

The Mississippi Research Alliance (MRA) was established in 2024 through funding from NSF EPSCoR to catalyze sustainable growth of a knowledge-based economy through strategic partnerships, coordination, and investments in research and development. The MRA will accomplish this mission through coordination of resources in the state to enhance access and sustainability. The MRA, to spur greater research and development using these resources, offers funding opportunities to Mississippi's academic researchers.

Opportunities for funding through the MRA include:

- Seed Grants
 - Support for faculty-initiated research projects
- Instrumentation Acquisition Awards
 - Acquisition of multi-user instrumentation
- Instrumentation Use Vouchers
 - Increase access to MRA affiliated resources
- Travel Awards
 - Travel to jurisdictional meetings and facilitate training.

The MRA will help position Mississippi as a national front-runner in science and technology through making investments throughout the state's research community. All academic institution granting four-year degrees are eligible to receive funding through the MRA through formal partnering with the program. Half of the funds are allocated to be awarded to emerging research institutions (ERIs), which are defined as an institution of higher education with an established undergraduate or graduate program that has less than \$50,000,000 in federal research expenditures.

Budget

All budgets are to be submitted in NSF format. Budgets may include faculty salaries, postdoctoral salaries, graduate and undergraduate student salaries, fees, and tuition, supplies, contractual, equipment and travel. The budgets must include appropriate fringes on all personnel salary and must include F&A. No subcontracts are allowed. Costshare is not required.

Proposal Review

Proposals will be reviewed by external reviewers for scientific merit, appropriateness of budget, potential for future funding, utilization of MRA resources, and training opportunities for students. The reviewers will provide scientific review without funding recommendations and the Mississippi EPSCoR Jurisdictional Steering Committee will make the final funding decisions.

Proposals should be contained in a single PDF file and submitted to:

https://www.msepscor.org/current-funding-opportunities



MRA SEED GRANTS

Deadline: May 30

Notification of Award: August 15

Who can apply: Early career researchers at any MS college or university;

Emerging Research Institutions faculty at any stage of their career.



Seed Grants are designed to strengthen competitiveness of the state's researchers in **all thematic areas within the NSF's purview**. Applicants are encouraged to contact MRA personnel to discuss the proposed research prior to submission. The grants are targeted to early-career investigators though researchers at any stage of their career may apply. Although the budget can remain entirely at a single institution, grants promoting multi-university collaborations and activities that involve facilities affiliated with the MRA are encouraged.

During the current phase of the MRA (2024-2028), a total of \$720,000 has been allocated to provide seed grants. Total project costs may not exceed \$75,000 for an 18-month project period inclusive of direct and indirect costs (i.e. \$75,000 total cost). Proposers should use the appropriate F&A rate of their institution. Receipt of funds is contingent on faculty being given access to adequate research space to conduct the project.

Seed Grant applications should be prepared with the following specifications:

Page Size: 8 ½ x 11 inches, Spacing: Single, Font: Times New Roman or Helvetica, 11 point, Margins: 1".

1. Cover Page

- a. Proposal Title
- b. Principal Investigator and Co-Investigator(s) (Full name, Title, Primary Affiliation, Phone Numbers, Fax Number, E-mail Address)
- c. Type of Proposal: Regular or Linked

2. Abstract (Maximum of 200 words) - Note this is separate to the proposal's 5-page limit below

3. Proposal (Maximum of 5 pages)

- a. Overview, objectives and significance (~0.5 page)
- b. Background and review of relevant literature (~0.5 page).
- c. Research plan—include a description of the nature of the proposed work and a publication plan (~2 pages).
- d. Expected results (~0.5 page)
- e. Potential for generating competitive funding (~0.5 page)
- f. Describe integration into the research ecosystem supported by the MRA. (~0.5 page)

- a. Literature cited
- b. AOR letter- A signed letter from your Authorized Organizational Representative (AOR) stating they have reviewed and approved the proposal as submitted and approve any institutional commitment.
- c. Budget (NSF format, 1 page).
- d. Budget justification (1 page)
- e. Curriculum vitae of all investigators (NSF biosketch format, 2 pages maximum for each investigator)
- f. Current and Pending support document
- g. Statement agreeing to provide a final report and to present the research results at a MRA supported Meeting.
- h. Up to three suggested reviewers (optional)

E-RISE RII: MS Nano-bio and ImmunoEngineering Consortium (NIEC) Seed Grants

Deadline: May 30

Notification of Award: August 15

Who can apply: Early career researchers at any MS college or university;

Emerging Research Institutions faculty at any stage of their career.



