

NSF 26-505: National Quantum and Nanotechnology Infrastructure (NQNI)

Program Solicitation

Document Information

Document History

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U.S. National Science Foundation

Directorate for Engineering

Division of Electrical, Communications and Cyber Systems

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Division of Civil, Mechanical and Manufacturing Innovation

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Division of Behavioral and Cognitive Sciences

Division of Social and Economic Sciences

Directorate for Biological Sciences

Directorate for STEM Education

Division of Undergraduate Education

Letter of Intent Due Date(s) (required) (due by 5 p.m. submitting organization's local time):

March 16, 2026

Letter of Intent (LOI) Deadline

Full Proposal Deadline(s) (due by 5 p.m. submitting organization's local time):

May 14, 2026

Full Proposal Deadline



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Important Information And Revision Notes

1. The program has an expanded network-wide emphasis to include NQNI Sites with strong expertise, capabilities, and instrumentation to support infrastructure for emergent areas of quantum information science and engineering as well as for critical nanotechnology research.
2. Sites are encouraged to participate in a "network of networks" by including partnerships that leverage complementary investments with other quantum and nanotechnology infrastructure. Such infrastructure may be supported by NSF, the Department of Commerce (DOC)/National Institute of Standards and Technology (NIST), the Department of Energy (DOE), the Department of War (DOW), U.S. National Laboratories, or other entities.
3. The program supports a regional network model that encourages Sites to be comprised of a primary institution of higher education with additional partners to serve larger surrounding geographic areas.
4. As one component of its workforce development activities, Sites should include formal partnerships with community and/or technical colleges (or equivalent educational institutions).
5. As an open and shared infrastructure network, external academic users (as defined below) should pay the same fees as internal users, and Sites should publish their fee schedules on their websites.

Proposals must be prepared in accordance with the [NSF Proposal & Award Policies & Procedures Guide \(PAPPG\)](#). Use the version of the guide that is in effect on the proposal's due date.

Summary Of Program Requirements

General Information

Program Title:

National Quantum and Nanotechnology Infrastructure (NQNI)

Synopsis of Program:

The U.S. National Science Foundation (NSF) National Quantum and Nanotechnology Infrastructure (NQNI) program will empower researchers nationwide to advance critical and emerging technologies. Through NQNI, NSF will establish an open-access network of research facilities to spur innovations in future quantum technologies, semiconductors, artificial intelligence, manufacturing, biotechnology, and other areas of national priority.

The NQNI solicitation establishes a competition for a network of university user facility Sites. The selection of user facility Sites will be based on their technical capabilities and instrumentation (specifically, fabrication, characterization, and expertise) to address current and anticipated user needs across quantum information science and engineering (QISE), nanoscience, nanoengineering, and nanotechnology. Site selection will also be based on plans to open facilities and instrumentation for external use, education, training, outreach, and workforce development.

In a later stage, NSF will select an NQNI Coordinating Office from among the Sites; the Coordinating Office will enhance and coordinate NQNI collective impacts that serve the Nation's quantum and nanotechnology innovators.

Expanding Participation In Stem, NSF Priorities, And Gold Standard Science

NSF prioritizes cutting-edge discovery science and engineering research, advancing technology and innovation, and creating opportunities for all Americans. NSF has established priorities set forth by Congress, the administration and the NSF director to promote [NSF's mission](#). Proposers should review the list of [NSF priorities](#) and are encouraged to align their proposals with them, where appropriate. NSF also expects the highest standards of scientific rigor, integrity and adherence to appropriate tenets of [Gold Standard Science](#) in proposals, as appropriate for the field of science and research modality.

Cognizant Program Officer(s):

Please note that the following information is current at the time of publishing. See program website for any updates to the points of contact.

