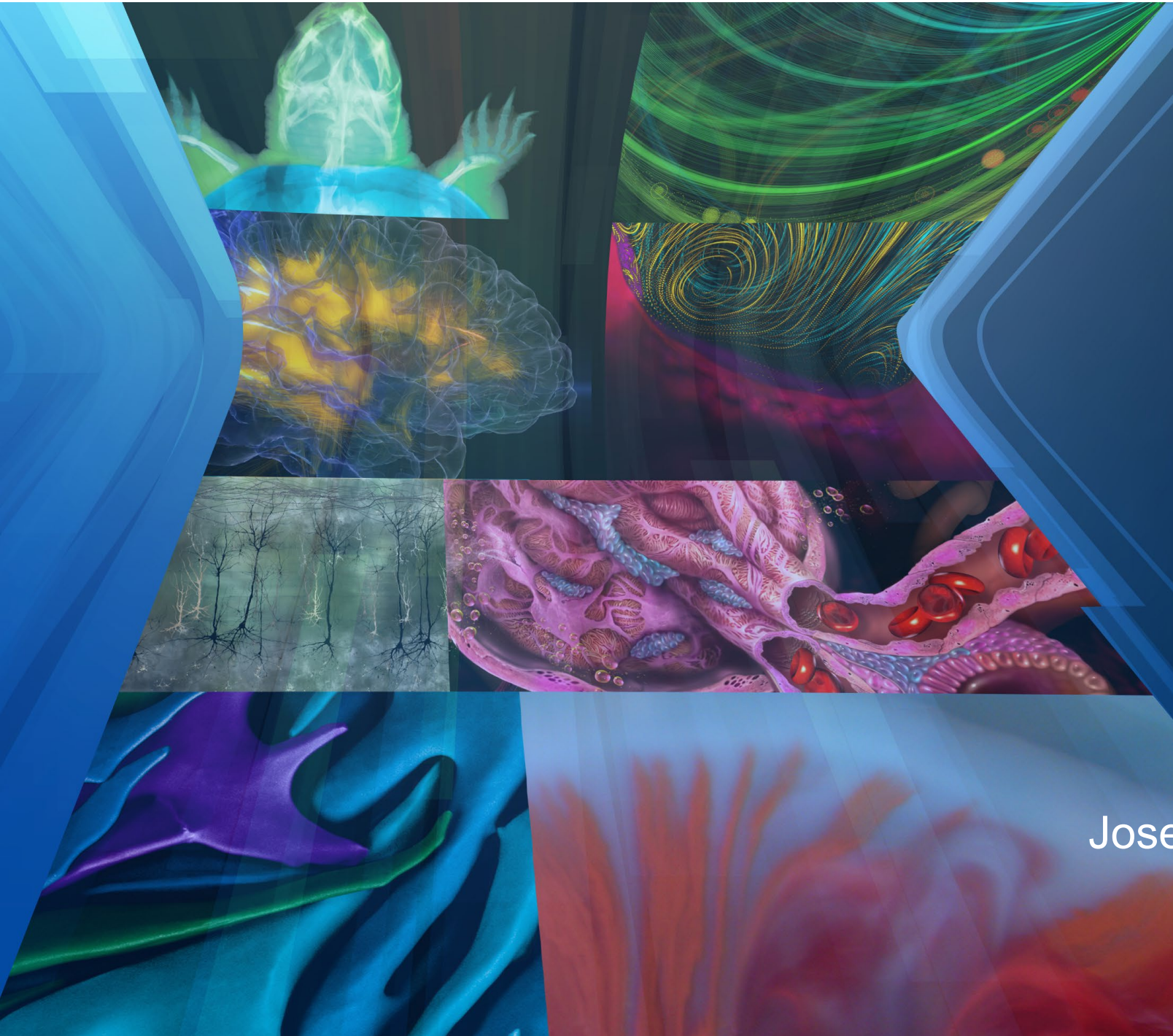


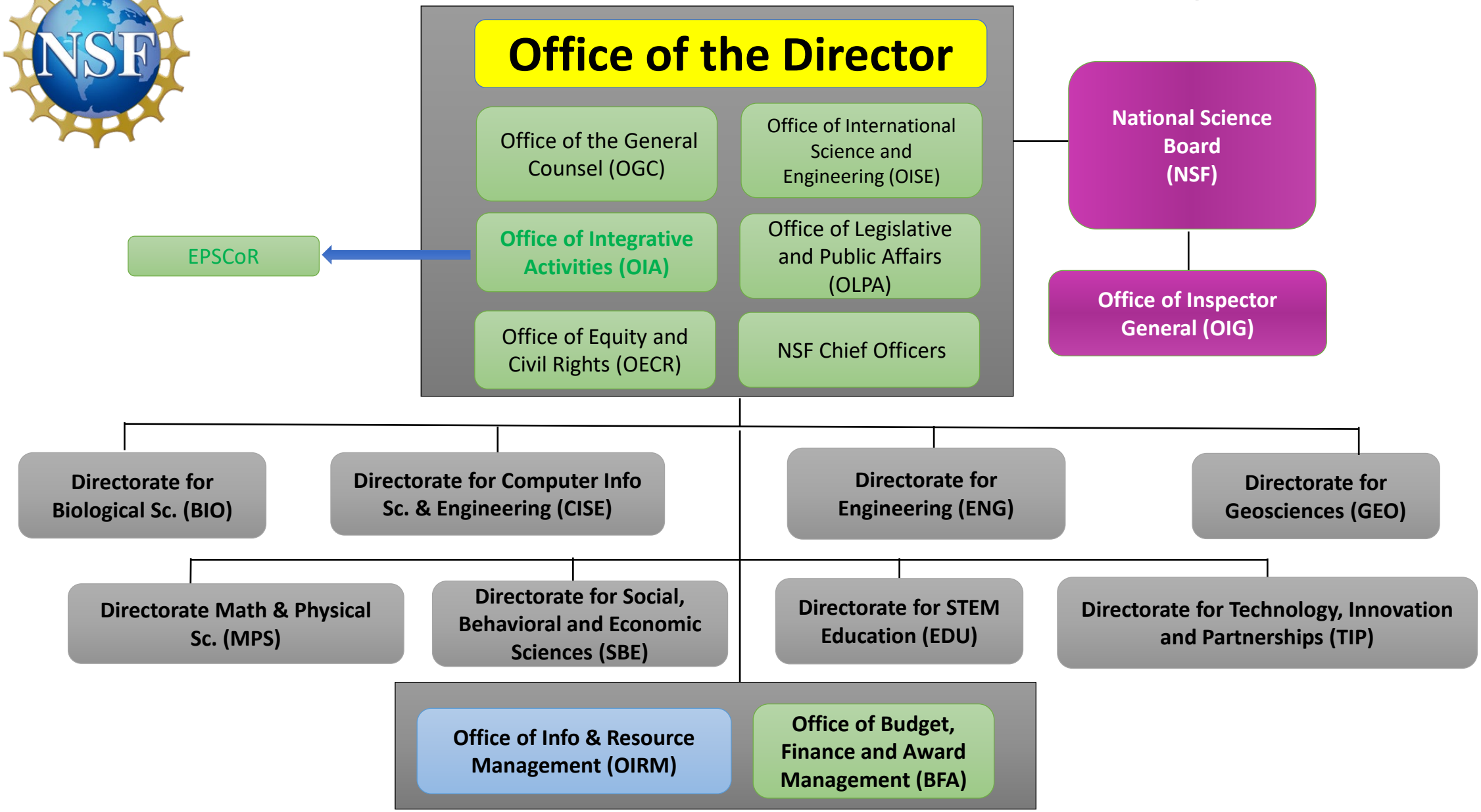
EPSCoR Update

FY 2023 RII Track-2

NSF 22-633

Jose Colom Ustariz and Ben McCall
Program Director
October 4, 2023

National Science Foundation (NSF) Org Chart



Established Program to Stimulate Competitive Research (EPSCoR)

