

**Federal Funding Opportunity**  
**National Institute of Standards and Technology**  
**NIST Center for Neutron Research (NCNR) Comprehensive Grants Program**

**Overview Information**

1. Funding Opportunity Title: NIST Center for Neutron Research (NCNR) Comprehensive Grants Program

3. Announcement Type: Initial Announcement

4. Funding Opportunity Number: 2010-NCNR-01

5. Catalog of Federal Domestic Assistance (CFDA) Number(s): 11.609

6. Dates: All electronic applications must be received no later than 5:00 p.m. Daylight Saving Time on May 13, 2010. All paper applications must be postmarked no later than 5:00 p.m. Daylight Saving Time on May 13, 2010. Late applications will not be reviewed or considered.

Executive summary: The National Institute of Standards and Technology (NIST) announces that the *NIST Center for Neutron Research (NCNR) Comprehensive Grants Program* is soliciting applications for financial assistance for FY 2010. The program will provide cooperative agreements for research involving Neutron Research and Spectroscopy specifically aimed at assisting visiting researchers at the NIST Center for Neutron Research, developing new instrumentation for Neutron Research, conducting collaborative research with NIST scientists, and to conduct other outreach and educational activities that advance the use of neutrons by U.S. academia and industrial scientists.

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**Full Text of Announcement**

a. Funding Opportunity Description:

**Authority: 15 U.S.C. § 272(b) and (c)**

Program Description: The *NIST Center for Neutron Research (NCNR) Comprehensive Grants Program* will provide cooperative agreements for research involving Neutron Research and Spectroscopy specifically aimed at assisting visiting researchers at the NIST Center for Neutron Research, developing new instrumentation for Neutron Research, conducting collaborative research with NIST scientists, and to conduct other outreach and educational activities that advance the use of neutrons by U.S. academia and industrial scientists.

Applicants and team members must possess the education, experience, and training to pursue and advance the field of Neutron Scattering efficiently. In addition, the applicant and team members must possess a demonstrated record of excellence in research involving neutron scattering methods. This will entail stationing scientific staff at the NCNR who, in collaboration with NIST and visiting scientists, advances these objectives.

Examples of jointly-pursued activities under previous cooperative agreements include the integration of expert academia research and technical staff to assist neutron users at the NCNR in conducting their scientific

research on various neutron instruments, the design and development of state-of-the-art double-focusing neutron monochromator for use on MACS (the Multi-Analyzer Crystal Spectrometer), studies of advanced applications of neutron residual stress methods, the design and development of a neutron phase space transformation chopper for use on the HFBS (High-Flux Backscattering Spectrometer), and computer modeling studies of neutron scattering measurements from biomolecular systems.

Dr. Dan Neumann should be contacted for any inquiries about the objectives for this NCNR program. He can be reached at (301) 975-5252 or by e-mail at [dan.neumann@nist.gov](mailto:dan.neumann@nist.gov).

b. Award Information:

The *NIST Center for Neutron Research (NCNR) Comprehensive Grants Program* will consider proposals lasting from one to five years. When a proposal for a multi-year award is approved, funding will generally be provided for only the first year of the program. If an application is selected for funding, NIST has no obligation to provide any additional funding in connection with that award. Continuation of an award to increase funding or extend the period of performance is at the total discretion of NIST. Funding for each subsequent year of a multi-year proposal will be contingent upon satisfactory progress, continued relevance to the mission of the NCNR Comprehensive Grants Program, and the availability of funds. The multi-year awards must have scopes of work that can be easily separated into annual increments of meaningful work that represent solid accomplishments if prospective funding is not made available to the applicant, (i.e., the scopes of work for each funding period must produce identifiable and meaningful results in and of themselves.)

For FY 2010 individual awards are expected to range from approximately \$1,500,000 - \$2,000,000 per year. One or more awards may be approved. Between one and three awards are likely.

NIST plans to fund the awards as cooperative agreements. The nature of NIST's "substantial involvement" will generally be collaboration with the recipient by working jointly with a recipient scientist in carrying out the scope of work, or specifying direction or redirection of the scope of work due to inter-relationships with other projects requiring such cooperation.

c. Eligibility Information:

1. Eligible Applicants: The *NIST Center for Neutron Research (NCNR) Comprehensive Grants Program* is open to institutions of higher education; hospitals; nonprofit organizations; commercial organizations; state, local, and Indian tribal governments; foreign governments; organizations under the jurisdiction of foreign governments; and international organizations.

2. Cost Sharing or Matching: There is no cost sharing or matching requirements for the program.

d. Application and Submission Information:

1. Application Package:

Paper applications: Ms. Tanya Burke, NIST Center for Neutron Research, National Institute of Standards and Technology, 100 Bureau Drive, Stop 6100, Gaithersburg, Maryland 20899-6100.

Electronic applications: The forms listed in 2.a. through 2.e. below are available as part of the Grants.gov application package and can be completed through the download application process.