- Richard S. Nash, email: NQNI@nsf.gov
- Sankar Basu, email: NQNI@nsf.gov
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- Leonard Spinu, email: NQNI@nsf.gov
- Joseph C. Toscano, email: NQNI@nsf.gov

Applicable Catalog of Federal Domestic Assistance (CFDA) Number(s):

- 47.041 --- Engineering
- 47.049 --- Mathematical and Physical Sciences
- 47.074 --- Biological Sciences
- 47.075 --- Social Behavioral and Economic Sciences
- 47.076 --- STEM Education
- 47.079 --- Office of International Science and Engineering

Award Information

Anticipated Type of Award: Standard Grant or Continuing Grant

Estimated Number of Awards: 8 to 16

Anticipated Funding Amount: \$60,000,000 to \$100,000,000

The NQNI program will support awards funded at different levels as motivated by the proposed activities. Individual NQNI Sites may be funded at a level between \$500,000/year and \$2,000,000/year, for up to 5 years. The budget of each proposed Site is expected to be commensurate with the associated research, education, and coordination activities.

Proposal Preparation and Submission Instructions

A. Proposal Preparation Instructions

- **Letters of Intent:** Submission of Letters of Intent is required. Please see the full text of this solicitation for further information.
- **Preliminary Proposal Submission:** Not required
- **Full Proposals:**
 - For proposals submitted via Research.gov, [PAPPG](#) guidelines apply.
 - For proposals submitted via Grants.gov, [NSF Grants.gov Application Guide](#) guidelines apply.

B. Budgetary Information

- **Cost Sharing Requirements:**

Inclusion of voluntary committed cost sharing is prohibited.
- **Indirect Cost (F&A) Limitations:**

Not Applicable
- **Other Budgetary Limitations:**

Not Applicable

C. Due Dates

- **Letter of Intent Due Date(s) (required)** (due by 5 p.m. submitting organization's local time):

March 16, 2026

Letter of Intent (LOI) Deadline
- **Full Proposal Deadline(s)** (due by 5 p.m. submitting organization's local time):

May 14, 2026

Full Proposal Deadline

Proposal Review Information Criteria

Merit Review Criteria:

National Science Board approved criteria. Additional merit review criteria apply. Please see the full text of this solicitation for further information.

Award Administration Information

Award Conditions:

Standard NSF award conditions apply.

Reporting Requirements:

Standard NSF reporting requirements apply.

I. Introduction

U.S. National Science Foundation (NSF) support for nanotechnology research infrastructure has enabled major discoveries and contributions to education, training, and industry. NSF funding has provided researchers and students with access to leading-edge nanoscale tools, instrumentation, and expertise. Recently, the need for infrastructure and expertise to support emergent quantum information engineering and future technologies has grown.

The NSF National Quantum and Nanotechnology Infrastructure (NQNI) program will establish the next generation of research infrastructure. NQNI will provide open access to tools, instrumentation, and expertise for both quantum information science and engineering (QISE) and nanotechnology.

NSF has invested in nanotechnology infrastructure for almost 50 years. Most recently, NSF supported the National Nanotechnology Coordinated Infrastructure (NNCI, 2015-2025). Agency programs have continuously adapted to the needs of industry, academia, and government.

NSF NQNI is supported by the NSF Directorates for Engineering (ENG) Mathematical and Physical Sciences (MPS), Social, Behavioral and Economic Sciences (SBE), Biological Sciences (BIO), and STEM Education (EDU), and the NSF Office of International Science and Engineering (OISE). The NSF Directorate for Engineering (ENG) is the lead Directorate for this program.

II. Program Description

NSF NQNI responds to national and community research priorities that will advance nanoscale and quantum science and engineering and grow U.S. leadership in critical and emerging technologies. These include quantum technology, semiconductors, artificial intelligence (AI), manufacturing, biotechnology, and others.

NQNI will provide broad access to domestic QISE research infrastructure as called for in the National Quantum Initiative (NQI) Act of 2018 (Public Law 115-368) and Administration priorities. NSF support for world-class research infrastructure will help U.S. researchers meet the needs of innovative quantum systems.