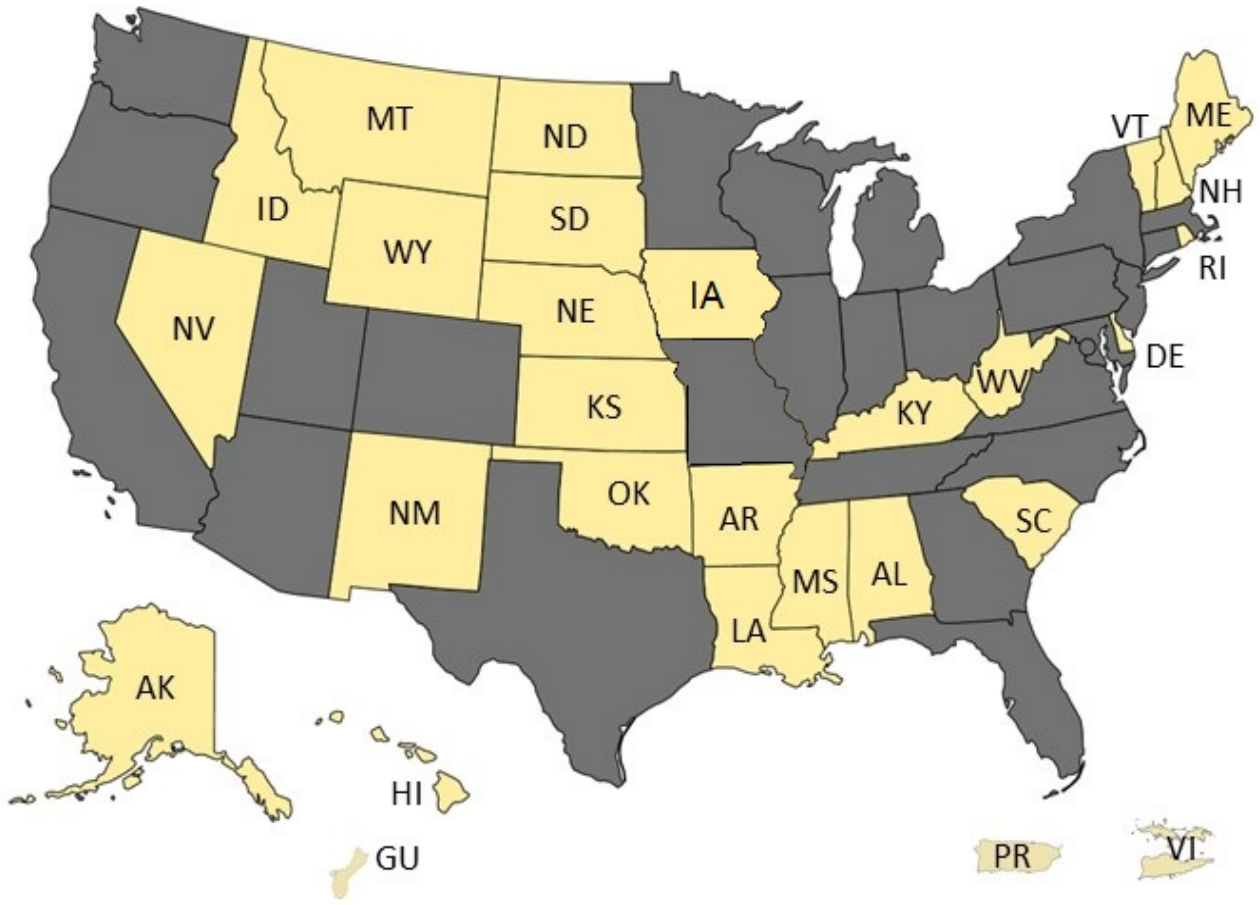
Mission: To enhance the research competitiveness of targeted jurisdictions by strengthening (STEM) capacity and capability through a diverse portfolio of **investments** from talent development to local infrastructure.

Eligibility: A jurisdiction is eligible to participate in the NSF's EPSCoR program if their most recent five-year level of total NSF funding is equal to or less than 0.75% of the total NSF budget (excluding EPSCoR funding and NSF funding to other federal agencies). Visit EPSCoR site for details.

