

EPSCoR 101: **Stimulating Competitive Research**

UAH NSF Advance Group Meeting

Friday, November 11·11:30am – 1:00pm



EPSCoR 101: Stimulating Competitive Research



Katie Echols, PhD

MS EPSCoR Project Administrator

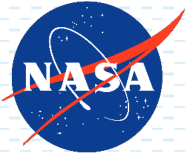
katie@research.misstatae.edu

(662) 325-3570

EPSCoR Agencies



National Science Foundation



National Aeronautics and Space Admin.



Department of Defense



Department of Energy



US Dept. of Agriculture



National Institutes of Health

Experimental Program to Stimulate Competitive Research

NSF EPSCoR Established: 1979

- 1985 AL became an NSF EPSCoR state
- 1987 MS became an NSF EPSCoR state

“To stimulate competitive research in regions of the country that were less able to compete successfully for research funds.”

Eligibility: A state, US territory or US commonwealth that receives less than or equal to 0.75 percent of NSF research funding averaged over the preceding three years.

Established Program to **S**timulate **C**ompetitive **R**esearch

NSF EPSCoR Established: 1979

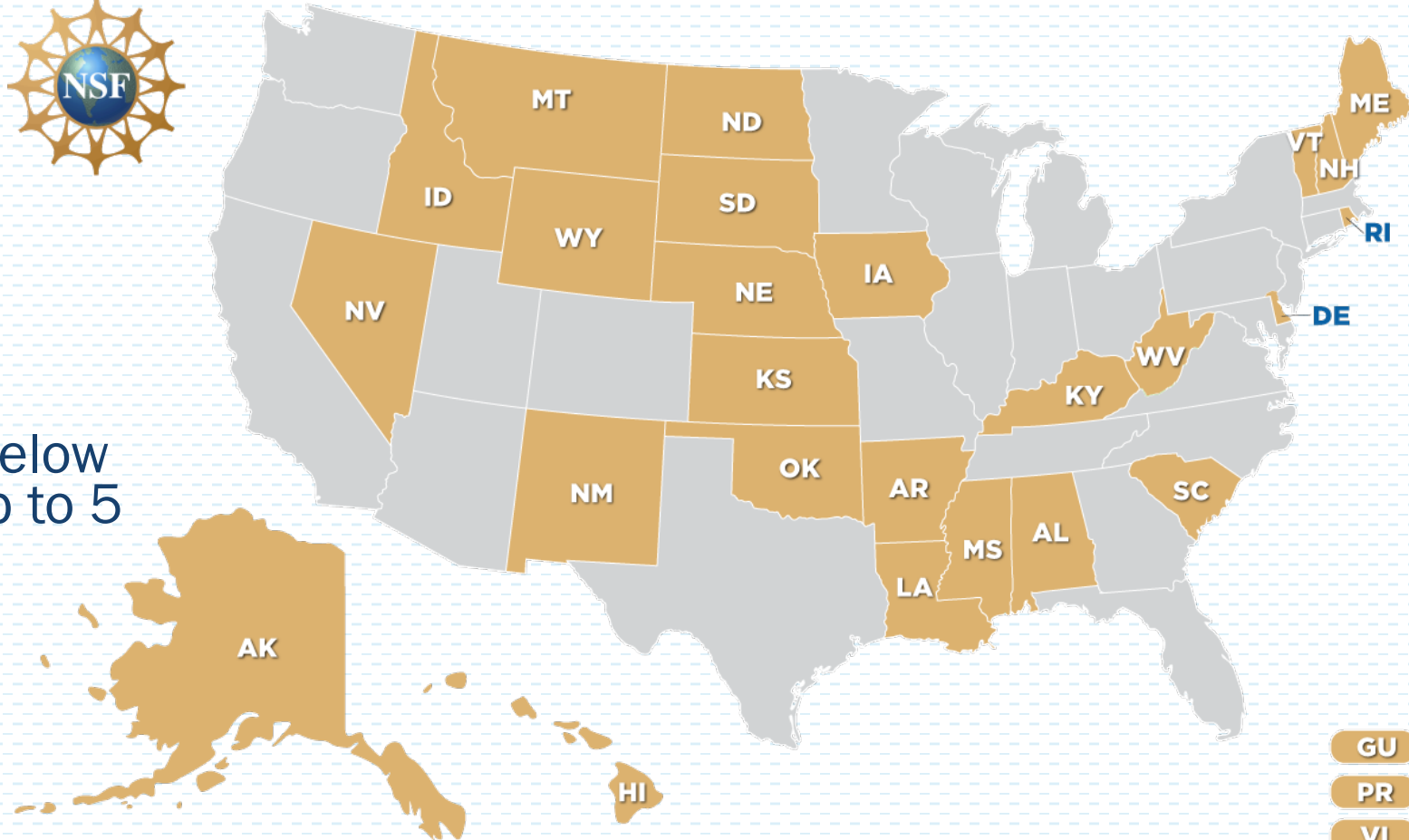
- 1985 AL became an NSF EPSCoR state
- 1987 MS became an NSF EPSCoR state

