



DIRECTOR'S REMARKS

NATIONAL SCIENCE BOARD MEETING

Sethuraman Panchanathan, U.S. National Science Foundation

July 24, 2024

NSB-NSF

PARTNERSHIP

NSB-NSF PARTNERSHIP

NSF welcomes new NSB Chairman,

Dr. Darío Gil



Image credit: Timothy Dalton/IBM



Image Credit: U.S. National Science Foundation



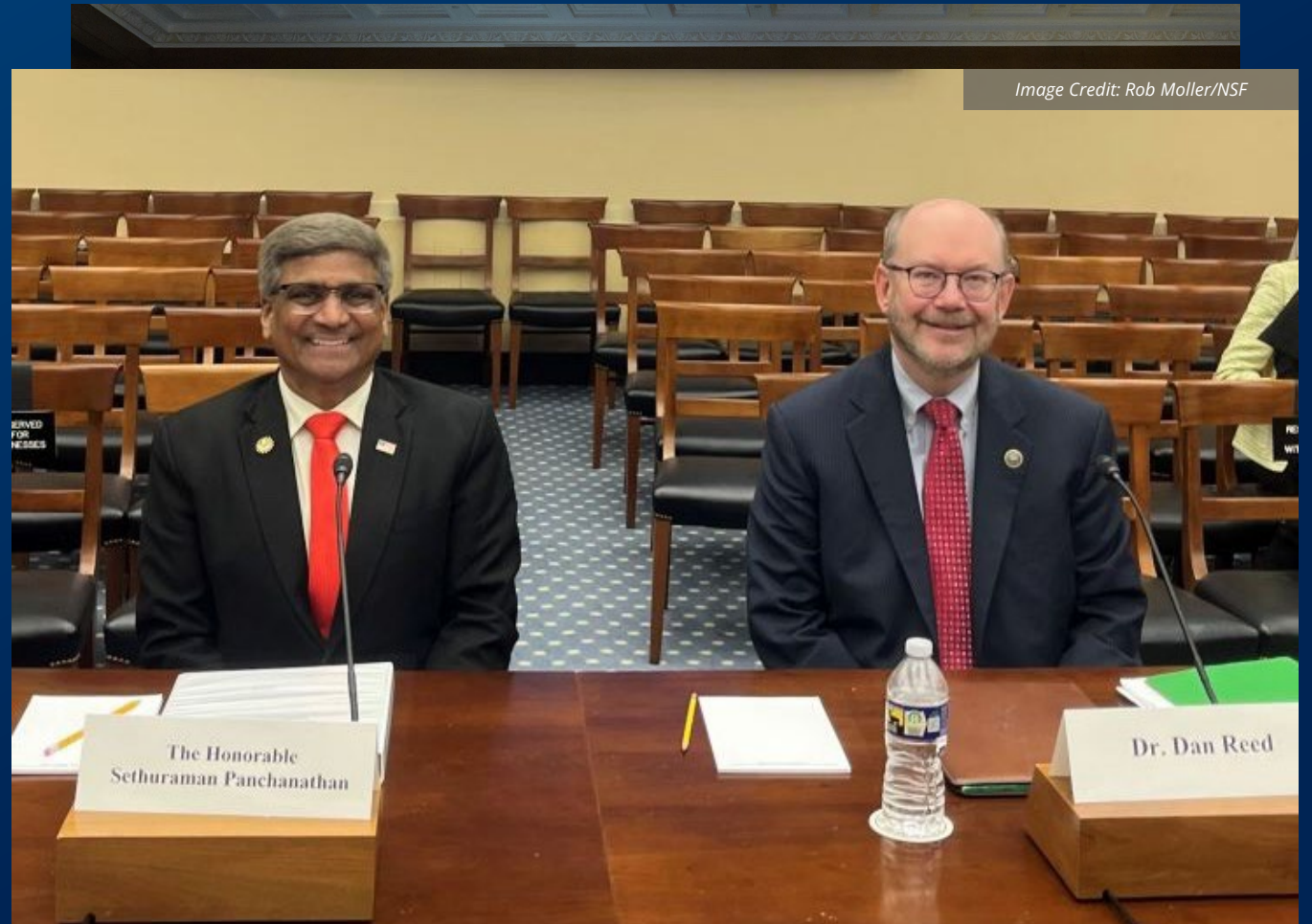


UPDATES FROM THE HILL

*House Committee on Science, Space
and Technology Subcommittee on
Research and Technology*

Oversight and Examination of the U.S.
National Science Foundation's Priorities
for 2025 and Beyond

May 16, 2024



*Senate Committee on Appropriations
Subcommittee on Commerce, Justice,
Science, and Related Agencies*

Review of the President's Fiscal Year
2025 Budget Request for the
National Aeronautics and Space
Administration and for the U.S.
National Science Foundation

May 23, 2024



FY2025

\$9.26 BILLION

HOUSE APPROPRIATIONS COMMITTEE





NSF'S STRATEGIC PRIORITIES

STRENGTHENING ESTABLISHED NSF

With **investments that expand the frontiers of knowledge and discovery**

INSPIRING MISSING MILLIONS

Using **capacity building and interventions** that enhance and broaden participation