A jurisdiction is eligible to participate in NSF EPSCoR if their most recent 5-year level of total NSF funding is equal to or less than 0.75% of the total NSF budget. Jurisdictions above 0.75% but less than 0.80% are allowed to remain EPSCoR-eligible for up to 5 years.

State	FY17 Total	FY18 Total	FY19 Total	FY20 Total	FY21 Total	2017-2021 Total	EPSCoR Total	Federal Total	Adjusted $	% of Total $
(Drill to Inst)	Amt $k	Amt $k	Amt $k	Amt $k	Amt $k	Amt $k	Amt $k		Amt $k	
Grand Total	$7,016,546	$7,457,851	$7,734,408	$7,799,302	$8,169,835	$38,177,942	$693,376	$785,955	$36,698,61	100.00%
Other	$18,894	$23,354	$27,131	$21,735	$22,869	$113,983	-	-	-	-
US Total	$6,997,652	$7,434,497	$7,707,277	$7,777,567	$8,146,966	$38,063,959	$693,376	$785,955	$36,698,61	100.00%
Guam	$2,516	-	$1,210	$4,490	$5,457	$13,673	$10,709	-	$2,964	0.01%
Virgin Islands	$5,109	$6,304	$2,922	$8,149	$8,842	$31,326	$17,935	-	$13,391	0.04%
Vermont	$15,665	$19,389	$6,118	$17,360	$12,103	$70,635	$22,881	-	$47,754	0.13%
South Dakota	$14,822	$15,021	$20,290	$19,570	$16,323	$86,026	$36,798	-	$49,228	0.13%
North Dakota	$13,434	$16,051	$8,671	$19,927	$25,074	$83,157	$23,797	-	$59,360	0.16%
West Virginia	$14,347	$15,959	$15,125	$17,222	$19,917	$82,570	$19,186	$695	$62,689	0.17%
Puerto Rico	$10,285	$19,488	$19,355	$23,623	$18,977	$91,728	$15,301	-	$76,427	0.21%
Wyoming	$13,344	$17,068	$28,525	$26,333	$17,722	$102,992	$20,889	-	$82,103	0.22%
Mississippi	$20,946	$21,791	$24,514	$19,826	$31,258	$118,335	$20,286	$1,159	$96,890	0.26%
Maine	$22,314	$33,440	$25,013	$29,236	$26,074	$136,077	$38,481	-	$97,596	0.27%
Idaho	$24,701	$24,745	$30,765	$25,426	$34,790	$140,427	$38,733	-	$101,694	0.28%
Arkansas	$15,411	$28,979	$19,720	$27,031	$33,841	$124,982	$22,699	-	$102,283	0.28%
Nevada	$18,375	$22,091	$25,951	$26,783	$29,940	$123,140	$7,419	-	$115,721	0.32%
Kentucky	$30,048	$32,887	$32,034	$41,422	$38,574	$174,965	$29,670	-	$145,295	0.40%
Nebraska	$37,926	$34,167	$41,761	$25,166	$39,216	$178,236	$31,976	-	$146,260	0.40%
Montana	$31,780	$30,567	$31,487	$38,541	$39,671	$172,046	$22,762	-	$149,284	0.41%
Oklahoma	$40,468	$24,624	$31,122	$37,208	$41,665	$175,087	$18,309	$2,701	$154,077	0.42%
New Hampshire	$40,038	$38,751	$41,947	$42,904	$33,275	$196,915	$30,330	$4,754	$161,831	0.44%
Delaware	$25,204	$36,652	$41,135	$44,312	$46,509	$193,812	$24,291	-	$169,521	0.46%
Kansas	$41,596	$41,173	$37,956	$44,239	$40,410	$205,374	$34,930	-	$170,444	0.46%
Louisiana	$36,916	$42,513	$39,207	$46,391	$62,140	$227,167	$34,770	-	$192,397	0.52%
South Carolina	$75,564	$64,019	$67,592	$55,752	$68,959	$331,886	$35,468	$83,943	$212,475	0.58%
Hawaii	$45,167	$45,314	$54,175	$49,016	$57,273	$250,945	$19,112	-	$231,833	0.63%
Rhode Island	$49,387	$43,605	$56,491	$51,046	$60,554	$261,083	$28,684	-	$232,399	0.63%
New Mexico	$51,704	$46,030	$45,758	$59,651	$55,250	$258,393	$23,853	$1,907	$232,633	0.63%
Alaska	$46,325	$45,032	$62,202	$61,168	$56,053	$270,780	$23,697	-	$247,083	0.67%
Iowa	$47,675	$50,677	$45,637	$51,742	$57,905	$253,636	$1,288	-	$252,348	0.69%
Alabama	$51,155	$60,140	$58,987	$69,095	$63,484	$302,861	$31,122	-	$271,739	0.74%