“To stimulate competitive research in regions of the country that were less able to compete successfully for research funds.”

Eligibility: A state, US territory or US commonwealth that receives less than or equal to 0.75 percent of NSF research funding averaged over the preceding three years.

NSF EPSCoR Jurisdictions

- 28 eligible jurisdictions
- Graduated jurisdictions
 - *Missouri*
 - *Tennessee*
 - *Utah*
 - *Iowa (re-eligible 2019)*
- Jurisdictions above .75% but below .80% can remain eligible for up to 5 years.
 - *Alabama* ➔ .74%
 - *Mississippi* ➔ .26%



NASA and the Department of Energy EPSCoR programs use NSF eligibility.

National Science Foundation



Goals:

- Catalyze research capability across and among jurisdictions
- Establish STEM professional development pathways
- Broaden participation of diverse groups/institutions in STEM
- Effect engagement in STEM at national and global levels
- Impact jurisdictional economic development

Major Initiatives:

- Research Infrastructure Improvement (RII) – Track-1, 2, 4, & BEC
- Co-funding
- Outreach Funding

NSF EPSCoR RII Programs



RII Track 1 (NSF 22-599): One per jurisdiction

- 5 year, \$20M cooperative agreements
- 20% cost share requirement
- State committees determine project topic that align with S&T plan.
- Letter of intent due: July Full proposal: August



AL Executive Director
Christopher Lawson
University of AL, Birmingham



MS State Director
Julie Jordan
Mississippi State University



NSF EPSCoR RII Programs



Alabama RII Track-1 (alepscor.org)

CPU2AL: Connecting the Plasma Universe to Plasma Technology in Alabama

Lead Institution: University of Alabama in Huntsville PI: Gary Zank

Award Period: 9/1/2017 – 8/31/2022



Future Technologies and Enabling Plasma Processes

Award Period: 9/1/2022 – 8/31/2027

Mississippi RII Track-1 (msepscor.org)

Center for Emergent Molecular Optoelectronics (CEMOs)

Lead Institution: Mississippi State University PI: Julie Jordan

Award Period: 10/1/2018 – 9/30/2023



NSF EPSCoR RII Programs



RII Track 2 FEC (NSF 22-523): One per institution

- \$1M - \$1.5M per year for four years
- Letter of Intent Due: November Full Proposal Due: January
- Theme changes every two years.
 - *2023 Theme: "advancing climate change research and resilience capacity to expand opportunities for disproportionately affected communities."*
- Must collaborate with at least 1 other EPSCoR jurisdiction
 - *Eligible for \$1.5M/year when the proposal includes 3 jurisdictions*

