Instrumentation Grants

National Institutes of Health Instrumentation Grants
High-End Instrumentation (HEI) Grant Program (S10 Clinical Trial Not Allowed)
National Institutes of Health
Office of Research Infrastructure Programs
Target audience: faculty, graduate students, undergraduates
Goal: Instrumentation
https://grants.nih.gov/grants/guide/pa-files/PAR-22-079.html
Deadline: 6/3/2024
The High-End Instrumentation (HEI) Grant Program encourages applications from groups of NIH-supported investigators to purchase or upgrade a single item of high-end, specialized, commercially available instruments or integrated systems. The minimum award is $750,001. There is no maximum price limit for the instrument; however, the maximum award is $2,000,000. Instruments supported include, but are not limited to, X-ray diffractometers, high throughput robotic screening systems, mass spectrometers, nuclear magnetic resonance spectrometers, DNA and protein sequencers, biosensors, electron and light microscopes, flow cytometers, and biomedical imagers.

Shared Instrumentation Grant (SIG) Program (S10 Clinical Trial Not Allowed)
National Institutes of Health
Office of Research Infrastructure Programs
Target audience: faculty, graduate students, undergraduates
Goal: Instrumentation
https://grants.nih.gov/grants/guide/pa-files/PAR-22-080.html
Deadline: 6/3/2024
The Shared Instrument Grant (SIG) Program encourages applications from groups of NIH-supported investigators to purchase or upgrade a single item of high-priced, specialized, commercially available instruments or integrated instrumentation system. The minimum award is $50,000. There is no maximum price limit for the instrument; however, the maximum award is $600,000. Instruments supported include, but are not limited to: X-ray diffractometers, mass spectrometers, nuclear magnetic resonance spectrometers, DNA and protein sequencers, biosensors, electron and light microscopes, flow cytometers, and biomedical imagers.

Limited Competition: Basic Instrumentation Grant (BIG) Program (S10 Clinical Trial Not Allowed)
National Institutes of Health
Office of Research Infrastructure Programs
Target audience: faculty, graduate students, undergraduates
Goal: Instrumentation
https://grants.nih.gov/grants/guide/pa-files/PAR-22-081.html
Deadline: 6/3/2024
The Basic Instrumentation Grant (BIG) Program encourages applications from groups of NIH-supported investigators to purchase a single high-priced, specialized, commercially available instrument or an integrated instrumentation system.

The BIG Program is limited to institutions that have not received S10 instrumentation funding of $250,001 or greater in any of the preceding 3 Federal fiscal years (FY).
The minimum award is $25,000. There is no maximum price limit for the instrument; however, the maximum award is $250,000. Instruments supported include, but are not limited to, basic cell sorters, confocal microscopes, ultramicrotomes, gel imagers, or computer systems.

Campus Cyberinfrastructure (CC*)
National Science Foundation (NSF)
Target audience: faculty, postdocs, graduate students, undergraduate students
Goal: instrumentation
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf24530
Program page
Deadlines: April 22, 2024; October 14, 2024
Amount Note: Approximately $15 million - $20 million will be made available in FY24 to support 32-55 awards, subject to the availability of funds.

The Campus Cyberinfrastructure (CC*) program invests in coordinated campus-level cyberinfrastructure improvements, innovation, integration, and engineering for science applications and distributed research projects. Projects that help overcome disparities in cyber-connectivity associated with geographic location, and thereby advance the geography of innovation and enable populations based in these locales to become more nationally competitive in science, technology, engineering, and mathematics (STEM) research and education are particularly encouraged. Science-driven requirements are the primary motivation for any proposed activity.

CC* awards will be supported in five program areas:

- Area (1) Data Driven Networking Infrastructure (Campus or Region),
- Area (2) Computing and the Computing Continuum (Campus or Region),
- Area (3) Network Integration and Applied Innovation (Small or Large),
- Area (4) Data Storage and Digital Archives, (Campus or Region), and
- Area (5) Strategy (Campus or Region).