EPSCoR Map



States

AL Alabama
AK Alaska
AR Arkansas
DE Delaware
HI Hawaii
IA Iowa
ID Idaho
KS Kansas
KY Kentucky
LA Louisiana
ME Maine
MS Mississippi
MT Montana
NE Nebraska
NH New Hampshire
NM New Mexico
ND North Dakota
NV Nevada
OK Oklahoma
RI Rhode Island
SC South Carolina
SD South Dakota
VT Vermont
WV West Virginia
WY Wyoming

Other

GU Guam
PR Puerto Rico
VI U.S. Virgin Islands

The CHIPS and Science Act of 2022 effectively freezes NSF EPSCoR jurisdiction eligibility through Fiscal Year (FY) 2027.

EPSCoR Investment Strategies

- **Research Infrastructure Improvement (RII) Programs – RII Track-1 (sunsetting), E-CORE, E-RISE, Track-2, Track-4** (78-84% of EPSCoR budget).

  Support physical, human, and cyber infrastructure within academic institutions across each jurisdiction.

- **Co-Funding w/ NSF Directorates & Offices** (16-22% of budget).

  Meritorious proposals reviewed in other NSF programs that also satisfy EPSCoR programmatic criteria.

- **Outreach and Workshops** (0.5-1% of budget).

  Interaction among EPSCoR Community and NSF to build mutual awareness and develop areas of potential strength.

EPSCoR Research Infrastructure Improvement Program: Track-2 Focused EPSCoR Collaborations (RII Track-2 FEC)

GU Team at SACNAS

IA Strategic Plan – Integration of Project

NSF EPSCoR RII Track-2

- Builds research capacity through interjurisdictional collaborative teams in focus area(s) aligned with NSF-wide priorities
- Combines expertise distributed in different EPSCoR jurisdictions into a "critical mass" capable of productive research and related activities in the focus area
- Promotes productive, balanced collaborations that are capable of sustained activities beyond the award period
- Exemplifies diversity through strategic, broad inclusion and meaningful integration of different types of individuals, institutions, and sectors
- Develops diverse early-career faculty

Solicitation: *"Central to the success of the proposal is a clear demonstration that the collaboration is well-positioned to produce outcomes that cannot be obtained through the efforts of a team in a single jurisdiction working alone."*

NSF EPSCoR RII Track-2

Request for RII Track-2 FEC funding must:

- Add to the research capacity of the participating jurisdictions in the focus area;
- Contribute to the advancement of research and innovation in the proposal's focus area;
- Outline clear plans for the recruitment and/or development of underrepresented early-career faculty in the STEM field;
- Engage the full diversity of the participating jurisdictions' resources including two- and four-year colleges, MSIs, and local and state industry in STEM workforce development;
- Engage and collaborate with social and economic scientists to understand and assess the societal implications;
- Present a detailed plan to demonstrate the potential for economic impact of the endeavor and present a sustainability plan for obtaining subsequent, sustained non-EPSCoR funding from federal, jurisdictional, or private sector sources.