ACCELERATING TECHNOLOGY AND INNOVATION

Through innovative, **cross-cutting partnerships** and programs





STRENGTHENING

ESTABLISHED NSF

NSF Trailblazer Engineering Impact Award

- Inaugural program to enable researchers to pursue novel engineering research projects
- **6 Trailblazers** to receive **\$3M** each leading projects in biotechnology, sustainability, quantum technology, and more
- Catalyzes the convergence of engineering and science domains that ultimately strengthen U.S. resilience and competitiveness



NSF Trailblazer



Image Credit: USFS

Gabriel López, *University of New Mexico*

- Developing an innovative model for **wildfire mitigation and forest sustainability** through the creation of bio-based chemical feedstocks from forest debris
- **Broadening participation** with Native American and Hispanic communities that rely on forest health in North Central New Mexico





LEADERSHIP-CLASS
COMPUTING FACILITY



NSF LCCF

Leadership-Class Computing Facility

- Construction has begun for a cutting-edge LCCF led by Texas Advanced Computing Center at the University of Texas at Austin
- Partnerships with multiple institutions, including HBCUs, will ensure broad access and advance AI and computational research across the U.S.
- To enhance **NAIRR**'s ability to support at-scale AI research across a diverse range of fields

INSPIRING

MISSING

MILLIONS

Building the **WORKFORCE** for the **FUTURE**



Image credit: Christina S. Murrey, College of Education, University of Texas at Austin



Image credit: Ocean Observatories Initiative



Image credit: Allison Heaslet / Alaska Native Science & Engineering Program

NRT



NSF RESEARCH TRAINEESHIP PROGRAM





Dr. Karletta Chief

Principal Investigator of the Indigenous Food Energy Water Security Sovereignty Training (Indige-FEWSS) Program at the University of Arizona

- **Leads an NRT** aimed at developing a **diverse workforce** with **intercultural awareness** and expertise in **FEWS for Indigenous communities**
- Training **39 graduate students** to **partner with Indigenous communities** and **create sustainable solutions** through cultural immersion and pilot projects with the Navajo Nation

NSF RESEARCH TRAINEESHIP PROGRAM (NRT)