We invite proposals that align with the Mississippi Nano-bio and ImmunoEngineering Consortium (NIEC) by addressing one of the three key scientific research focus areas: RFA1, which emphasizes Biomimetic Materials to Modulate Nano-Immuno Interactions via Protein Corona Engineering; RFA2, which targets Polymer Nanocarrier Design for Efficient Nucleic Acid Complexation and Release; or RFA3, focusing on Pathogen Resilient Bioinspired Polymeric Scaffolds for Tissue Regeneration. Alternatively, proposals that explore emerging research directions complementary to NIEC initiatives are welcome, particularly those that foster collaborative research and expand the state's nanobio expertise. We encourage applicants to engage with the PI, Science Director, or co-leaders of the RFAs for preliminary discussions to ensure that their proposals are well-aligned with our strategic objectives prior to submission.

- PI: Dr. Adam Smith, aes@olemiss.edu
- Science Director: Dr. Tristan Clemons, <u>Tristan.clemons@usm.edu</u>
- RFA 1 Lead: Dr. Eden Tanner, eetanner@olemiss.edu
- RFA 2 Lead: Dr. Alex Flynt, asflynt@olemiss.edu
- RFA 3 Lead: Dr. Lauren Priddy, lbpriddy@abe.msstate.edu

Seed Grant applications should be prepared with the following specifications:

Page Size: 8 ½ x 11 inches, Spacing: Single, Font: Times New Roman or Helvetica, 11 point, Margins: 1".

1. Cover Page

- a. Proposal Title
- b. Principal Investigator and Co-Investigator(s) (Full name, Title, Primary Affiliation, Phone Numbers, Fax Number, E-mail Address)
- c. Type of Proposal: Regular or Linked

2. Abstract (Maximum of 200 words) - Note this is separate to the proposal's 5-page limit below

3. Proposal (Maximum of 5 pages)

- a. Overview, objectives and significance (~0.5 page)
- b. Background and review of relevant literature (~0.5 page).
- c. Research plan—include a description of the nature of the proposed work and a publication plan (~2 pages).
- d. Expected results (~0.5 page)
- e. Potential for generating competitive funding (~0.5 page)
- f. Describe integration into the research ecosystem supported by the MRA. (~0.5 page)

- a. Literature cited
- b. AOR letter- A signed letter from your Authorized Organizational Representative (AOR) stating they have reviewed and approved the proposal as submitted and approve any institutional commitment.
- c. Budget (NSF format, 1 page).
- d. Budget justification (1 page)
- e. Curriculum vitae of all investigators (NSF biosketch format, 2 pages maximum for each investigator)
- f. Current and Pending support document
- g. Statement agreeing to provide a final report and present research results at a MRA supported Meeting.
- h. Up to three suggested reviewers (optional)

INSTRUMENTATION ACQUISITION AWARD

Deadline: May 30

Notification of Award: August 15

Who can apply: Researchers at any MS college or university



Key to building a flourishing research ecosystem is the strategic acquisition of multi-user instrumentation. To build these capabilities, the MRA offers instrumentation acquisition awards (IAAs) that do not exceed \$100,000 in total cost. During the current phase of the MRA (2024-2028), a total of \$1,000,000 has been allocated for IAAs. Requests can only be for a single piece of equipment or several interdependent instruments. Applicants are also encouraged to contact MRA personnel to discuss the appropriateness of the request.

Proposals must demonstrate how instrumentation will support the projects of multiple research groups. These groups can be located at a single institution but must show a multi-disciplinary use case. However, proposals that benefit multiple institutions, especially those that involve researchers at ERIs, are given priority. For the purpose of the IAA a 'project' can be considered as a research project and/or teaching project (i.e. lecture, course, or laboratory) that utilizes the proposed instrumentation. Proposals must also provide a long-term sustainability plan and interact with the MRA Exchange Portal.

IAA applications should be prepared with the following specifications:

Page Size: 8 ½ x 11 inches, Spacing: Single, Font: Times New Roman or Helvetica, 11 point, Margins: 1".