Track-2 Solicitation-Specific Elements – *Merit Review Criteria Section*

Solicitation: *"Intellectual Merit: The **Intellectual Merit** criterion encompasses the potential to advance knowledge; and Broader Impacts: The **Broader Impacts** criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes:"*

Solicitation: *"Reviewers for the RII Track-2 FEC competition will also consider the following specific aspects of intellectual merit and broader impacts, as applicable:"*

- **Research Capacity** – *potential to advance STEM fields, research competitiveness and capacity of the jurisdictions (including physical, cyber, and human resources)*
- **Interjurisdictional Collaboration** – *balanced collaboration?*
- **Workforce Development** – *recruit/develop diverse early career faculty, and create a diverse workforce relevant to the jurisdiction and industry*
- **Jurisdictional Impacts** – *sustainable research, innovation, and workforce preparation, education capacity, economic development*
- **Integration of Project Elements** – *cohesive project (all aspects well integrated?), effective coordination, evaluation, sustainability*

Major Changes from FY22/23

The ACTIVE Solicitation

NSF 22-633

EPSCoR Research Infrastructure Improvement Program: Track-2 Focused EPSCoR Collaborations (RII Track-2 FEC)

PROGRAM SOLICITATION
NSF 22-633

REPLACES DOCUMENT(S):
NSF 22-523

National Science Foundation

Office of Integrative Activities

Letter of Intent Due Date(s) ***(required)*** (due by 5 p.m. submitter's local time):

December 20, 2022

Third Tuesday in December, Annually Thereafter

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

January 24, 2023

Fourth Tuesday in January, Annually Thereafter

IMPORTANT INFORMATION AND REVISION NOTES

Only jurisdictions that meet the EPSCoR eligibility criteria may submit proposals to the Research Infrastructure Improvement Program Track-2 (RII Track-2 FEC) competition.

- The topical focus area for the FY 2023/2024 competition is: "advancing climate change research and resilience capacity to expand opportunities for disproportionately affected communities."
- Proposals for the FY 2023/2024 competition may be submitted either as (i) a collaborative proposal from multiple organizations or (ii) a collaborative proposal from one organization with support for non-lead collaborating organizations requested as subawards.
- Each submitting organization may serve as lead on only one proposal. However, an organization may serve as a non-lead in a collaborative submission or subawardee on any number of additional proposals.
- Each submission must have at least two collaborators (specifically as PI or co-PI) who are from an organization in a different eligible EPSCoR jurisdiction.
- An investigator may serve as Principal Investigator (PI) or Co-PI on only one RII Track-2 FEC award at any given time. However, the investigator may serve as Senior Personnel on any number of RII Track-2 FEC submissions or awards.

Key Proposal Preparation Changes or Clarifications

- New Theme!!!! This Solicitation and Theme is good for TWO Years!
- Proposals for the FY 2023/2024 competition may be submitted either as (i) a collaborative proposal from multiple organizations or (ii) a collaborative proposal from one organization with support for non-lead collaborating organizations requested as subawards.
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“advancing climate change research and resilience capacity to expand opportunities for disproportionately affected communities.”

