Minority-Serving Institutions Research Expansion Program (CISE-MSI Program) NSF 22-518

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Purpose of this Webinar

o Orient potential proposers

o Summarize the MSI program and review criteria

o Answer questions

o Improve the quality of proposals

Webinar Outline

o MSI program description

o Overview of solicitation (NSF 22-518)

o Questions from the community – via Zoom Q&A

NSF MSI Program

This program solicitation offers three Threads to grow research capacity at MSIs and encourage intra- and inter-organizational collaborations:

1) Research Capacity-Building Planning (RCBP), including (Thread 1, Track A) Enhancement and Development (RCBP-ED) and (Thread 1, Track B) Research-Focused (RCBP-RF)

2) Demonstration Projects (DP)

3) Research Partnerships Enhancement Projects (RPEP).

Award Information

Thread 1: Research Capacity Building Planning Projects (RCBPP)
Number of awards: Up to 4
Project length: Two years
Award size: Up to $400,000

Thread 2: Demonstration Projects (DP)
Number of awards: Up to 10
Project length: Three years
Award size: Up to $600,000

Thread 3: Research Partnerships Enhancement Projects (RPEP)
Number of awards: 2-3
Project length: Up to four years
Award size: Up to $1,200,000

Anticipated Total Funding Amount: $7,000,000

Eligibility

- **Proposals may <u>only</u> be submitted by:**

  - Universities and Colleges

  - Non-profit, non-academic organizations

  - NSF-sponsored federally funded research and development centers (FFRDCs) may apply, provided that that they are not including costs for which federal funds have already been awarded or are expected to be awarded.

- **Limit on Number of Proposals per PI/Co-PI/Senior Personnel: 2**

  - An individual may participate as Principal Investigator, co-Principal Investigator or other Senior Personnel in at most two full proposals across all categories of proposal for each deadline.

- A MSI faculty member should serve as the lead principal investigator(s) on any proposal submission. An institution must not have previously received an award funded by any of the CISE programs solicitations noted in Section II. Program Description within the past five years.

- **See solicitation for details**

Additional Eligibility Info

○ MSIs, for the purposes of this solicitation, include Historically Black Colleges and Universities (HBCUs), Hispanic-Serving Institutions (HSIs), and Tribal College & Universities (TCUs) as defined in Section I. Introduction.

○ Institutions must satisfy the definition of an MSI (HBCU, HSI or TCU) defined earlier in this solicitation (See Section I). The MSI Certification Form is required with submission of the proposal. (See Section V of the solicitation.)

○ For MSI certification, a representative of the institution (e.g., Sponsored Research Officer or higher) must sign a Certification of MSI Eligibility (see Section V below for the required template) to be included in the Supplementary Documentation section of the proposal.

Additional Eligibility Info, cont'd

○ Non-MSIs and other MSIs which are not listed in this solicitation **are welcome** to partner with HBCUs, HSIs and TCUs on this solicitation via subawards or collaborative proposals as non-lead organizations.

○ The lead MSI institution **cannot** have any CISE Core and/or solicitation participating program award in the **last 5 years**. If so, the institution is **NOT eligible to be the lead on a CISE MSI proposal**. NOTE: The 5-year criterion applies to university/Institution Enterprise awards (and other similar research organizations) associated with an institution.

○ The co-PIs (collaborators) do **not** have to meet the 5-year eligibility criterion and can participate in the proposed effort.

Additional Eligibility Info, cont'd

o Awards made by sources other than the CISE core and participating programs do not count against institutional eligibility.

o EAGERS, GRFP, REU sites, Excellence-In-Research (EiR), RAPIDs, conference, workshops, CAREER and CRII, and other award types that are not submitted directly to a core or participating program's solicitation do not count against institutional eligibility.

o Subawards also do not count as "submitted directly" and thus do not affect eligibility.

o However, awards based on separate proposals submitted as part of collaborative projects do count as "submitted directly". So do awards with designators such as "RUI", "RCN", "NSF-BSF", and similar solicitations, where the proposals are submitted directly to a core or participating program's solicitation.

o **Institutions are encouraged to email MSIquestions@nsf.gov if unsure.**

One way to check for awards

- Use the advanced search tool at https://www.nsf.gov/awardsearch/advancedSearch.jsp.
- Select the institution using the "Organization" field.
- Limit the NSF Organization to "CSE".
- Search for award number by "Find award numbers within a range", with the range of 1700000 to 2299999 (i.e., awards made between FY2017 and FY 2022).
- Check both the "active" and "expired" awards boxes.

Participating NSF Organizations

- Directorate for Computer and Information Science and Engineering (CISE)
  - Division of Computing and Communication Foundations (CCF)
  - Computer and Network Systems (CNS)
  - Division of Information and Intelligent Systems (IIS)
  - Office of Advanced Cyberinfrastructure (OAC)

- Other participating programs, spanning multiple CISE divisions:
  - Cyber-Physical Systems (CPS)
  - CISE Community Research Infrastructure (CCRI)
  - Secure and Trustworthy Cyberspace (SaTC)
  - Smart and Connected Communities (S&CC)
  - Smart and Connected Health (SCH)

https://www.nsf.gov/pubs/2022/nsf22518/nsf22518.htm

Participating NSF Organizations

We strongly recommend that you discuss your ideas with the appropriate Program Directors after emailing them a one page summary.

https://www.nsf.gov/pubs/2022/nsf22518/nsf22518.htm

Proposal Preparation

- The NSF proposal and award process is detailed in the Proposal & Award Policies & Procedures Guide (PAPPG, NSF 22-1).

  https://www.nsf.gov/pubs/policydocs/pappg22_1/

  The next slides include aspects that are specific to this solicitation.