Geoinformatics (GI)
National Science Foundation (NSF)
Division of Earth Sciences (EAR)
Directorate for Geosciences (GEO)
Target audience: faculty
Goal: Cyberinfrastructure
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23594
Program page
Deadlines: December 5, 2025 Innovative Resources only
December 6, 2024 Sustained Resources only. Prior to submission of full proposals, investigators for the Sustained Resources track are required to submit a Concept Outline, which is due at least three (3) months before the full proposal target date.
Amount Note: Estimated Number of Awards: 6 to 8
The Geoinformatics program funds the deployment, operation, and sustainment of cyberinfrastructure (CI) resources to serve and support Earth Sciences research and education. In this solicitation, Earth Sciences refers to the academic research communities supported by programs within NSF's Division of Earth Sciences (EAR) (https://www.nsf.gov/funding/programs.jsp?org=EAR).

Goals for Geoinformatics support include (but are not limited to):

(i) Enabling the management of and access to data, physical samples, and other research products in the Earth Sciences;
(ii) Facilitating the development and use of open-source software and modeling capabilities, preferably via approaches that leverage shared computing resources and collaborative software development processes;
(iii) Fostering transparent and reproducible modes of research and education in the Earth Sciences; and
(iv) Increasing the capacity of Earth Scientists to utilize cyberinfrastructure resources.

The Geoinformatics program will consider proposals within two tracks of support:

- The **Innovative Resources track** supports the early-stage development, deployment, and community-building for CI resources that serve Earth Sciences research and education.
- The **Sustained Resources track** supports the sustained operations and user community support for mature CI resources that serve Earth Sciences research and education.

Major Research Instrumentation
National Science Foundation (NSF)
Target audience: faculty, undergraduates, graduate students
Goal: instrumentation
https://new.nsf.gov/funding/opportunities/major-research-instrumentation-program-mri/nsf23-519/solicitation
Program page
Deadline window: October 15 2024 - November 15, 2024
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 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/or not appropriate for support through other NSF programs.

An MRI proposal may request from NSF up to $4 million 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 MRI proposals are those that request funds from NSF greater than $100,000 and less than $1,400,000.
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 MRI proposals are those that request funds from NSF greater than or equal to $100,000 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 the consumption of helium.
Institutions may submit no more than one Track 3 proposal. Submission of a Track 3 proposal does not impact limits that apply for Track 1 and Track 2 proposals.

Mathematical Sciences Infrastructure Plan
National Science Foundation (NSF)
Target audience: Mathematics faculty
Goal: training, infrastructure, conferences, symposia, travel support
PD 20-1260
Program page
Deadlines: August 6, 2024, first Tuesday in August, annually thereafter
February 4, 2025, first Tuesday in February, annually thereafter

The DMS Infrastructure program invites projects that support core research in the mathematical sciences, including: 1) novel projects supporting research infrastructure across the mathematical sciences community; 2) training projects complementing the Workforce Program, and 3) conference, workshop, and travel support requests that include cross-disciplinary activities or have an impact at the national scale.

Proposals under this solicitation submitted to DMS Infrastructure must show engagement in developing or enhancing the mathematical sciences research infrastructure in the U.S., including, but not limited to, broadening participation activities; professional development training; or involvement of students and early career researchers. Proposals must explain the regional or national scale impact of the activity that goes substantially beyond the submitting institution or the location of the event.

There are 3 categories of funding:

(1) **Novel projects that serve to strengthen the research infrastructure:** The DMS Infrastructure Program will consider novel projects that support and strengthen the research infrastructure across the mathematical sciences community. These projects most often cut across multiple sub-disciplines supported by DMS or involve interdisciplinary collaborations. The main goal of these projects should be to create a new research infrastructure or substantially enhance or transform an existing infrastructure with regional or national impact that goes substantially beyond the submitting institution or the location of the project. Full proposals must be submitted by the Full Proposal Target Date.
(2) **Training projects:** Training proposals submitted to DMS Infrastructure must not fit into one of the areas covered by solicitations in the Workforce Program in the Mathematical Sciences; they must be submitted by the Full Proposal Target Date. See the program page for more information

Conferences, Symposia, Working Research Sessions, Travel Support Requests: Principal Investigators should carefully read the program solicitation Conferences and Workshops in the Mathematical Sciences to obtain important information regarding the substance of proposals for conferences, workshops, summer/winter schools, international travel support, and similar activities. Conference/workshop proposals that concern topics within a particular subdiscipline of mathematics or statistics should be submitted to the appropriate DMS disciplinary program(s). These submissions are subject to the lead-time requirements specified by the disciplinary program(s); see the program web pages listed on the DMS home page