NSF developed the NQNI program with input on future research infrastructure needs from academia, government, industry, and U.S. National Laboratories. The workshop report, [Nanotechnology Infrastructure of the Future](#) (2023, NSF award 2331369), emphasized the need to continue supporting nanotechnology infrastructure; it concluded that such resources are "essential for quantum science and engineering and other emerging national research priorities." The workshop report, [Workshop on Quantum Engineering Infrastructure II](#) (2025, NSF award 2405015), affirmed that NSF nanofabrication infrastructure programs are highly valuable for quantum research; it also stated that such infrastructure should support quantum "technologies that require higher-levels of integration, yet have the flexibility to work with emerging platforms."

Overall Approach

The NQNI program will support open-access user facilities called NQNI Sites. NQNI Sites will be distributed across the U.S. to create a shared national resource for the research and business communities. Each Site will serve regional communities, with a focus on community members that lack access to advanced micro- and nano-fabrication and characterization equipment, training, and expertise.

The Sites should aim to provide access to users from local and regional institutions, industry, and government who are not themselves formally part of the NQNI Site ("external users"). Potential external users could be from other academic institutions as well as startups, small and large businesses, and government. To advance the open-access mission, external academic user fees at Sites must be identical to internal academic fees. Similarly, Sites should explore ways to reduce barriers to entry for industrial and small business/startup users. Submitting teams are asked to describe plans to reach untapped populations and bring benefits to a wide range of communities.

NQNI awards will primarily support personnel to run activities to recruit and train new external users to access tools and expertise at Sites. While access to computational resources and remote use of tools can be incorporated, Sites should

prioritize hands-on experiences for external users. Additionally, education, training, workforce development, and outreach efforts are expected. Funds may be used for activities related to the creation of educational materials, student researchers, postdoc training exchanges, and such.

Proposals should advance one or more of the following measures of success:

- Publications from research
- Data sets established or expanded
- New technologies or techniques established
- Undergraduate and graduate students trained in a specific critical area
- Research facility usage

Funding from this program may not be used for construction, acquisition, maintenance, or repair of physical infrastructure. Funding is available through NSF programs such as [Major Research Instrumentation](#), [Mid-scale Research Infrastructure-1](#), and [Mid-scale Research Infrastructure-2](#). More information is available at the [NSF Research Infrastructure Office website](#).

Technical Capabilities

The broad spectrum of NQNI capabilities could advance: nanostructures, materials, processes, devices, and systems; advanced packaging and heterogeneous integration for chips, chiplets, and system-in-package; nanoscale building blocks and materials, composites, coatings, and surfaces; soft matter synthetic biology; human neuroimaging and neurophysiological techniques; heterogeneous integration of complex, 3D nanoscale systems; hierarchical design to build nanoscale systems across multiple dimensions; prototyping, process integration, and testing of new manufacturing platforms such as 3D printing and self-driving laboratories.

Additional capabilities specific to quantum engineering could advance: 2D materials for applications such as flexible electronics and quantum devices; quantum mechanical phenomena for non-classical computation; quantum/nano materials development and synthesis; quantum-relevant fabrication infrastructure and processes; information storage; quantum dots in semiconductor design; low-dimensional quantum materials for hybrid 2D and 3D devices; solid-state memory; scalable qubits; transmission platforms with passive and active components; and system integration.

NQNI Sites could enable promising research directions such as: new system design and materials for energy conversion, harvesting and storage, dissipation of heat, precision sensing, and local actuation; bio-inspired, self-healing materials; structures and devices supporting research in the life sciences and biomedical applications; study of nanotoxicity; sensors for environmental science and monitoring; sensors for imaging and recording of chemical, physiological, neurobiological, and biochemical processes; energy-efficient devices and circuits for communication, storage, and processing of information including AI hardware; and devices and circuits for new information processing such as neuromorphic computing, quantum computing, and optical/photonic computing.