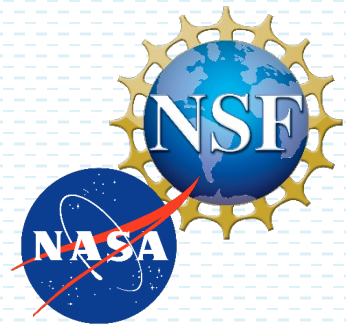
NSF EPSCoR RII Programs



RII Track 4: EPSCoR Research Fellows NSF Track (NSF 22-573) – Limit 3 per institutions

- \$300,000 for two years
- Full Proposal Due: April 2023
- Opportunities for investigators in pre-tenure/non-tenure track positions
- Develop individual research potential through extended collaborative visits to national, governmental or academic research centers
- Any research topic supported by NSF directorates will be considered.
- Persons with transitional fixed-term postdoctoral positions are not eligible.

NSF EPSCoR RII Programs



RII Track 4: EPSCoR Research Fellows FAST Track (NSF 22-573)

– Limit 6 per institutions

- \$300,000 for two years, additional \$60,000 can be requested for equipment
- Full Proposal Due: April 2023
- Opportunities for investigators in pre-tenure/non-tenure track positions
- Develop individual research potential through extended collaborative visits to **NASA research facilities** located at NASA Centers
- Persons with transitional fixed-term postdoctoral positions are not eligible
- Only for PIs from MSIs, PUIs, 2-year colleges, women's colleges

NSF EPSCoR RII Programs



RII BEC: Bridging EPSCoR Communities (NSF 22-536) – no limits on #

- \$1M for five years to set up bridge programs
- Full Proposal Due: April 2023
- Intended to support individuals most strongly affected by the pandemic at vulnerable career transition points (first two years of college, preparation into grad school, entry to STEM workforce, etc.)



NSF EPSCoR Co-Funding



Goal: To accelerate the movement of EPSCoR researchers and institutions into the mainstream of NSF support.

- Funding mechanism for “fund-if-possible” proposals*
- Not a program with a unique RFP*
- Managing Program Manager must request from EPSCoR office*
- Proposals must align with EPSCoR priorities for co-funding*

NSF EPSCoR Co-Funding



EPSCoR Programmatic Priorities:

- Researchers with no active NSF awards in 3 years
- Collaborative efforts across jurisdictions
- Cross-discipline, cross-directorate or NSF-wide funding opportunities
- NSF investments and funding priorities in current fiscal year
- Enhancing participation of underrepresented individuals, organizations and/or institutions
- Equipment that builds institutional/jurisdictional research capacity
- Enhances institutional research capacity and competitiveness
- Training K-12 students/teachers
- Activities that exemplify NSF's commitment to the integration of research and education

NSF EPSCoR Outreach Funding



EPS-WO: Workshop Opportunities (NSF 19-588)

- *Up to \$100,000 for one year*
- *5-10 awards per year*
- *No cost-share requirement*
- *Not intended to proposal development*
- *Topic: Any topic, including the exploration of topic areas that have been described as NSF priorities*
 - Must be of importance to relevant science or engineering fields
 - Must be of particular interest to the greater EPSCoR community (multi-jurisdictional)
 - Inclusive of underrepresented groups

US Department of Agriculture



2.) Sabbatical Grants

- Up to one year of salary, funds for travel & supplies; mini-sabbaticals also appropriate

3.) Equipment Grants

- 50% of cost or \$50,000 (whichever is less) for one piece of equipment in the range of \$10,000-250,000
- Require non-federal matching, but waivers (<\$25K) for lowest one third institutions are available

4.) Strengthening Grants:

- Single function (research, education, extension) or integrated standard grants
- Conference grants
- Coordinated Agriculture Project (CAP) grants



AL EPSCoR USDA Director
Frank Bartol
Auburn University

Department of Defense

Eligibility: based on how much DoD S&E Research and Development funds were obligated to IHE within the state/territory over a three-year average.