Celebrating A Decade Of Investments In The STEM Workforce

2014

2024



190

PROJECT AWARDS

45

STATES

3,000

NRT-SUPPORTED STUDENTS

119

ACTIVE PROJECTS AWARDS

20

EPSCoR JURISDICTIONS

116

INSTITUTIONS

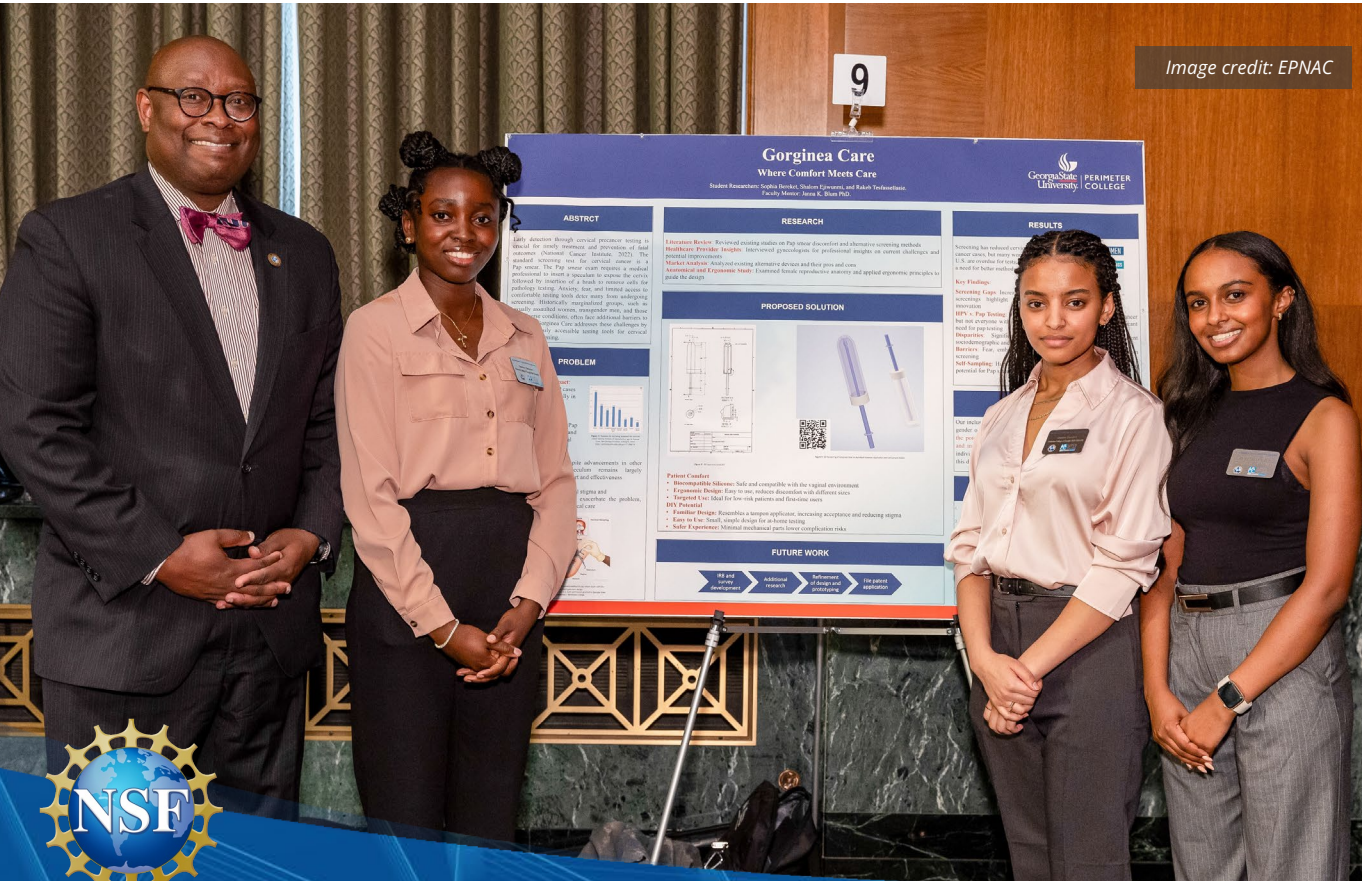
5,000

TRAINEES PREPARED





NSF Community College Innovation Challenge



First Place Winner (Pictured)

Perimeter College at Georgia State University, Georgia: Addressing cervical cancer mortality rates, especially in low-income countries, through a noninvasive screening alternative.

Second Place Winner

Dallas College, Texas: Protecting agricultural land with the Autonomous Monitoring for Blaze Emergency Response (AMBER) early detection system.

Third Place Winner

County College of Morris, New Jersey: Safely and efficiently increasing the world's energy supply through a molecular solar thermal system.



