



NATIONAL SCIENCE FOUNDATION
2415 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22314

NSF 21-058

Dear Colleague Letter: Access to Commercial Cloud Computing Resources for Proposers Submitting to the Computer and Information Science and Engineering Minority Serving Institutions Research Expansion (CISE-MSI) Program

March 19, 2021

Dear Colleagues:

The National Science Foundation's (NSF) Directorate for Computer and Information Science and Engineering (CISE) recently launched a new, focused program to support research expansion for Minority-Serving Institutions (MSIs). The goal of this program, the [CISE MSI Research Expansion \(CISE-MSI\) program \(NSF 21-533\)](#), is to broaden participation in CISE Core and other participating research programs by increasing the number of CISE-funded research projects from MSIs. MSIs are central to inclusive excellence: they foster innovation, cultivate current and future undergraduate and graduate computer and information science and engineering talent, and bolster long-term U.S. competitiveness. Details about the CISE-MSI program can be found in the [program solicitation](#).

An important element of the CISE-MSI program is the opportunity for principal investigators (PIs) to include in their proposals requests for commercial cloud computing resources. Access to these resources will be through the NSF-funded [CloudBank project](#). CISE anticipates that these resources will enable the research and/or education activities specified in the corresponding proposals, while also growing capacity for advanced computing capabilities within MSIs more generally.

With this Dear Colleague Letter (DCL), the CISE directorate wishes to notify the community of a new partnership with commercial cloud computing providers specifically for CISE-MSI proposers and awardees. In particular, Google Cloud and Microsoft Azure have **each** agreed to provide cloud computing resources ("credits") toward projects funded through the CISE-MSI program. These credits will match NSF funding for access to the commercial cloud computing resources, and will not count toward the proposal budget limits.

As stated in the CISE-MSI program solicitation, proposals may request cloud computing resources to access and use commercial cloud computing resources. The CISE-MSI program solicitation further notes that the proposal budget should *not* include the costs for accessing commercial cloud computing resources via CloudBank; these costs should instead be described in an accompanying Supplementary Document. In addition, the total cost of a given project, including the commercial cloud computing resource request, may not exceed the budget limit described in the CISE-MSI solicitation.

With the partnership described above, Google Cloud and Microsoft Azure have agreed to provide *matching credits* that do not count toward the proposal budget limits. For example, a proposal submitted to Thread 2 of the CISE-MSI program, namely a Demonstration Project (DP), has a total proposal budget limit of \$500,000. If a PI wishes to request \$50,000 in commercial cloud computing resources through CloudBank, then the CISE-MSI program solicitation specifies that the proposal budget should not exceed \$450,000 in the PI's NSF budget request (i.e., the NSF Budget and Budget Justification); the remaining \$50,000 for commercial cloud computing resources should be specified in the Supplementary Document. With the above partnership, in this case, the commercial cloud computing provider requested by the PI would provide \$25,000 in matching cloud credits, allowing the PI to increase their NSF budget request to \$475,000, instead of \$450,000, plus \$50,000 for commercial cloud computing resources (of which \$25,000 will be the commercial cloud computing provider's matching amount).

Example Proposal Type: Demonstration Projects (DP)

	Originally	With the Partnership Described in this DCL
Maximum allowed budget	\$500,000	\$500,000
PI requests commercial cloud resources through CloudBank in the Supplementary Document	\$50,000	\$50,000
NSF provides funds for cloud access	\$50,000	\$25,000
NSF funding remaining for the project, to be requested on the NSF Budget pages	\$450,000	\$475,000

Commercial cloud computing provider offers cloud credits

\$0

\$25,000

Proposers should continue to follow all other guidance in the CISE-MSI program solicitation, including specifying which commercial cloud computing providers they wish to use in their Supplementary Documents.

In addition to the above resources, some cloud computing providers may also offer curricula and training support to the proposing team, including PI, co-PIs, and students. For example, Google Cloud will offer several live instructor-led courses that cover cloud fundamentals, big data and machine learning capabilities of the cloud, and teaching cloud to students, specifically intended for the CISE-MSI program awardees. Likewise, Microsoft offers a full suite of researcher-focused training courses available on demand, as well as technical support for researchers to assist with applying the principles learned in the courses to their research.

For questions about the cloud offerings, PIs may contact the commercial cloud providers directly:

- Alice Kamens, Google Cloud, alicekamens@google.com; and
- Microsoft University Relations, AzureUGrants@microsoft.com.

As a reminder, proposers may contact CloudBank (see the [Frequently-Asked Questions webpage](#)) for consultation on estimating costs for accessing and using commercial cloud computing resources.

Proposers to the CISE-MSI program intending to request access to cloud computing resources and/or with questions about the matching credits being provided by Google Cloud and Microsoft Azure are strongly encouraged to contact one of the following program directors prior to submitting their proposals:

- Fay Cobb Payton, Program Director, CISE/CNS, telephone: (703) 292-7939, email: fpayton@nsf.gov; and
- Deep Medhi, Program Director, CISE/CNS, telephone: (703) 292-2935, email: dmedhi@nsf.gov.

Sincerely,

Margaret Martonosi
Assistant Director, CISE