34 states, Puerto Rico, Guam, and U.S. Virgin Islands

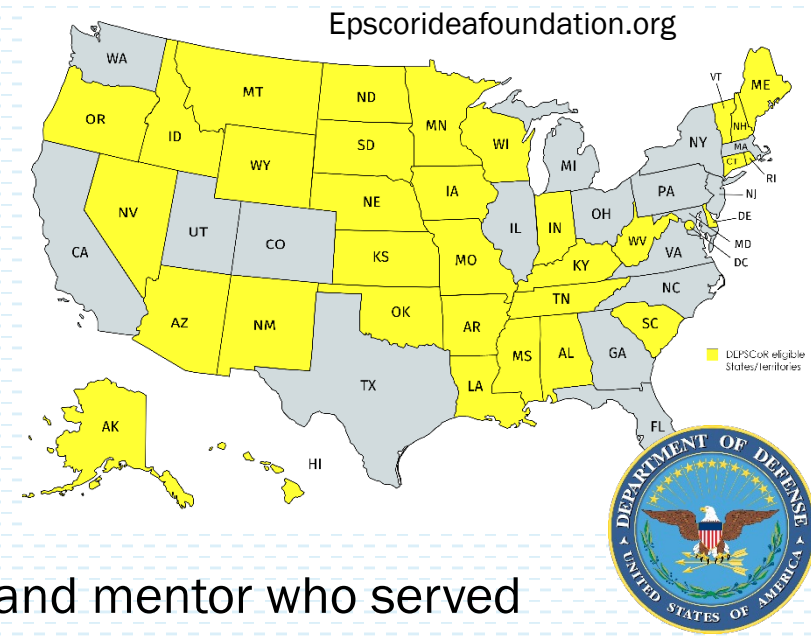
Thrust 1: Research Collaboration DEPSCoR Competition

- Basic research project with 2-person team (PI with no prior DOD award and mentor who served as DOD-funded PI after October 2015)
- \$200,000/year for three years (no cost share required) – Anticipate funding 25 projects

Thrust 2: Capacity Building DEPSCoR Competition

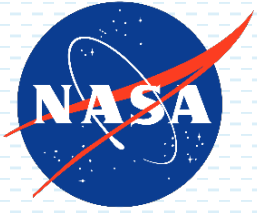
- Focuses on **capacity building through human, technical and management resources** involving research in areas of high relevance to DOD.
- \$500,000/year for two years (no cost share required) – Anticipate funding 4 projects

Thrust 3: DEPSCoR Education and Outreach



National Aeronautics & Space Administration (NASA)

Established and authorized in 1993



Two Types of NASA EPSCoR Awards:

1. EPSCoR Cooperative Agreement Notice (CAN) for Research Awards:

- *Provides up to \$750,000 over three years (50% cost sharing required)*
- *Awards 1 proposal*

2. Research Infrastructure Development (RID) Awards

- *Provides up to \$125,000 a year for three years (100% cost sharing required)*
- *Solicitation released every three to five years based on funding*
- *Enables jurisdictions to build and strengthen relationships with NASA*

3. EPSCoR International Space Station (ISS) Flight Opportunity Awards

- *100% cost sharing*
- *Solicitation released annually (subject to funding availability)*

National Aeronautics & Space Administration (NASA)



Alabama NASA EPSCoR

Dale Thomas

AL Agency Director

University of AL, Huntsville

<https://www.uah.edu/alabama-nasa-epscor>

Current NASA EPSCoR Awards for Alabama

Award Type	Total Number of Awards	Amount of Award	Period of Performance
NASA EPSCoR Research Infrastructure Development	1	\$1,000,000	2022-2027
NASA EPSCoR International Space Station Flight Opportunity	2	\$200,000	2018-2023
NASA EPSCoR Suborbital Flight Opportunity	1	\$298,221	2021-2024
NASA EPSCoR Rapid Response Research	10	\$1,000,000	2018-2022
NASA EPSCoR Research Award	3	\$2,250,000	2018-2024

