

Limited Submission Funding Opportunity
National Science Foundation
Major Research Instrumentation (MRI) Program

FOA #: NSF 23-519

The Major Research Instrumentation (MRI) Program serves to increase access to multi-user scientific and engineering instrumentation for research and research training in our Nation's institutions of higher education and not-for-profit scientific/engineering research organizations. An MRI award supports the acquisition or development of a multi-user research instrument that is, in general, too costly and/or not appropriate for support through other NSF programs. The MRI Program provides support to acquire critical research instrumentation without which advances in fundamental science and engineering research may not otherwise occur. The Program also provides support to develop next-generation research instruments that open new opportunities to advance the frontiers in science and engineering research. Additionally, an MRI award is expected to enhance research training of students who will become the next generation of instrument users, designers, and builders.

The MRI Program especially seeks broad representation of PIs in its award portfolio, including women, underrepresented minorities, and persons with disabilities. Since demographic diversity may be greater among early-career researchers the MRI program also encourages proposals with early-career PIs and proposals that benefit early-career researchers.

Development proposals (in either Track 1, Track 2, or Track 3) allow support for graduate students and postdocs. If you are considering a development proposal, please contact the relevant NSF division to discuss your ideas before submitting an internal proposal.

The program description [here](#).

The full announcement is [here](#).

Answers to frequently asked questions are [here](#).

ELIGIBILITY

There are no restrictions or limits.

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AWARD

Proposals may request up to \$4 million for either acquisition or development of a research instrument.

LIMIT ON NUMBER OF PROPOSALS PER ORGANIZATION

The MRI program requires that an MRI-eligible organization may, as a performing organization, submit or be included as a significantly funded subawardee in no more than three MRI proposals. Each performing organization is limited to a maximum of three proposals in *revised* "Tracks" as defined below, with no more than two submissions in Track 1 and no more than one submission in Track 2. One additional submission is permitted in the newly defined Track 3. Any MRI proposal may request support for either the acquisition or development of a research instrument. Within their submission limit, NSF strongly encourages organizations to submit proposals for innovative development projects.

- Track 1: Track 1 MRI proposals are those that request funds from NSF greater than or equal to \$100,000 and less than \$1,400,000.
- Track 2: Track 2 MRI proposals are those that 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 are those that request funds from NSF greater than or equal to \$100,00 up to and including \$4,000,000 for Helium recovery only.

INTERNAL PROPOSAL GUIDELINES

Based on previous competitions, we anticipate that there will be more applicants than are allowed under the proposal requirements. Internal proposals will be used to select most meritorious proposals for submission to the NSF. Proposals should be prepared with at least 1/2-inch margins and 11-point font size, and are required to contain the following components:

1. **Summary/narrative** directed at a lay audience including the following (4 pages max):
 1. Include the proposal title. The title must include the words "Equipment Acquisition: Your Project Title" or "Equipment Development: Your Project Title."
 2. Explicitly state if the proposal is for Track 1, Track 2, or Track 3.
 3. Explicitly state if this is a resubmission.
 4. Provide a description of the equipment and justification of need.

5. List the faculty who will be involved in the submission and the estimated number of researchers who will benefit from the use of the equipment.
 6. Provide a description of the management plan, **including 5-year operational budget with rates and anticipated annual samples/usage hours**, plans for the maintenance, operation, training, and technical support of instrumentation. If the instrument will reside in a core, state the core, include the core Operations Director in key personnel, and estimate annual usage and expected rates. If proposed instrument replaces an existing capability, provide NUcore name of service line and usage time and revenue over last two years by department. Include the room where the equipment will be located along with any renovations needed to complete the project. If no renovations are required, explicitly state that fact.
 7. Provide a description of other requirements as outlined in the NSF guidelines for the MRI Program. Examples include the plan for attracting new users, how the instrument will impact interdisciplinary science, research in the private sector and/or other academic institutions, risk factors involved, and how they will be addressed.
 8. Provide a summary of your proposal as outlined in the program solicitation. In addition, the summary **MUST** address the "Intellectual Merit" and "Broader Impact" of the proposal.
2. **NSF-formatted biographical sketch** of all key personnel (2 pages max for PI)
 3. **Project budget**
 - a. Include quote for instrument as appendix for acquisition proposals.
 4. **Previous Reviews (for resubmission only)**
 5. **Documents required for instruments operated by core facilities:**
 - a. **Core Commitment** provided by the Core Faculty Director that core will maintain and operate instrument using this [template](#).
 - b. **Operational Financial Commitment** provided by the Center Director/Department Chair that propose instrument is in strategic interest and that unit will resolve any financial issues arising from the operation of the proposed instrument using this [template](#).
 - c. **Space Confirmation** provided by the space owner that space is available and appropriate for the proposed instrument using this [template](#).

KEY DATES

Internal Competition Proposal due: August 21, 2023 (by midnight)

Internal notifications due: By Mid-September 2023

NSF full proposal due: November 15, 2023 (5:00 PM local time)

SUBMITTING THE INTERNAL PROPOSAL

1. Assemble all documents in the INTERNAL PROPOSAL GUIDELINES description into a single pdf document titled "LastName-FirstInitial-NSF-MRI-TrackX-2023-IP" where X is 1, 2, or 3.

2. Submit your proposal by completing this [web form](#). Note: Supplemental documents are not accepted.
3. To receive a confirmation email and copy of your submission, check the box ("Send me a copy of my responses") and enter your email address.
4. Click "Submit".

CONTACT

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