Some Sites may have widely used nanofabrication capabilities applicable to a wide range of disciplines, while others may offer highly specialized tools and processes to support a focused subset of nanoscience and technology. All will enable exploration and development of new applications of nanotechnology and QISE. Appropriate techniques should be intended principally for feedback control of fabrication processes, though access may be needed in specific fields to specialized characterization capabilities, either on-site or by remote operation.

Considerations for Individual Site Proposals

Sites should demonstrate their ability to manage shared facilities and to understand and serve the needs of external users. They should assess and describe the current state and opportunities of socio-technological environments in the targeted regions. They should have a plan to assess existing and potential user needs and highlight how they will provide broad and affordable access to a rich user base. They should show how NSF funds will leverage university and other resources to grow their external users and outline the facility's growth potential. They should also have methods to assess and quantify overall Site performance and impact, including education, training, workforce development, and outreach.

NQNI Sites should have strong underlying internal research programs that provide a critical knowledge base to develop new processes, methods, and instruments; they should demonstrate how these resources will be used to support training and development of new users. They should have a plan for supporting technical staff with the expertise to enable external users to plan and carry out experiments, and to instruct in laboratory safety, methods, and usage.

Sites must embrace a culture of open access, with protection of intellectual property, to researchers for any research project of merit. They also must embrace mechanisms that encourage non-traditional users from a broad range of disciplines and communities. They should have an organizational structure that allows coordination of complex process steps and tools for integrated tasks. They should also accept experimental risks associated with non-standard processes and materials.

Sites should provide an accessible website that describes how to gain access to the facility, their technical capabilities, tools, instruments, and user fees. This information should be available without the need to request access, create login credentials, or overcome any other restriction to immediate availability. They should have a plan for data management and sharing policies of research products.

Open-access user facilities provide unique opportunities to integrate innovative education, training, and workforce development with research at the frontiers of the field. Sites should provide clear, focused strategies for sharing promising practices. Learning experiences, resources, and tools for student researchers and postdoctoral associates, as well as outreach activities, should leverage the Site's unique strengths. These may involve, for example, community and technical colleges, pre-college levels, informal science settings, and international experiences. Sites should also create recruiting programs for potential users, including those from startups and small businesses, whose work could benefit from the Site.

Sites having expertise in organizational, economic, social, environmental, ethical, and/or policy issues are encouraged to integrate instruction and training on them into their proposals. The NQNI program can fund training and advising about the social and ethical implications (SEI) of nanotechnology if a Site integrates them into its activities. NQNI Sites that engage in social science activities should coordinate them across the network via the NQNI Coordinating Office.

Regional Connections and Partnerships

NQNI Sites are expected to be leaders in their regions, helping to create, grow, and lead open laboratory networks. They should show how they will complement and connect to other resources in the region. Sites may partner with facilities at regional or smaller institutions to bring new capabilities to users and enhance student research and postdoc training. Sites are encouraged to create partnerships that leverage investments between universities, non-profit organizations, industry associations, and government user facilities.

Proposals should clearly describe how these partnerships will expand available resources for users. Proposals should justify how coordination within the NQNI Site, with partners (both funded and unfunded), and with the broader community would stimulate research, education, training, workforce development, and outreach activities beyond what could be accomplished without NQNI funding. Partnering with Federal, state and local organizations and with industry can help grow the national workforce and ensure that education and training meet the needs of industry and small businesses.

Sites should think broadly about how unfunded partners could help. Potential ways to help include workforce development, education and outreach, staff exchange, sharing of expertise, determining research directions and infrastructure needs, serving on external advisory boards, and more.

Role of the Coordinating Office

After awarding the individual Sites, NSF will convene the NQNI Site Directors to discuss ways to enhance their impact through a coordinated national network. An NQNI Coordinating Office will then be selected by NSF to develop management strategies, the strategic plan, and operational plans in concert with the NQNI Site Directors.

The NQNI Coordinating Office will be responsible for establishing a web portal that links individual facility websites to present a unified face to the user community; the web portal will describe overall capabilities, tools, instrumentation,

regional partnerships, and expertise. The Office will help to coordinate and share best practices for education, training, workforce development, and outreach. It will also establish methods for assessment and quantifiable metrics of overall Site performance and impact.