Current NASA EPSCoR Awards for Mississippi

Award Type	Total Number of Awards	Amount of Award	Period of Performance
NASA EPSCoR Research Infrastructure Development	1	\$1,000,000	2022-2027
NASA EPSCoR International Space Station Flight Opportunity	3	\$300,000	2017-2023
NASA EPSCoR Suborbital Flight Opportunity	1	\$248,457	2021-2024
NASA EPSCoR Rapid Response Research	0	0	-
NASA EPSCoR Research Award	2	\$1,500,000	2017-2024

Mississippi NASA EPSCoR

Nathan Murray

MS Agency Director

University of Mississippi

<http://ms.spacegrant.org/>



Department of Energy



- Supports basic and applied research and development across a wide range of interdisciplinary program areas including:

** Advanced Scientific Computing Research *Basic Energy Sciences *Biological and Environmental Research *Fusion Energy Sciences *High Energy Physics and Nuclear Physics*

1) Implementation Grants - Due in January

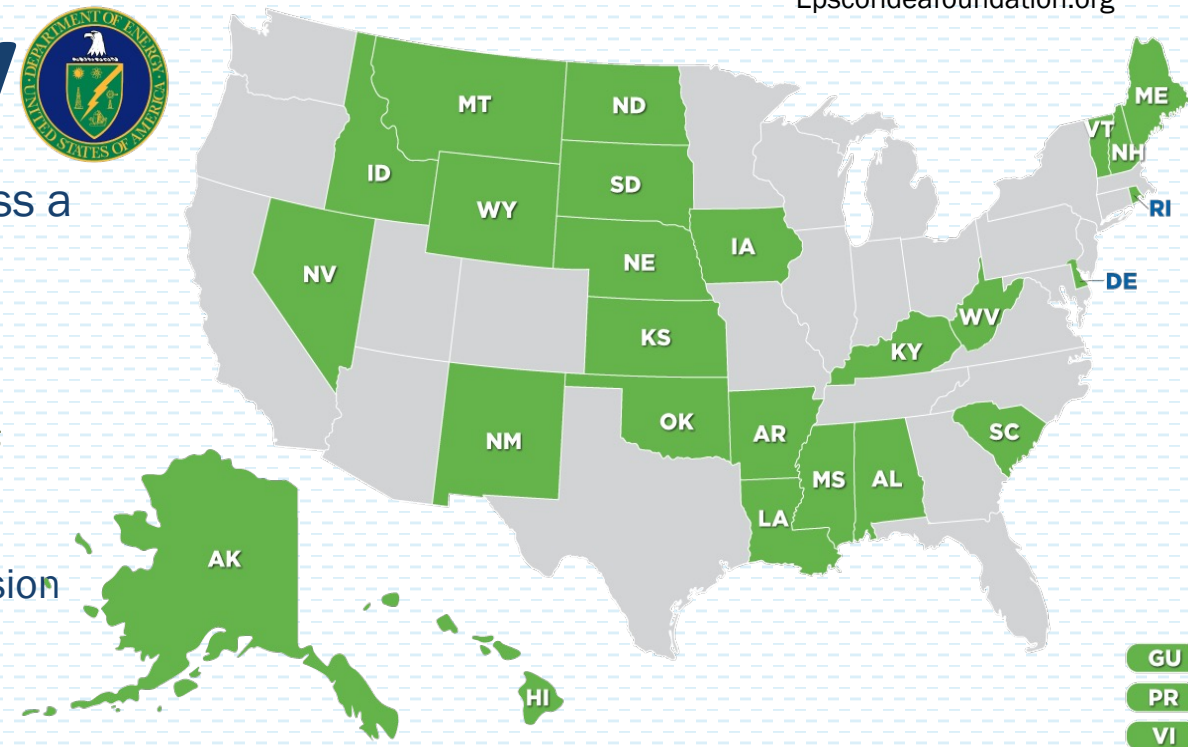
- \$2,500,000/per year for three years with possible three-year extension
- Build capacity in areas of interest to DOE (listed above)
- No cost share and collaborations with other jurisdictions is allowed

2) EPSCoR-State/National Laboratory Partnership Grants - Due in January

- Provides \$750,000 for three years (no cost share)
- Allows EPSCoR researchers to work closely with the DOE national lab

3) DOE Office of Science Early Career Awards and Office of Science Annual FOAs

- Consideration is limited to applications received from academic institutions to the DOE Office of Early Career Award FOAs or Office of Science Annual FOAs.
- DOE Program Area and/or Office may nominate meritorious applications for joint funding consideration



Established 1992 – follows NSF eligibility.