ACCELERATING

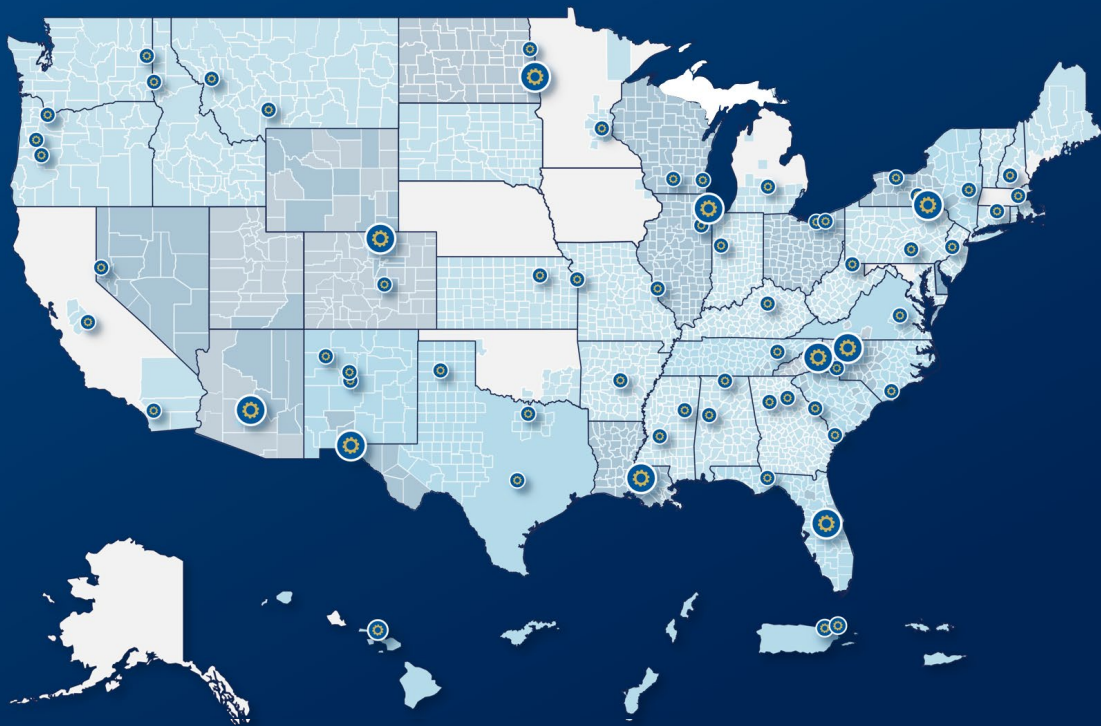
TECHNOLOGY, INNOVATION AND PARTNERSHIPS

COLLABORATING FOR THE FUTURE ECONOMY



NSF ENGINES

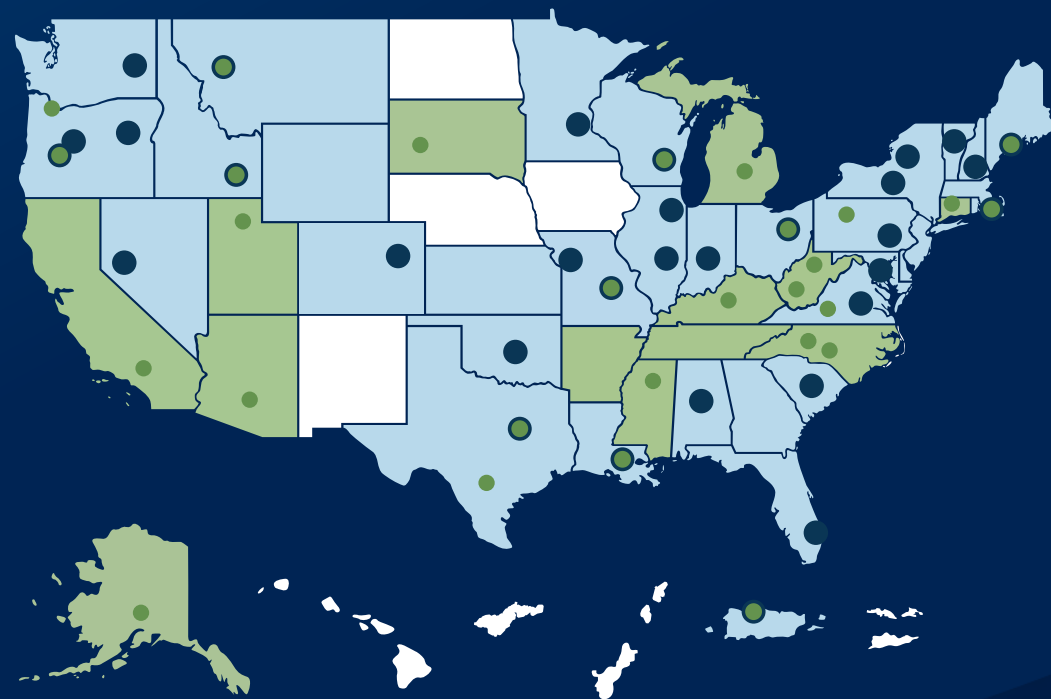
- NSF Engines (Type 1)
- NSF Engines (Type 2)