III. Award Information

Estimated program budget, number of awards and average award size/duration are subject to the availability of funds.

Approximately \$12,000,000 - \$20,000,000 total funds will be available in this competition for each year of the period FY 2026-2030. NSF intends to provide individual or collaborative awards to support approximately 8-16 university user facility Sites; funding will range from \$500,000 to a maximum of \$2,000,000 per year, depending on the scope and scale of a Site's activities. Proposing institutions can include partnerships with other institutions of higher education either as subawards or as collaborative awards. The initial award duration will be for five years and may be renewed once for five more years, subject to merit review. NSF may hold limited additional competitions to address critical technical needs or to replace non-performing Sites or the Coordinating Office.

An institution selected to lead the Coordinating Office will receive a separate award; its funding will be approximately \$700,000 per year.

IV. Eligibility Information

Who May Submit Proposals:

The categories of proposers eligible to submit proposals to the National Science Foundation are identified in the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG), Chapter I.E. Unaffiliated individuals are not eligible to submit proposals in response to this solicitation.

Who May Serve as PI:

By the submission deadline, the Principal Investigator (PI) must hold either:

- a tenured or tenure-track position, or
- a full-time, paid appointment to a research position

at a U.S.-based campus of an IHE eligible to submit to this solicitation.

Limit on Number of Proposals per Organization: 1

Limit on Number of Proposals per PI or co-PI: 1

V. Proposal Preparation And Submission Instructions

A. Proposal Preparation Instructions

Letters of Intent (*required*):

A one-page Letter of Intent (LOI) must be submitted through Research.gov. LOIs must include:

- Heading: Include the proposal title and lead organization.
- Title: Titles must begin with "NQNI:".
- Principal Investigator: Name, departmental and organizational affiliation, and expertise.
- Synopsis: Proposed vision, key components, main activities, and major goals of the proposed activity.
- Other Comments (maximum 2500 characters): A list of Senior/Key Personnel (Principal Investigator, co-PI(s), and Faculty Associate(s) or equivalent), including funded and unfunded collaborators, and providing names,

affiliations, and area(s) of expertise for all personnel. Estimated total budget for each year of award and for each funded partner institution.

For this Program Solicitation, submission of multiple LOIs from the same PI is not permitted.

LOIs are not reviewed or used as pre-approval mechanisms for the submission of preliminary proposals. No feedback is provided.

Letter of Intent Preparation Instructions:

When submitting a Letter of Intent through Research.gov in response to this Program Solicitation please note the conditions outlined below:

- Submission by an Authorized Organizational Representative (AOR) is required when submitting Letters of Intent.
- A Minimum of 0 and Maximum of 4 Other Senior Project Personnel are permitted
- A Minimum of 0 and Maximum of 4 Other Participating Organizations are permitted
- Proposal Title: is required when submitting Letters of Intent
- Synopsis: is required when submitting Letters of Intent
- Other Comments: is required when submitting Letters of Intent
- Submission of multiple Letters of Intent is not permitted

Full Proposal Preparation Instructions: Proposers may opt to submit proposals in response to this Program Solicitation via Research.gov or Grants.gov.

You must prepare your proposal according to [Chapter II.D.2 of the PAPPG](#), unless this solicitation specifies different instructions. Always use the version of the PAPPG in effect on your proposal's due date.

- For proposals submitted via Research.gov, [PAPPG](#) guidelines apply.
- For proposals submitted via Grants.gov [NSF Grants.gov Application Guide](#) guidelines apply.

In determining which method to utilize in the electronic preparation and submission of the proposal, please note the following:

Collaborative Proposals. All collaborative proposals submitted as separate submissions from multiple organizations must be submitted via Research.gov. [PAPPG Chapter II.E.3](#) provides additional information on collaborative proposals.

