

Division of University Research, Rowan University

October 2, 2024

Dear Colleagues,

The National Science Foundation (NSF) posted the solicitation for the Major Research Instrumentation (MRI) program.

<https://www.nsf.gov/pubs/2023/nsf23519/nsf23519.htm>

Rowan researchers have competed successfully in past MRI solicitations. **PLEASE READ THE FOLLOWING INFORMATION CAREFULLY BEFORE DECIDING IF YOU WILL RESPOND TO THIS CALL.**

Please attend an MRI virtual town hall meeting for information and to have your questions answered on the program. The webinars will be held on October 3 and 4 from 12:00 - 1:30 p.m. (EDT).

Registration is available at: <https://new.nsf.gov/events/mri-town-hall-webinars-october-3rd-4th/2024-10-04>

Synopsis of Program:

The Major Research Instrumentation (MRI) Program ([MRI Program Website](#)) increases access to multi-user scientific and engineering instrumentation for research and research training in our Nation's higher education institutions and not-for-profit scientific/engineering research organizations. An MRI award supports the acquisition of a multi-user research instrument that is commercially available through direct purchase from a vendor or for the personnel costs and equipment that are required for the development of an instrument with new capabilities, thereby advancing instrumentation capabilities and enhancing expertise for instrument design and fabrication at academic institutions. MRI instruments are, in general, too costly and not appropriate for support through other NSF programs.

MRI provides support to acquire critical research instrumentation, without which advances in fundamental science and engineering research may not otherwise occur. MRI also provides support to obtain next-generation research instruments by developing instruments with new capabilities that open new opportunities to advance the frontiers in science and engineering research. Additionally, an MRI award is expected to enhance the research training of students who will become the next generation of instrument users, designers, and builders.

An MRI proposal may request up to \$4 million from NSF for either acquisition or development of a research instrument. Each performing organization may submit in revised "Tracks" as defined below, with no more than two (2) submissions in Track 1 and no more than one (1) submission in Track 2. For the newly defined Track 3, no more than one (1) submission per competition is permitted. **As a result, it is now possible for an institution to submit up to four MRI proposals within the Track limits as described above.**

- Track 1: Track 1 MRI proposals request funds from NSF greater than \$100,000¹ and less than \$1,400,000.
- Track 2: Track 2 MRI proposals request funds from NSF greater than or equal to \$1,400,000 up to and including \$4,000,000.

- Track 3: Track 3 MRI proposals request funds from NSF greater than or equal to \$100,000¹ and less than or equal to \$4,000,000 that include the purchase, installation, operation, and maintenance of equipment and instrumentation to conserve or reduce helium consumption. **Institutions may submit no more than one Track 3 proposal. Submission of a Track 3 proposal does not impact limits that apply to Track 1 and Track 2 proposals.**

Cost-sharing requirements for new awards in the MRI Program are waived for five years, beginning with the FY 2023 MRI competition. Institutional submission limits for Track 1, Track 2, and Track 3 proposals remain.

The MRI Program especially seeks broad representation of underrepresented groups, institutions, and geographic regions in STEM disciplines. Proposals from women, underrepresented minorities, persons with disabilities, and early-career PIs are encouraged, as are proposals that benefit early-career researchers and proposals with PIs from geographically underserved regions, including EPSCoR jurisdictions. Additionally, proposals are encouraged from under-resourced institutions, including emerging research institutions, where MRI can significantly build capacity for research.

¹ Track 1 proposals requesting funds from NSF less than \$100,000 will be accepted only from: a) eligible performing organizations requesting instrumentation supporting research in the disciplines of mathematics or social, behavioral, and economic sciences; or b) non-Ph.D.-granting institutions of higher education requesting instrumentation supporting research in any NSF-supported disciplines.

Limit on Number of Proposals per Organization:

Two (2) in Track 1, one (1) in Track 2 and one (1) in Track 3 as described below. Potential PIs are advised to contact their sponsored projects office well in advance of the MRI submission window regarding processes used to select proposals for submission.

The MRI program requires that an MRI-eligible organization may, as a performing organization, submit or be included as a significantly funded² sub awardee in no more than three MRI proposals in Tracks 1 and 2 as defined below, with no more than two (2) submissions in Track 1 and no more than one (1) submission in Track 2. One (1) additional submission is permitted in the newly defined Track 3. **As a result, it is now possible for an institution to submit up to four MRI proposals within the Track limits described above.**

Any MRI proposal may request support for either the acquisition or development of a research instrument or an upgrade of an existing one. Within their submission limit, NSF strongly encourages an organization to submit proposals for innovative development projects.

- Track 1: Track 1 MRI proposals request funds from NSF greater than or equal to \$100,000¹ and less than \$1,400,000.
- Track 2: Track 2 MRI proposals request funds from NSF greater than or equal to \$1,400,000 up to and including \$4,000,000.
- Track 3 MRI proposals are those that request funds from NSF greater than or equal to \$100,000¹ and less than or equal to \$4,000,000 for requests that include the purchase,

installation, operation, and maintenance of equipment and instrumentation to reduce helium consumption.

Rowan Pre-Proposals:

NSF does not require MRI pre-proposals. However, given the constraints associated with the MRI program, **the Division of University Research will facilitate a pre-proposal screening to determine the 3 or 4 full proposals to be submitted to NSF.** MRI pre-proposals should be no more than three pages in length and should address the following items:

- a. *Research Activities:* Describe the research and research training activities and projects to be conducted with the desired instrumentation, and sources of support, if any.
- b. *Description of the Research Instrumentation and Needs:* Acquisition proposals should include a technical description of the requested instrumentation, including manufacturer and model number, where appropriate. For development proposals, present the rationale for the new instrumentation, the design concept, and the development strategy and methods in sufficient detail to allow for the evaluation of its technical feasibility. Justify the necessity and adequacy of the new instrumentation for the proposed research projects with reference to existing instruments.
- c. *Impact on Research and Training Infrastructure:* Describe how the instrumentation will contribute to meeting the research and educational goals of the university. Describe how students will be involved and how development efforts will enhance their education.
- d. *Space Required:* Please specify the space needed for this instrumentation and provide acknowledgment from your department chair and/or dean that the space is available.
- e. *Budget:* Give an estimated total budget amount for the proposal. Acquisition proposals and personnel support in development proposals must be well-justified and commensurate with the scale and complexity of the instrument and/or development effort. The budget justification must explain the basis of the cost estimate. Specify allowability under the MRI solicitation and a projection of when they will be available.

MRI Proposal Timeline:

- **MRI pre-proposals must be submitted electronically as WORD documents by 5:00PM on Friday, October 18, 2024, to the Division of University Research at ORD@rowan.edu.**
- Selection of Rowan MRI projects to be developed into full proposals will be completed by **Friday, October 25, 2024**. Proposals will be reviewed by designees from the Deans of Science & Mathematics, Engineering, CMSRU, SEE, and Rowan Virtua SOM.
- Full proposals will be submitted to NSF via the Office of Sponsored Programs by 5 p.m. local time on **Friday, November 15, 2024**.

Please contact the Office of Research Development at ORD@rowan.edu if you have questions.