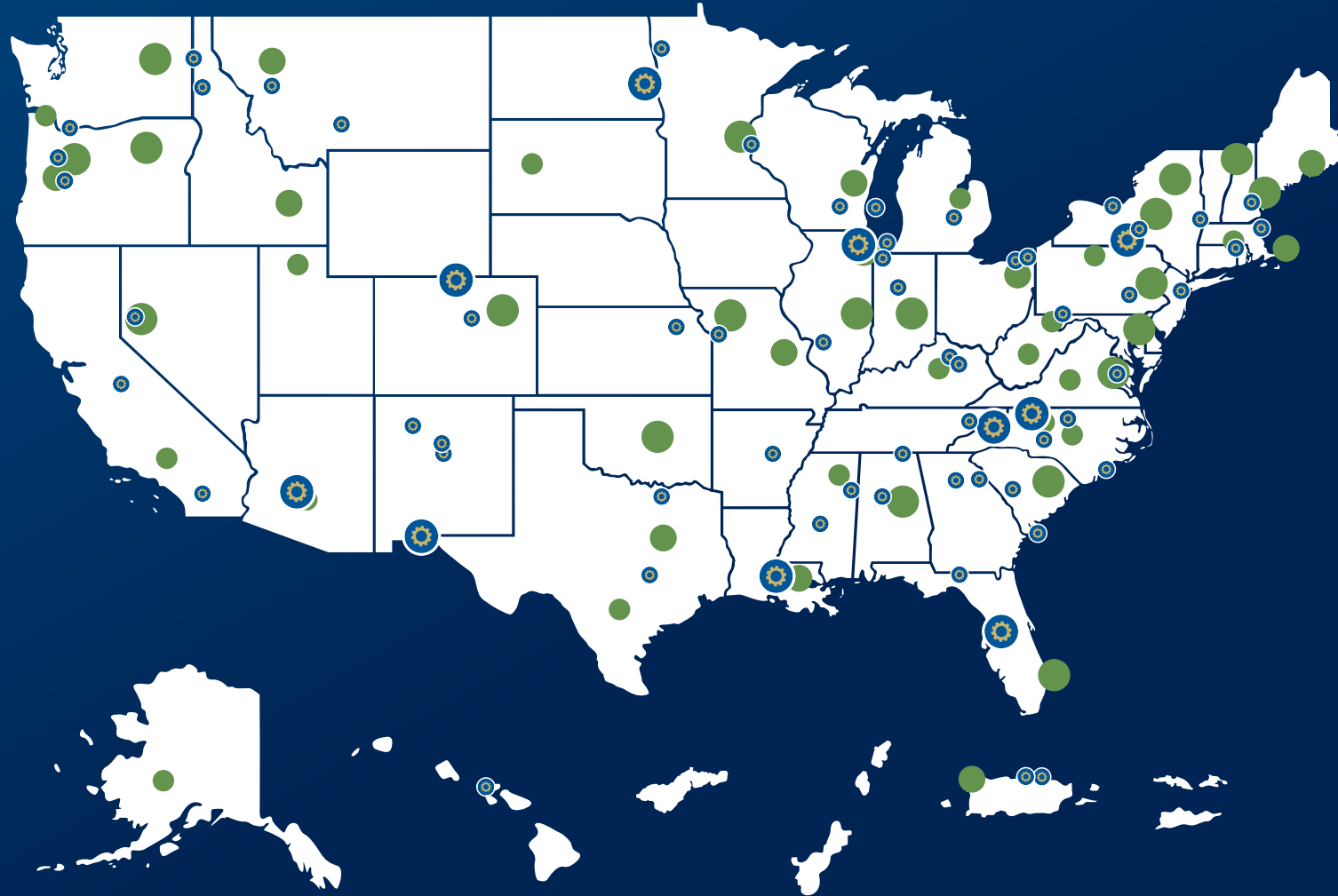
TECH HUBS

U.S. Economic Development Administration

- Designee HQ
- SDG Recipient HQ
- Designee and SDG Recipient HQ
- Designee States Served
- States Served by Only SDG



COLLABORATING FOR THE FUTURE ECONOMY



COLLABORATING FOR THE FUTURE ECONOMY

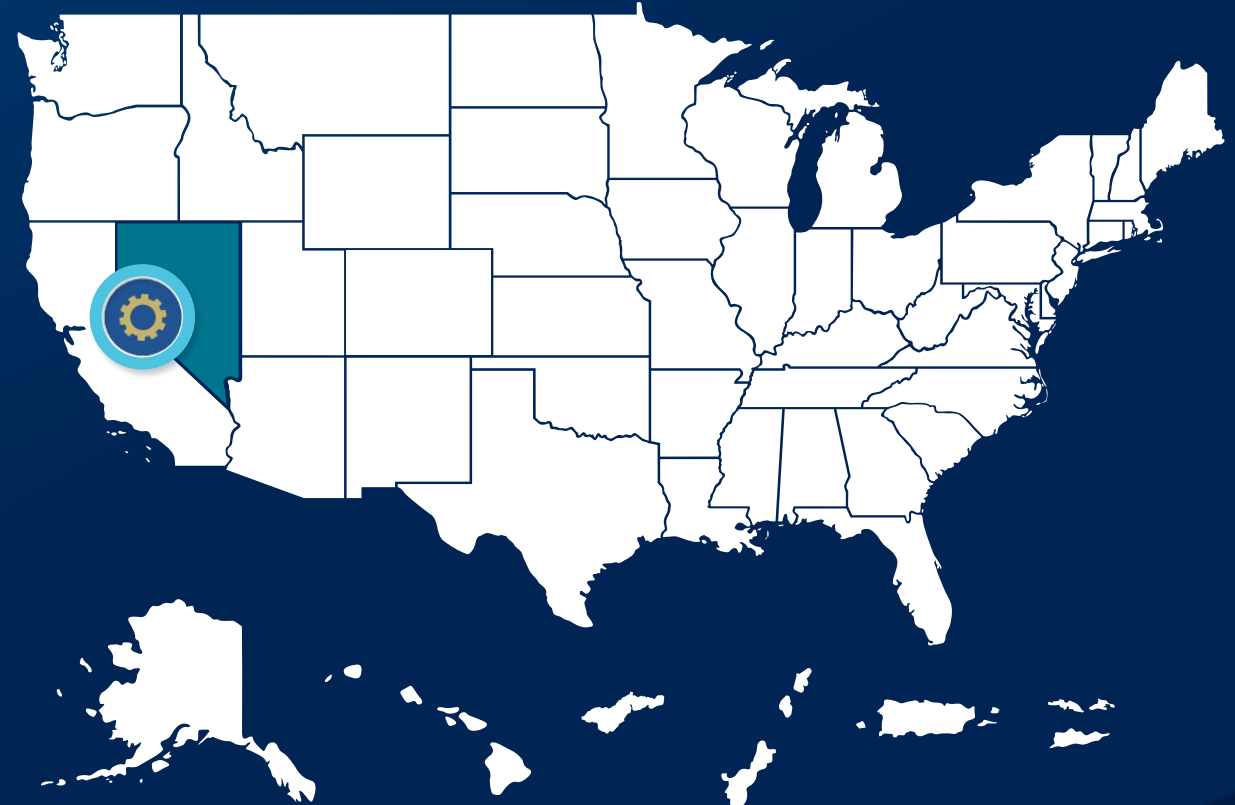
RENO, NEVADA

POWERING THE INDUSTRIES OF TOMORROW

\$1M NSF Development Award:
Circular Economy for Lithium Batteries

\$21M EDA Tech Hub Award:
Lithium Batteries and Other EV Material Loop

- Over 80 business, academic, non-profit, and government partners.
- Over 50,000 STEM jobs estimated to be created.
- A home-grown powerhouse for a critical industry in the future economy.



