoR jurisdictions to develop administrative, grant management, and proposal writing capabilities;
- (iv) capacity building activities for Emerging Research Institutions (ERIs) and Minority Serving Institutions (MSIs); and
- (v) leveraging the Partnerships for Innovation Program to build sustainable innovation ecosystems in EPSCoR jurisdictions.

Progress in Agency-level Spending for Target 1

- The FY23 actual amount invested in EPSCoR jurisdictions, \$1,204.98M, represents an investment rate of 15.9% according to legislative direction laid our in the CHIPS and Science Act.
- FY24 EPSCoR jurisdiction investment target will be 16%; the dollar amount of this target is pending confirmation of NSF's proposed FY24 Current Plan.

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Percent Target	15.5%	16.0%	16.5%	17.0%	18.0%	19.0%	20.0%
Dollar Target	\$1,176.00	TBD	TBD	TBD	TBD	TBD	TBD
Resulting Investment	\$1,204.98	TBD	TBD	TBD	TBD	TBD	TBD

Agency-level Spending Target

(Dollars in Millions)

Progress in Agency-level Spending for Target 2

- The FY23 actual amount invested in EPSCoR scholarships, fellowships, etc., \$60M, represents an investment rate of 18.5% according to legislative direction laid our in the CHIPS and Science Act.
- FY24 EPSCoR jurisdiction investment target will be 18%; the dollar amount of this target is pending confirmation of NSF's proposed FY24 Current Plan.

	Scholarships Spending Target									
(Dollars in Millions)										
FY 2023 FY 2024 FY 2025 FY 2026 FY 2027 FY 2028 FY 202										
Percent Target	16.0%	18.0%	20.0%	20.0%	20.0%	20.0%	20.0%			
Dollar Target	\$51.87	TBD	TBD	TBD	TBD	TBD	TBD			
Resulting Investment	\$60.00	TBD	TBD	TBD	TBD	TBD	TBD			

Coholarching Coonding Target

Data for all Institutions in EPSCoR JUs (FY13-23)

Numbers

By the

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Data for all States (FY13-23)



Link to data source

New NSF Dear Colleague Letters and Programs

- NSF 24-079 (April release): Expanding Geographic and Institutional Diversity in Social, Behavioral, and Economic Sciences
- NSF 24-077 (April release): Enhancing STEM Education, Research Capacity, and Workforce Development in EPSCoR Jurisdictions
- NSF 24-056 (Feb release): Expanding Geographic and Institutional Diversity in Computer and Information Science and Engineering (CISE)
- EPSCoR Centers of Research Excellence in Science and Technology (EPSCoR CREST Centers) Solicitation Coming Soon

(https://new.nsf.gov/funding/opportunities/epscor-centers-research-excellence-science)

Agency Collaboration and Implementation

- EPSCoR Strategy, Engagement, and Consultation Working Group
- Workshops, Outreach, and Engagement
 - NSF Open House at EPSCoR PI Meeting
 - TIP Workshop (Dec 2023): Increasing participation of EPSCoR jurisdictions in translational research in NSF
 - HBCU EPSCoR Regional Outreach event (February)
- NSF Advisory Committee Engagement
- Data Tools for Internal Analysis

Additional Conversation