The following provides additional guidance beyond that contained in the PAPPG or NSF Grants.gov Application Guide. Proposals that do not include required sections or components, or that exceed the total page limitations specified below, may be returned without review.

Full Proposal Title:

The title of the proposal must begin with the letters "NQNI: " The rest of the title should describe the project in concise language that is understandable to a technically literate reader.

Full Proposal Project Summary:

The Project Summary consists of an overview, a statement on the intellectual merit of the proposed activity, and a statement on the broader impacts of the proposed activity. Provide a summary of the proposed project at this user facility Site that conveys its objectives, key features, and main technical focus areas in a way that will be informative to a general technical audience. Include proposed major activities in the core components of expanding external user access, partnerships, education, training, workforce development, and outreach.

Full Proposal Project Description:

The NQNI proposal core components comprise the following items **a** through **h**, which must be addressed in the project description.

- a. **List of Participants.** List the PI (Site Director), any co-PIs, and each participating other Senior/Key Personnel, including institutional and departmental (if applicable) affiliation.
- b. **Vision and Goals:** Describe the vision and goals for the proposed NQNI project activities for the Site. Include its main technical focus areas, partnerships, and potential in contributing to the nation's research, education, training, and workforce development.
- c. **Capabilities of the Site:** Describe the extent of fabrication and characterization instrumentation capabilities, the breadth of research fields and needs, and the nature of user services to be provided. Present evidence of capability of operating as a shared user facility that can serve both external and internal users, including those not in academia. Describe how external users will apply to the facility, how non-traditional users will be encouraged, how projects will be accepted, and how users can be accommodated both on-site and remotely. Discuss how NSF funds will be leveraged with institutional and other resources to grow the numbers of external users over time. Describe plans for professional staffing, accommodating external users, encouraging non-traditional users, user training, user fee structure, and intellectual property policy. Describe briefly the in-house research programs of principal faculty members that underpin the Site's capabilities and enable it to support development of new processes, tools, and instrumentation. Describe the planning process for acquisition and development of new tools and instrumentation needed to position the facility at the frontier over the duration of the award. Discuss plans to develop any connections with other centers or networks and facilities supported by government, the private sector, and international partners.
- d. **Education, Training, Workforce Development, Outreach, and Knowledge Dissemination:** State the specific goals and objectives of this component. Explain how innovative experiences infused with content from the frontiers of quantum information and nanoscale science and engineering for students, postdoctoral associates, and others will be emphasized. Describe educational outreach as well as training and workforce development and expansion plans. Describe outreach plans intended to increase the external user base, to encourage non-traditional users, and to reach potential users from startups and small businesses that could benefit from the Site's capabilities. Discuss how the Site may complement and connect to other local resources, such as business incubators, prototyping, and manufacturing facilities. Describe plans to share effective practices and knowledge to the broader research, education, and technology communities. The range and scope of the education, training, workforce development, and outreach activities are expected to be commensurate with the size of the requested budgets.
- e. **Partnerships:** Sites should assess and use regional needs and opportunities to expand the user base in science and engineering among students, postdoctoral researchers, faculty, staff, management, and outreach activities. Sites are encouraged to create new partnerships between community and technical colleges, universities, non-profit organizations, industry associations, and government user facilities. Each Site should have a formal partnership with a community college, technical college, or equivalent educational institution, and should include programs that engage these students.
- f. **Social and Ethical Implications:** Sites having expertise in organizational, economic, social, ethical, and policy issues (herein called social and ethical implications) related to QISE and nanotechnology are encouraged to integrate instructions and training of those aspects into their proposals. Proposals should explain how they will engage their user community base and relate regional needs to the capabilities of their respective user facilities. They should also indicate the social and ethical implications that will be the core concerns at the Site.
- g. **Leadership and Management Plan:** Describe the management structure for the individual user facility Site. Discuss the method of selection, duration, and responsibilities of the Site Director and other management individuals. Describe provisions for oversight, including an External Advisory Board, its composition (without specifying potential members), responsibilities, and means of advising Site management. Describe the methods for managing the external users program and for integrating the activities with academic programs. Discuss the planning process to determine overall Site requirements, including the development of a vision for future research directions, needs, and capabilities; allocation of resources; and prioritization of equipment acquisition,

development, and staffing. Describe plans for assessment and quantifiable metrics of Site performance and impact, including for education, training, workforce development and outreach. Describe the processes for setting goals, including a goal for promoting significant participation of non-traditional users and external users.