1. Cover Page

- a. Proposal Title
- b. Principal Investigator and Co-Investigator(s) (Full name, Title, Primary Affiliation, Phone Numbers, Fax Number, E-mail Address)
- c. Type of Proposal: Regular or Linked

2. Abstract (Maximum of 200 words)

3. Proposal (Maximum of 6 pages)

- a. Description of instrument and capabilities (~1 page).
- b. Description of projects from up to 6 faculty supported by the acquisition. For the purpose of the IAA a 'project' can be considered as a research project and/or teaching project (i.e. lecture, course, or laboratory) that utilizes the proposed instrumentation (~3 pages).
- c. Sustainability Plan- approach to and sources of support for long-term operation of the instrument (~1 pages).
- d. Describe integration into the research ecosystem supported by the MRA. (~0.5 page).

- a. Literature cited
- b. AOR letter- A signed letter from your Authorized Organizational Representative (AOR) stating they have reviewed and approved the proposal as submitted and approve any institutional commitment.
- c. Budget (NSF format, 1 page).
- d. Budget justification (1 page)
- e. Curriculum vitae of all investigators (NSF biosketch format, 2 pages maximum for each investigator)
- f. Statement agreeing to provide a final report and to present the research results at a MRA supported Meeting.
- g. Current and Pending support document
- h. Up to three suggested reviewers (optional)

INSTRUMENTATION USE VOUCHERS

Deadline: No deadline

Notification of Award: Within three weeks after receipt of application Who can apply: Early career researchers at any MS college or university;

Emerging Research Institutions faculty at any stage of their career.



Facilitating access to resources in Mississippi is central to the mission of the MRA. Any researcher at an eligible institution can request up to \$10,000 for materials and usage charges required to conduct experiments on a MRA affiliated resource. Funds are disbursed to the partnering facility that manages the resource for sole support of the voucher recipient's activities. Preference is given to early-career faculty and those without other sources of support.

Instrumentation use voucher applications should be prepared with the following specifications:

Page Size: 8 ½ x 11 inches, Spacing: Single, Font: Times New Roman or Helvetica, 11 point, Margins: 1".

1. Cover Page

- a. Proposal Title
- b. Principal Investigator and Co-Investigator(s) (Full name, Title, Primary Affiliation, Phone Numbers, Fax Number, E-mail Address)
- c. Type of Proposal: Regular or Linked

2. Justification (Maximum of 1 page)

- a. Description of project supported (~0.5 page)
- b. Description of how access to the resource is needed to promote the project. (~0.5 page)
- c. Itemized use of funds

- a. Literature cited
- b. Curriculum vitae of all investigators (NSF biosketch format, 2 pages maximum for each investigator)
- c. Statement agreeing to provide a final report.
- d. Current and Pending support document

TRAVEL AWARDS

Deadline: No deadline

Notification of Award: Within three weeks after receipt of application Who can apply: Open to researchers at any MS college or university



The MRA offers support for travel to increase opportunities for collaboration. Travel awards will be made available to support student participation in statewide meetings, such as the MS IDeA/EPSCoR annual conference, the Mississippi Academy of Science Meeting, MRA proposed research symposia, regional meetings, and national scientific conferences. Researchers can apply for up to \$2,000 in student travel support for planned in-state meetings or instrumentation training workshops taking place at MRA shared facilities. Travel support for faculty at any Mississippi academic institution will also be available for training at national laboratories, elite institutions, or collaborating with industry. Training on new acquisitions coming into MS that enrich expertise in the state is also supported. Up to \$3,500 can be requested for out-of-state travel.

Travel award applications should be prepared with the following specifications:

Page Size: 8 ½ x 11 inches, Spacing: Single, Font: Times New Roman or Helvetica, 11 point, Margins: 1".

1. Cover Page

- a. Proposal Title
- b. Principal Investigator and student supported (Full name, Title, Primary Affiliation, Phone Numbers, E-mail Address). Note only one student can be supported per application submitted.

1. Justification (Maximum of 1 page)

- a. Description of meeting or site to visit (~0.5 page)
- b. Description of research promoted or enabled by the requested travel. (~0.5 page)
- c. Itemized use of funds

2. Appendices

a. Statement agreeing to provide a final report.