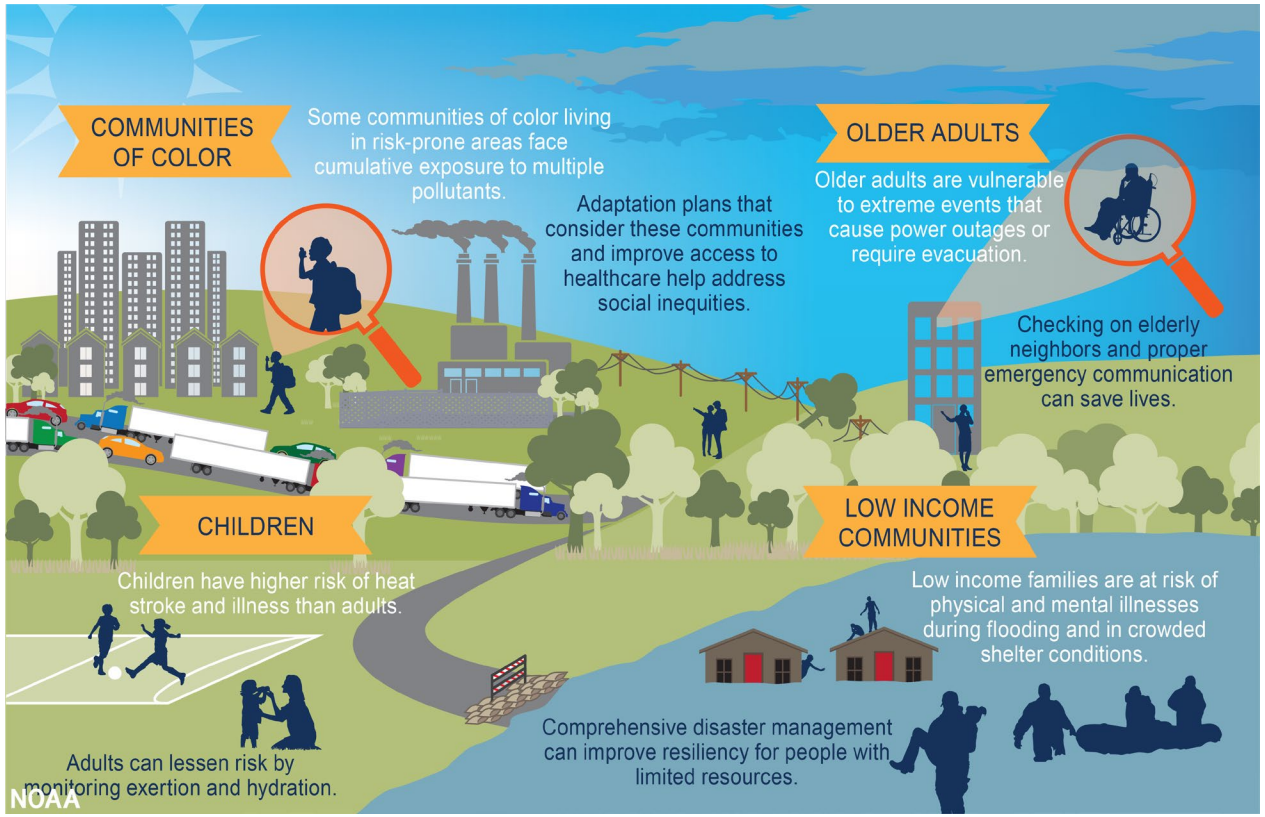
New Topic

Theme

Climate change:

- Build capacity in climate change research and resiliency.
- Must include communities that are disproportionately affected by climate change.

https://www.nsf.gov/pubs/2022/nsf22068/nsf22068.pdf



From NOAA: Health Impacts

Research Areas for Climate Change

- Air Quality
- Climate Change Tools to Protect Public Health and the Environment
- Community Resilience
- Ecosystems
- Energy Transformation and Climate Change Research
- Human Health
- Water Quality
- Wildland Fires

EPA

Topics

Adaptation and Resilience
Agriculture and Forestry
Bioenergy
Buildings and Infrastructure
Climate Change
Climate Diplomacy
Climate Finance
Conservation
Electrification
Energy Efficiency
Energy Transmission and Storage
Environmental Justice
Fossil Fuels
Hydrogen and Fuel Cells
Industry and Manufacturing
National Security and Energy Independence
Nuclear Energy
Public Health
Renewable Energy
Rural Development
Transportation
Waste Management and Recycling
Workforce

Environmental and Energy Study Institute

FY23 RII Track-2 AWARDS

Supporting rural livelihoods in the water-stressed Central High Plains: Microbial innovations for climate-resilient agriculture (MICRA), Kansas State University, University of Nebraska-Lincoln and Langston University

Developing effective adaptation strategies to enhance the resilience of farmers under changing climate, Auburn University

Center for Climate Conscious Agricultural Technologies (CCAT), South Dakota State University

RURAL CONFLUENCE: Communities and Academic Partners Uniting to Drive Discovery and Build Capacity for Climate Resilience, Oklahoma State University, Louisiana State University, and University of Nebraska-Lincoln

An interdisciplinary program for research, education, and outreach on climate change and adaptive resilience in the Yazoo - Mississippi Delta, Mississippi State University

Community-Driven Coastal Climate Research & Solutions (3CRS) for the Resilience of New England Coastal Populations, Brown University