COLLABORATING FOR THE FUTURE ECONOMY

LOUISIANA

LEADING THE TRANSITION TO
THE ENERGIES OF TOMORROW

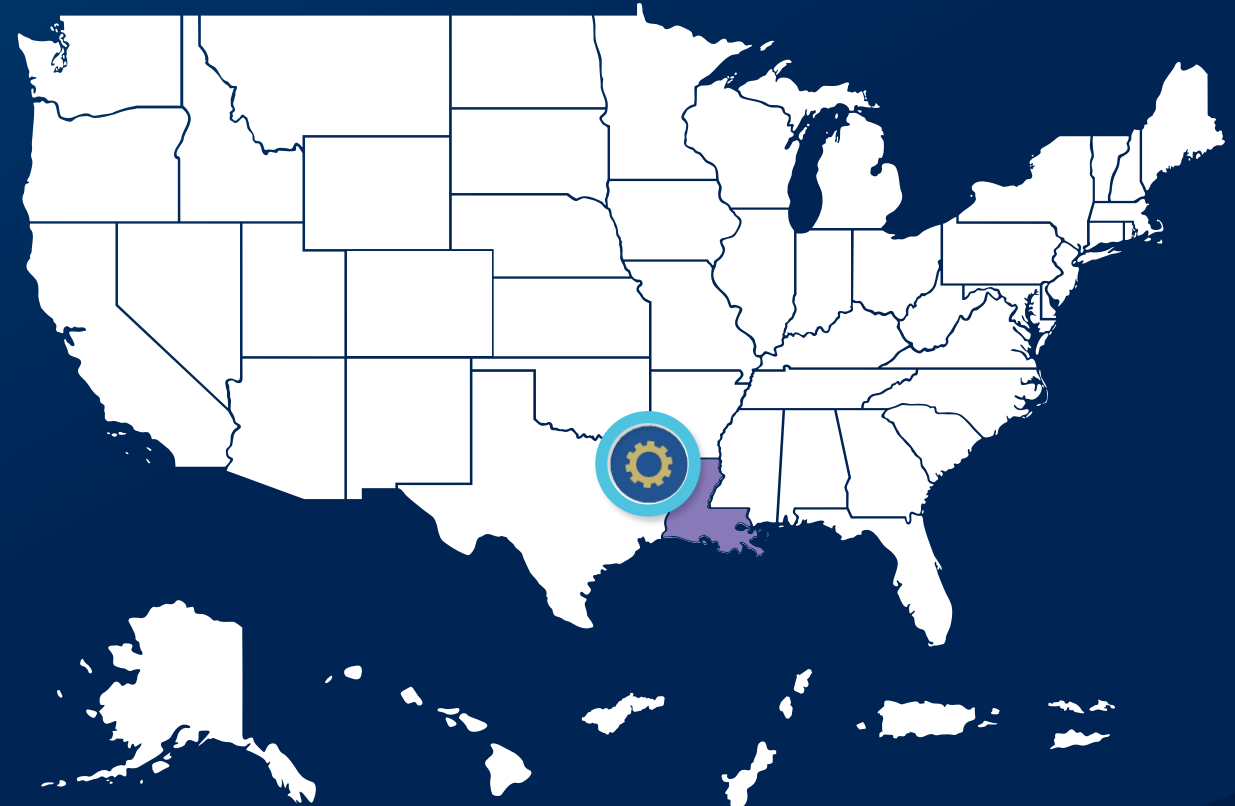
\$15M NSF Engine Award

Louisiana Energy Transition Engine

\$450K EDA Strategy Development Grant

Gulf Louisiana Offshore Wind Propeller

- Over 60 business, academic, non-profit, and government partners
- Over 250,000 oil and gas jobs to transition to clean energy
- An American energy revolution for cleaner, cheaper domestic fuel