<https://science.osti.gov/bes/epscor>

Alabama DOE EPSCoR

John Steadman
AL Agency Director
University of South Alabama

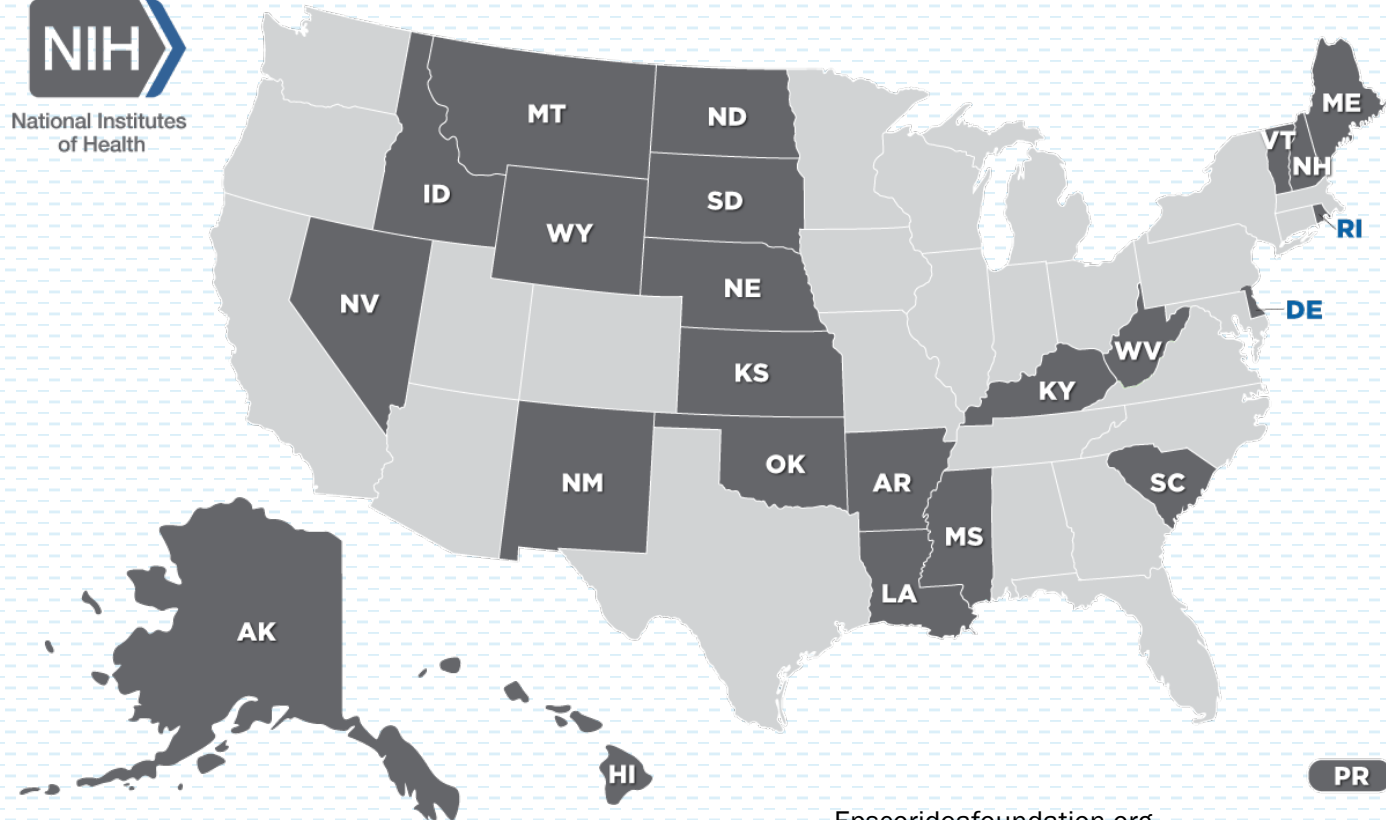


National Institutes of Health

- Institutional Development Award (IDeA) program established
- in 1993. IDeA—the largest of the EPSCoR-like programs—is designed to broaden the geographic distribution of NIH funding for biomedical research.