- h. **External Advisory Board (EAB):** Each NQNI Site is required to have an EAB, with members selected from outside the funded institutions of the Site. The proposal may describe the role of the EAB, but for conflict-of-interest purposes, proposers may not name prospective EAB members in the proposal or approach potential EAB members before an award is made.

Full Proposal Budget and Budget Justification:

Proposing institutions must provide annual budgets for each year of five years for their user facility Site proposals. A Site is limited to proposing a maximum award of \$2.0 million per year for the entire Site (including subawards or collaborative awards). A major portion of NSF funds should be budgeted for operation and staffing of the user facility to perform activities related to expanding the external user base. NSF funds may also be budgeted for associated purposes including education, training, translation, workforce development, and outreach activities. NSF funds may not be budgeted for direct research purposes.

For any funded non-lead participating partners, if included as subawards, provide a separate subaward budget and an additional 3-page (maximum) detailed justification for each. A funded non-lead participating partner may also submit a collaborative proposal which should have its own budget and budget justification.

Provide a detailed justification for the funds requested in the major budget categories for the proposed Site. This is important to enable NSF to perform a cost analysis for each individual item of cost. Describe the proposed allocation of funds with sufficient clarity to show how resources will be utilized in carrying out the proposed activities.

Facilities, Equipment, and Other Resources:

Describe all facilities, equipment, and other resources, such as shared infrastructure, that are critical to the proposed Site.

Any proposal which requests funds for construction, acquisition, maintenance, or repair of physical infrastructure will be returned without review.

Full Proposal Supplementary Documents:

- **Statement on NQNI Site Roles:** A one-paragraph statement (up to one-half page) from each of those listed as participating Senior/Key Personnel (including the PI, co-PIs, and other Senior/Key Personnel) outlining how they view their role in the NQNI Site. This must be specific and not a general statement of support. If the proposed Site has new or open positions that they plan to fill, if awarded, they may describe the expected role of that position.
- **Letters of Collaboration:** The Project Description must detail any substantial collaborations and engagements (included or not included in the budget) with partner organizations. Additionally, proposals should include Letters of Collaboration from major partners in their region.
 - Letters of Collaboration should confirm the intent to collaborate. It should include a short description of their contribution (facilities, equipment, expertise, personnel, etc.) and how they will benefit from the collaboration.
 - The letters may neither be statements of support or endorsement, nor should they contain evaluations of the project, proposal, or the project senior/key personnel.
 - Each lead institution proposal must submit a minimum of 3 and a maximum of 10 Letters of Collaboration.
 - The page limit per letter is 1 page.
 - Letters of Collaboration must be from institutions or facilities who are external to the lead institution.
 - Proposals that contain letters not permitted by the program solicitation may be returned without review.

Important Information when Preparing the Collaborators and Other Affiliations (COA) document:

PIs should carefully follow the instructions regarding preparation of the COA form provided at <https://www.nsf.gov/bfa/dias/policy/coa.jsp>. A COA form in .xlsx format must be submitted as a Single Copy Document for each individual identified as senior/key personnel of the NQNI team. For large collaborations or authorships, the form should only list those people with whom the senior personnel have collaborated in a direct and substantive way. Senior/Key personnel with questions regarding whom they should list in their COA form should contact the cognizant NQNI Program Officer(s). Note in this context that listing a collaboration name or providing a collaboration URL is not sufficient.

B. Budgetary Information

Cost Sharing:

Inclusion of voluntary committed cost sharing is prohibited.