COLLABORATING FOR THE FUTURE ECONOMY

BINGHAMTON, NEW YORK

STORING THE ENERGY FOR
A BRIGHTER TOMORROW

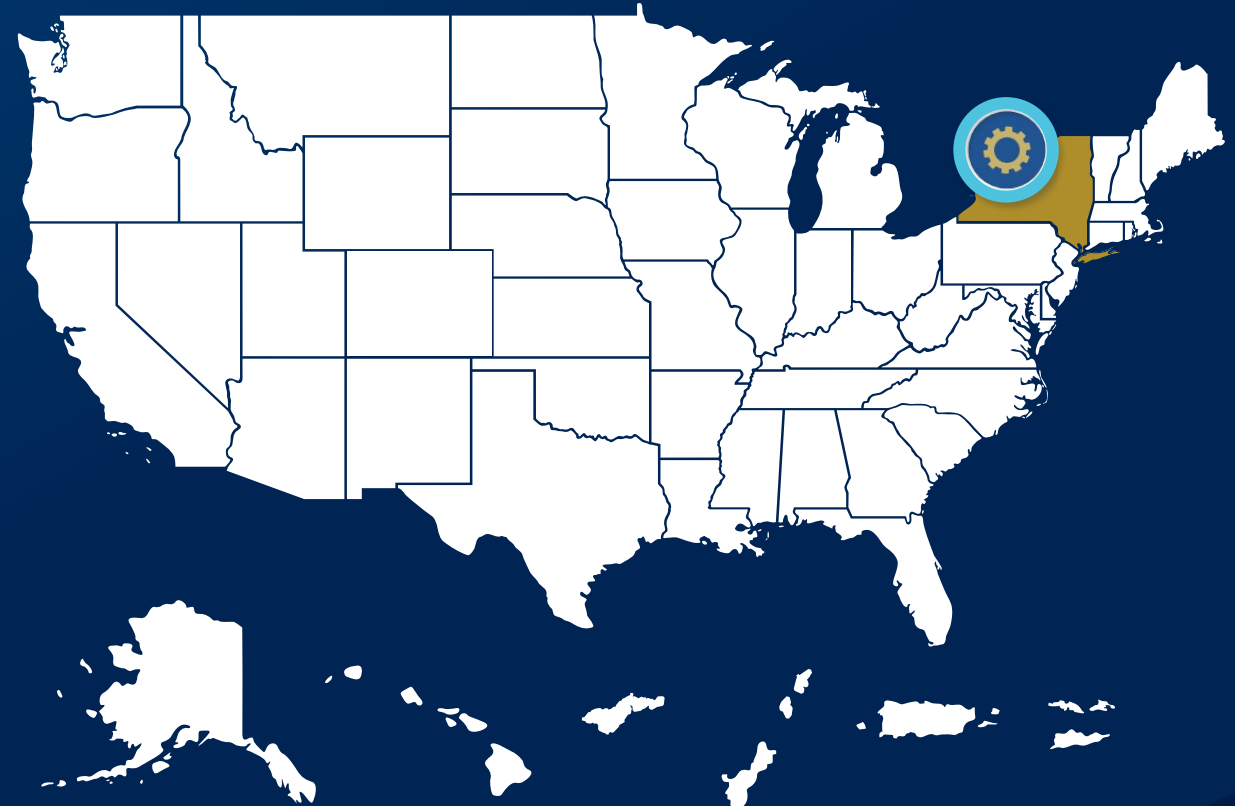
\$15M NSF Engine Award:

Upstate New York Energy Storage Engine

EDA Tech Hub Designee:

New Energy New York Battery Tech Hub

- 50 business, academic, non-profit, and government partners
- 27 counties involved
- The cutting edge of next-gen batteries developed on American soil.