STORM: Data-Driven Approaches for Secure Electric Grids in Communities Disproportionately Impacted by Climate Change, University of Maine, South Dakota State University, University of Puerto Rico at Mayagüez and University of Alaska Fairbanks

Where We Live: Local and Place Based Adaptation to Climate Change in Underserved Rural Communities, University of Idaho; University of South Carolina; and University of Nevada, Reno

Advancing Social and Environmental Equity through Plastics Research: Education, Innovation, and Inclusion (ASPIRE), University of Southern Mississippi

Sustainable Engineering Infrastructures and Solutions for Tribal Energy Sovereignty, University of North Dakota

Promoting N2O- and CO2-Relieved Nitrogen Fertilizers for Climate Change-Threatened Midwest Farming and Ranching, Iowa State University and Wichita State University

To be successful, projects must:

- **Have a clear focus on Broadening Participation**
  - seeks to create a significant and collective impact on targeted jurisdictions by advancing the quality of life of disproportionately affected populations and thus enhancing jurisdictions' awareness of the socio-economic impact of climate change.
- **Have clear focus on Social Perspectives**
  - It is expected that projects include components that address understanding and assessing any specific disruptive impacts of the research for the betterment of these populations.
  - The development of innovative educational plans to prepare a skilled technical workforce, at all levels, to adapt to and understand climate change and climate resiliency and the social and economic impacts on the jurisdiction(s).
- **Retain a focus on developing early career faculty**

Clarifications

- Important Thoughts….
  - Workforce Development
    - develop workforce activities that are integrated with the research and education components of the project
    - provide trainees with skills to work easily across disciplinary and other perceived boundaries and able to integrate as appropriate within the chosen science as defined by the project
    - provide early career faculty mentoring and training
  - Evaluation and Assessment Plan
    - aid in the identification of outcomes and impacts of the project's goals and objectives as well as a tool for providing effective feedback to the management team

Solicitation: *"An independent expert evaluator must provide annual evaluation and assessment of the project. In addition, quantitative collection is required as part of the centralized project output data collection (see below) and should be used in concert with any additional quantitative or qualitative data collected by the required independent evaluator."*

Clarifications

- Management and Implementation
  - Management Plan includes the roles and responsibilities of key personnel,
  - How the PI and co-PIs plan on communicating and coordinating with each other and the project team
  - How project output and data-collection will be integrated into evaluation mechanisms, and how the project's administrative requirements will be managed across all areas.
  - If funded administrative staff are included, how are they expected to support the project on a full- or part-time basis.

Letters of Commitment

- A maximum of five Letters of Commitment of two pages or less may be included
- NO Letters of Collaboration

Solicitation: *“No Letters of Collaboration should be included for both the established and new collaborations included in this project, as the role and extent of involvement should be clearly outlined in the Project Description. However, up to a maximum of five Letters of Commitment of two pages or less from other partners or jurisdictional officials may be included to support commitment that will be relied upon beyond the collaboration among the core project investigators."*

Key Dates

Letter of Intent

Third Tuesday in December: **December 21, 2023**

Final Proposal

Fourth Tuesday in January: **January 26, 2023**

Track-2 Chat with Program Officers:

Oct 26, 2023 02:30 PM EST

Nov 29, 2023 02:30 PM EST

Dec 20, 2023 02:00 PM EST

Link:

https://new.nsf.gov/funding/initiatives/epscor/epscor-investment-strategies

Select: “RII Track-2”

Office Hour Dates & Times:

•Thursday, October 26 at 2:30pm EDT Register here: https://nsf.zoomgov.com/meeting/register/vJItce2spz8uGxy5IFY_eZG3DtSnFvy3L8Y

•Wednesday, November 29 at 2:30pm EDT Register here: https://nsf.zoomgov.com/meeting/register/vJItde6upj8pE748IYEQei0ai8ot3p13Ol0

•Wednesday, December 20 at 2:00pm EDT Register here: https://nsf.zoomgov.com/meeting/register/vJIsf-Copj4oHa-kDl4ISBlcRmIzkHHSN54

Questions and Contact Information

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