C. Research.gov/Grants.gov Requirements

You can submit proposals in response to this solicitation through Research.gov or Grants.gov, unless otherwise noted.

Information on how to prepare and submit proposals is available on the [Submitting Your Proposal](#) page on NSF.gov.

VI. NSF Proposal Processing And Review Procedures

Information on NSF's proposal processing and review procedures is available on the [Overview of the NSF Proposal and Award Process](#) page on NSF.gov.

A. Merit Review Principles and Criteria

All NSF proposals are evaluated through use of the two National Science Board-approved merit review criteria:

- **Intellectual Merit**, which encompasses the potential to advance knowledge.
- **Broader Impacts**, which encompass the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

Information on NSF's merit review principles and process can be found on the [How We Make Funding Decisions](#) page on NSF.gov.

Additional Solicitation Specific Review Criteria

In responding to the above NSF review criteria, reviewers will be asked to place emphasis on the following additional criteria for individual Site proposals:

1. Quality of programs for outreach, knowledge dissemination, educational, research, and workforce development experiences, including expanding the breadth of the workforce.
2. Strength of internal research programs and faculty, and site management structure, plans, and ability to ensure high-quality external user services.
3. Breadth and impact of regional coverage, integration of partnership structure, and sufficient budget for funded partners to serve a large external user community.
4. If applicable, quality of plans for inclusion of social, ethical, economic, and environmental aspects of quantum information and nanotechnologies and/or computational and modeling/simulation capabilities.

B. Review and Selection Process

Proposals submitted in response to this program solicitation will be reviewed by Ad hoc Review and/or Panel Review, Internal NSF Review, or Reverse Site Review.

Proposals submitted in response to this program solicitation will be reviewed by Ad hoc Review, internal Review, and/or Panel Review, or Reverse Site Visit (RSV). Teams selected to move forward in the competition may be asked to participate

in a virtual RSV to clarify concerns or questions raised in the review.

After a proposal passes an initial compliance check, it will be reviewed by an NSF Program Officer. In most cases, three or more external experts will also review it (either as ad hoc reviewers, panelists or both).

Visit the [Overview of the NSF Proposal and Award Process](#) page for more information on the proposal review and selection process.

VII. Award Administration Information

A. Notification of the Award

Notification of an award is made to *the submitting organization* by an NSF Grants and Agreements Officer.

B. Award Conditions

Information on NSF award conditions can be found on the [Award Terms and Conditions](#) page on NSF.gov and [Chapter VII of the PAPPG](#).

Administrative and National Policy Requirements:

Information on administrative and national policy requirements can be found on the [National Policy Requirements for Recipients of NSF Awards](#) page on NSF.gov.

C. Reporting Requirements

Unless your award notice says otherwise, NSF requires the principal investigator of every grant to submit annual project reports and a project outcomes report for the general public. For complete reporting requirements, see [Chapter VII of the PAPPG](#).

VIII. Agency Contacts

For questions related to the use of NSF systems contact:

- **Research.gov:** NSF IT Service Desk at rgov@nsf.gov or 1-800-381-1532. The Service Desk is open from 7 a.m. to 9 p.m. Eastern time, Monday through Friday (except for federal holidays).

For questions relating to Grants.gov contact:

- **Grants.gov:** The Grants.gov Contact Center at support@grants.gov or 1-800-518-4726. (Contact if the Authorized Organizational Representative (AOR) has not received a confirmation message from Grants.gov within 48 hours of submitting an application.)

IX. Other Information

For information on NSF directorates, programs and funding opportunities, go to [NSF.gov](#).

About The National Science Foundation

The U.S. National Science Foundation is an independent federal agency created by the "National Science Foundation Act of 1950." More information about NSF can be found on [NSF.gov](#).

- **Location:** Randolph Building, 401 Dulany Street, Alexandria, VA 22314

- **General Information** (703) 292-5111
- **TDD (for the hearing-impaired):** (703) 292-5090

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