- Award Components

- *Centers of Biomedical Research Excellence (COBRE)*
- *IDeA Networks of Biomedical Research Excellence (INBRE)*
- *IDeA Clinical and Translational Research (CTR)*
- *Co-Funding*



National Institutes of Health



Centers of Biomedical Research Excellence (COBRE)

Designed to increase the pool of well-trained investigators in the IDeA States

- Expands research facilities and equips laboratories with the latest research equipment
- Provides mentoring for promising candidates, and
- Develops research faculty through support of a targeted multi-disciplinary center, led by an established, senior investigator with expertise in the research focus area of the center.

IDeA Networks of Biomedical Research Excellence (INBRE)

Designed to increase the pipeline of outstanding students and enhance the quality of science faculty in the IDeA states by networking research intensive and undergraduate institutions

- Prepares students for graduate and professional schools as well as careers in the biomedical sciences
- Supports research and mentoring of young investigators
- Enhances research infrastructure at participating institutions

National Institutes of Health



Centers of Biomedical Research Excellence (COBRE)

Designed to increase the pool of well-trained investigators in the IDeA States

- Expands research facilities and equips laboratories with the latest research equipment
- Provides mentoring for promising candidates, and
- Develops research faculty through support of a targeted multi-disciplinary center, led by an established, senior investigator with expertise in the research focus area of the center.

IDeA Networks of Biomedical Research Excellence (INBRE)

Designed to increase the pipeline of outstanding students and enhance the quality of science faculty in the IDeA states by networking research intensive and undergraduate institutions

- Prepares students for graduate and professional schools as well as careers in the biomedical sciences
- Supports research and mentoring of young investigators
- Enhances research infrastructure at participating institutions

National Institutes of Health



IDeA Clinical and Translational Research (CTR)

Designed to encourage applications from IDeA states to develop infrastructure and capacity for clinical and translational research on diseases that affect the medically underserved populations and/or the diseases prevalent in IDeA states.

Co-Funding: When funding is available, NIGMs co-funds awards made by other NIH institutes and centers (ICs) in support of investigator-initiated research project grants

Mississippi IDeA Conference

2022 Thursday, July 28, 2022

Lake Terrace Convention Center | Hattiesburg, Mississippi

Register for free at msinbre.org/ms-idea-epscor-2022/

Featuring

MISSISSIPPI HEALTH DISPARITIES

Mississippi EPSCoR

The logo for the Mississippi IDeA Conference 2022. It features a green and white geometric design with the text "Mississippi IDeA Conference" in a black box. Below this is a large white ampersand "&" on a grey background. To the right of the ampersand is the year "2022" in large white font, with "Thursday, July 28, 2022" in smaller white font below it. Further down, it says "Lake Terrace Convention Center | Hattiesburg, Mississippi" and "Register for free at msinbre.org/ms-idea-epscor-2022/". Below that is the word "Featuring" in a white box, followed by the logo for "MISSISSIPPI HEALTH DISPARITIES" which consists of colorful human figures and the text. At the bottom left is the "Mississippi EPSCoR" logo with a yellow flower.

MS IDeA
Alex Flynt
MS INBRE Director
University of Southern Mississippi
www.msinbre.org



Questions?



Gloria W. Greene, MA, CRA

Assistant Vice President, Contracts and Grants
Office of Sponsored Programs

greeneg@uah.edu

(256) 824-2657

www.uah.edu/osp