Cover Sheet

o **NSF Unit of Consideration (Division):**

   o The proposals should choose "CNS" as program.

o **Proposal Title**

   o Proposal titles should begin with "CISE-MSI:", then the Thread acronym, then the intended CISE program

   o Example

      o CISE-MSI::RPEP: CNS: *MyProjectTitle*

Project Description

In the first paragraph of the Project Description, identify the intended CISE program(s) (e.g., CPS, SaTC). The description must indicate how the proposed research will foster department and/or organizational research capacity.

In addition to the guidance specified in the PAPPG, address:

- Institutional Data Narrative - The Project Description must include institutional data with a narrative describing and contextualizing the institution's need for the proposed project and potential to build research capacity and partnerships.

Supplementary Documents specific to MSI (1)

- A list of Project Personnel and Partner Institutions (Note: In collaborative proposals, the lead institution should provide this information for all participants)

- Collaboration Plan (2-page limit)

- Data Management Plan (2-page limit)

- Cloud Computing Resources (if applicable)

- Departmental Letter (1-page limit)

- Certification of MSI Eligibility

Supplementary Documents specific to MSI (2)

- Collaboration **Plan** (2-page limit) should include:
  - the **specific roles** of the PI, co-PIs, other senior personnel and paid consultants at all institutions involved
  - how the project will be **managed** across all the investigators, institutions, and/or disciplines
  - identification of the specific **coordination mechanisms** that will enable cross-institution and/or cross-discipline scientific integration
  - pointers to the budget line items that support these management and coordination mechanisms

Supplementary Documents specific to MSI (3)

- Data Management Plan (2-page limit) should include:
  - This supplementary document should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results.
  - For specific guidance for Data Management Plans submitted to the Directorate for Computer and Information Science and Engineering (CISE) see: https://www.nsf.gov/cise/cise_dmp.jsp.
  - See Chapter II.C.2.j of the PAPPG for full policy implementation.
  - For additional information on the Dissemination and Sharing of Research Results, see: https://www.nsf.gov/bfa/dias/policy/dmp.jsp.

Supplementary Documents specific to MSI (3)

- **Cloud Computing Resources:** if requesting cloud resources through CloudBank only, a supplementary document (not to exceed 2 pages) should be included

  1. *The anticipated annual and total costs for accessing the desired cloud computing resources, based on pricing currently available from the public cloud computing providers*

  2. *Which public cloud providers will be used*

  3. *A technical description and justification of the request, along with how the cost was estimated.*

Cloud Computing Resources

The NSF Budget should not include any such costs for accessing public cloud computing resources via CloudBank.org. The total cost of the project, including this cloud computing resource request from CloudBank.org, may not exceed the budget limit described in this solicitation.

Proposers should carefully **read** the solicitation

NSF Review Criteria

Reviewers and review panel will address:

- Intellectual Merit,
- Broader Impacts, and

- MSI Specific Review Criteria

in their reviews, panel discussions, and panel summaries

Standard NSF Review Criteria

MSI-Specific Review Criteria

MSI Specific Criteria

Collaborative partnerships

o Proposals funded by this solicitation must demonstrate collaborative partnerships across MSI departments/units, across MSIs, and/or between one or more MSIs and other research-intensive organizations.

MSI Specific Criteria

MSI student research involvement

Projects should involve MSI undergraduate and/or graduate students depending on the thread selected and foster fundamental contributions to computing and information disciplines as defined by the CISE directorate.

The proposals should be building "capacity" to train students (e.g. via means such as student visits to research intensive institution, addition of resources such as cloud computing in courses, established training of UGs for research).

MSI Specific Criteria

Multi-disciplinary efforts

The collaboration plan should demonstrate active participation of an multi-disciplinary group, which includes, but is not limited to: computing and information science researchers; computer and other engineering; physical, biological science; social scientists; and other necessary research expertise.

The Collaboration Plan included as a Supplementary Document should demonstrate the extent to which the research team is integrated, has a common focus, and has a plan for continuing that integration and focus.

For RPEP, reviewers will be asked to evaluate the likelihood of a given proposal to result in a transformative impact in the participating organizations, with a particular focus on organizations and PIs that do not have recent NSF/CISE funding through the CISE programs named in Section II.

For RCBP (Thread-1) and DP (Thread-2) projects will **NOT** be evaluated based on the Collaborative partnerships and MSI student research involvement. Multi-disciplinary groups are not a requirement for RCBP (Thread-1) and DP (Thread-2) projects, but are not discouraged.

NSF

Schedule

- Upcoming Deadline for NSF 22-518

  February11, 2022

- **Schedule:**

  Proposals Due: February 11, 2022

  Announcement of Awards: May - June 2022

Frequently Asked Questions

Q: If I am the PI, co-PI or Senior Personnel on a proposal to MSI (NSF 22-518):
- Can I be the PI on any other proposal to MSI   YES
- Can I be a PI on any other awards to the CISE core?   NO
- We received a HBCU EiR grant last year, can we submit   YES

An individual may participate as PI, co-PI, or other Senior Personnel on at most two proposal across the solicitation.

EAGERS, GRFP, REU sites, Excellence-In-Research (EiR), RAPIDs, conference, workshops, CAREER and CRII, *are eligible to submit to the CISE MSI solicitation.*

Thank you!

Questions?

During Webinar: Via Zoom Q&A

After Webinar: MSIQuestions@nsf.gov