HEART MONITOR



CONGRESSIONAL ENGAGEMENTS



New Hampshire Business Day Luncheon
with Sen. Jeanne Shaheen

June 12, 2024





ENGAGEMENTS

Image credit: Charlotte Geary/NSF

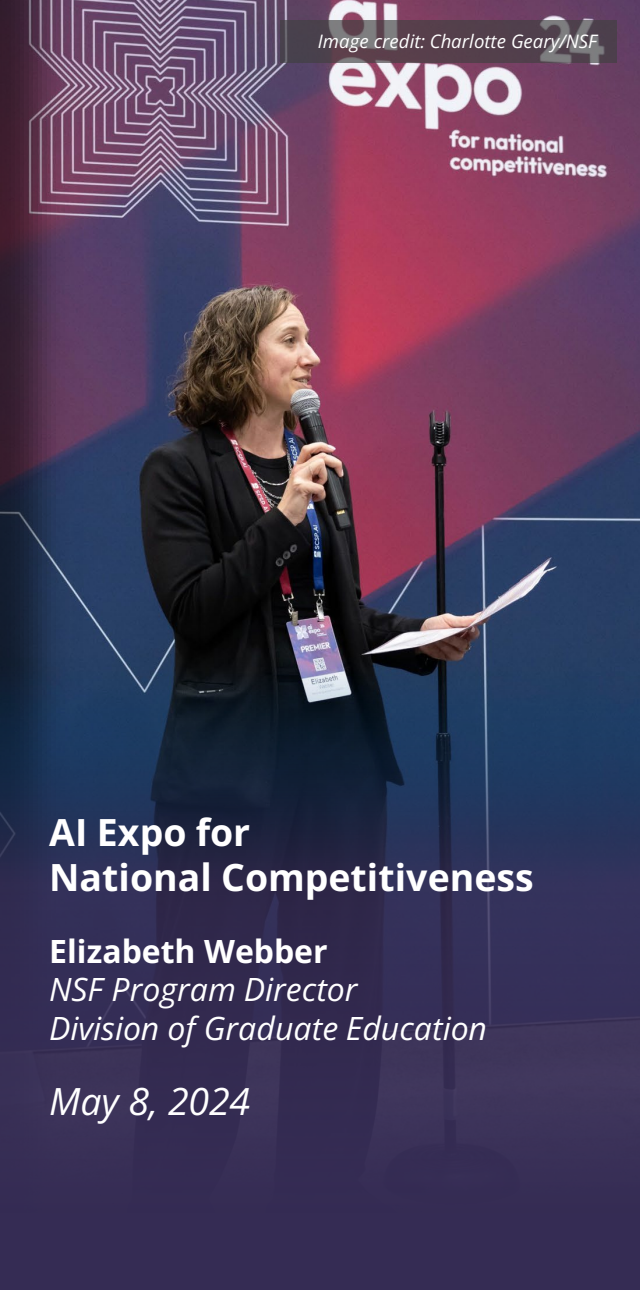


Opportunities at the AI Research Frontier OSTP

May 6, 2024



Image credit: Charlotte Geary/NSF

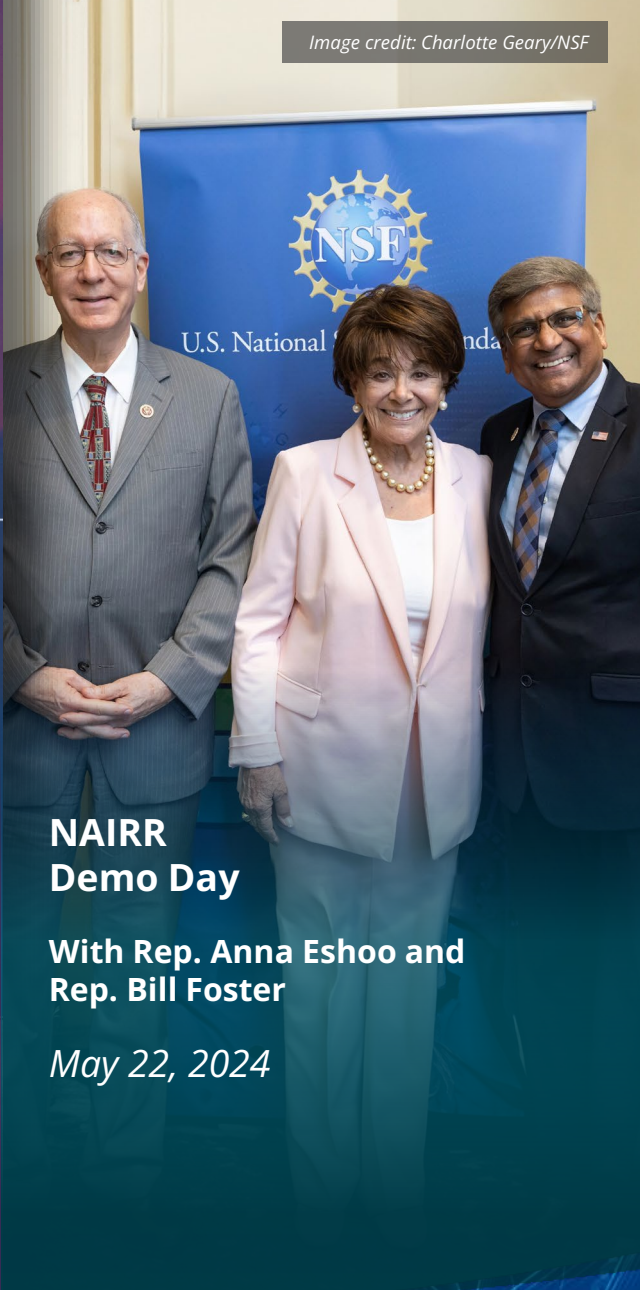


AI Expo for National Competitiveness

Elizabeth Webber
NSF Program Director
Division of Graduate Education

May 8, 2024

Image credit: Charlotte Geary/NSF



NAIRR Demo Day

With Rep. Anna Eshoo and
Rep. Bill Foster

May 22, 2024

Image credit: Charlotte Geary/NSF



AI Aspirations: R&D for Public Missions event

AI Institute for Agriculture

June 13, 2024

INTERNATIONAL ENGAGEMENTS

INTERNATIONAL ENGAGEMENTS

Global Research Council (GRC) 12th Annual Meeting

*Interlaken, Switzerland
May 28, 2024*



India – U.S. Initiative on Critical and Emerging Technologies

*New Delhi, India
June 17, 2024*



NSF – Korea Collaborations

*Seoul, South Korea
July 15, 2024*



CHIEF MANAGEMENT OFFICER INTRODUCTION



MICAH CHEATHAM



Senior Executive Introductions

Mr. Francisco Ruben

Agency Ethics Official (DAEO) & Senior Assistant General Counsel

Mr. Victor Powers

Division Director, Division of Administrative Services (DAS) in the Office of Information and Resource Management (OIRM)

Dr. Felecia Nave

Division Director in the Division of Equity for Excellence (EES) in the Directorate for STEM Education (EDU)

Dr. Kathryn Jablokow

Deputy Division Director, Division of Research, Innovation, Synergies, and Education (RISE) in the Directorate for Geosciences (GEO)

Dr. John-David Swanson

Section Head for Innovation Programs within the Division of Innovation and Technology Ecosystems (ITE) in the Directorate for Technology, Innovation and Partnerships (TIP)



DIRECTOR'S AWARDS

CELEBRATING NSF'S OUTSTANDING STAFF

Excellence, Public Service, Learning, Inclusion, Collaboration, Integrity, and Transparency

Recognizing Individuals or Groups:

- Administrative Excellence
- Meritorious Service
- Distinguished Service
- Leader of Change/Innovation
- Superior Accomplishment (Individual)
- Superior Accomplishment (Leads and Members)

Special Awards:

- Esther F. Gist for Labor Relations
- Achievement in Equal Opportunity or Diversity, Equity, Inclusion
- Outstanding Mentorship

Expanding and encouraging an inclusive process in 2024:

- More time for nomination submissions, directorate/office reviews, and final panel discussions
- Provided instructions for Nominators on narrative submission, including samples in respective award categories.

2023

472

Employees
Nominated

2024

697

Employees
Nominated