## 2. Content and Form of Application/Proposal Submission

Complete applications/proposals must include the following forms and documents:

- a. SF-424, Application for Federal Assistance
- b. SF-424A, Budget Information Non-Constructions
- c. SF-424B, Assurances Non-Construction
- d. CD-511, Certification Regarding Lobbying
- e. SF-LLL, Disclosure of Lobbying Activities (IF APPLICABLE)

Proposal submissions must include a Technical Proposal and a Budget Narrative. Proposals that are submitted without a Technical Proposal and/or a Budget Narrative will be rejected. There is no set format for the Technical Proposal and the Budget Narrative; however, they must be word-processed documents written by the applicant. The Technical Proposal should describe in depth the scope of the proposal, its goals, the methods and equipment to be used, its schedule, the personnel working on the project and their qualifications, and the institutional capabilities of the applicant. The Budget Narrative should detail the funds requested by object class, their purposes, and the timetable for using the funds for each year of expected funding.

The Technical Proposal is limited to 25 pages. There is no page limit for the budget narrative.

The applicant is responsible for ensuring that the application is complete and that it conforms to the requirements of this notice.

If submitting a paper application each applicant must submit one signed original and two paper copies of the complete application. Facsimile, electronic mail, and or forms of electronic application submissions other than Grants.gov will not be accepted.

### 3. Submission Dates and Times:

Timely submission of an application, whether submitted electronically or in paper format, is the responsibility of the applicant.

All electronic applications must be received no later than 5:00 p.m. Daylight Saving Time on May 13, 2010. All paper applications must be postmarked no later than 5:00 p.m. Daylight Saving Time on May 13, 2010. Late applications will not be reviewed or considered.

4. Intergovernmental Review: Executive Order 12372: Applications under this program are not subject to Executive Order 12372, "Intergovernmental Review of Federal Programs."

5. Funding Restrictions: Not applicable.

### 6. Other Submission Requirements:

Proposals may be submitted in hard copy or in electronic format as follows:

**Paper submission:** Ms. Tanya Burke, NIST Center for Neutron Research, National Institute of Standards and Technology, 100 Bureau Drive, Stop 6100, Gaithersburg, Maryland 20899-6100.

Paper submissions require an original and two (2) copies.

**Electronic submission:** Electronic proposals should be uploaded to [www.grants.gov](http://www.grants.gov)

The following forms are available as part of the Grants.gov application kit and can be completed through the download application process.

- SF-424, Application for Federal Assistance
- SF-424A, Budget Information – Nonconstruction Programs
- SF-424B, Assurances – Nonconstruction Programs
- CD-511, Certification Regarding Lobbying
- SF-LLL, Certification Regarding Lobbying Disclosure (if applicable)

The list of certifications and assurances referenced in item number 21 of the SF-424 is contained in the SF-424B.

**In order for an application to be considered complete, it must meet all the application documentation requirements stated in the Federal Funding Opportunity notice.**

Applicants may choose to scan or create the necessary documents and then attach them to the application in Grants.gov. Applicants should carefully follow specific Grants.gov instructions to ensure the attachments will be accepted by the Grants.gov system. A receipt from Grants.gov indicating a proposal is received does not provide information about whether attachments have been received.

For further information or questions regarding applying electronically for this announcement, please contact Christopher Hunton at 301-975-5718, e-mail address [Christopher.Hunton@nist.gov](mailto:Christopher.Hunton@nist.gov).

**Applicants are strongly encouraged to start early and not to wait until the approaching due date before logging on and reviewing the instructions for submitting an application through [Grants.gov](http://Grants.gov).** The Grants.gov registration process must be completed before a new registrant can apply electronically. If all goes well, the registration process takes from 3 to 5 business days. If problems are encountered, the registration process can take up to 2 weeks or more. Applicants must have a Dun and Bradstreet Data Universal Numbering System (DUNS) number and must be registered with the Federal Central Contractor Registry and with a Credential Provider, as explained on the Grants.gov web site. After registering, it may take several days or longer from the initial log-on before a new [Grants.gov](http://Grants.gov) system user can submit an application. Only authorized individual(s) will be able to submit the application, and the system may need time to process a submitted application. Applicants should save and print the proof of submission they receive from Grants.gov. If problems occur while using Grants.gov, the applicant is advised to (a) print any error message received, and (b) call Grants.gov directly at 800-518-4726 for immediate assistance. Grants.gov hours of operation are Monday-Friday, 7:00 a.m. to 9:00 p.m. Eastern Daylight Time (EDT) (except for Federal holidays). For assistance with using the Grants.gov, you may also contact [support@grants.gov](mailto:support@grants.gov).

Please refer to important information in "Submission Dates and Times" above to help ensure your application is received on time.

e. Application Review Information:

1. Criteria:

The *NIST Center for Neutron Research (NCNR) Comprehensive Grants Program* evaluation criteria that the technical reviewers will use in evaluating the proposals are as follows:

1. Qualifications and experience of the Principal Investigator in neutron scattering research, as demonstrated by extensive publications and invited lectures in condensed matter physics, chemistry, material science, macromolecular science or related fields (10%)
2. Qualifications and experience of the Applicant's proposed staff in neutron scattering research or in related scientific or engineering areas that are key to the activities contained in the proposal, as demonstrated by resumes of staff proposed for this program (30%).
3. Quality of the proposed research and development plan and its potential impact on neutron scattering science, particularly in the areas of macromolecular science, condensed matter physics, and chemistry (20%).
4. Quality of the plan in terms of providing research assistance to U.S. neutron researchers using the NCNR facilities, including related training, education, and outreach (30%).
5. Quality of the plan to integrate the Applicant's staff effectively into the activities of the NCNR facility, including establishing robust communications between the Applicant and the NCNR (10%).

## 2. Review and Selection Process:

Proposals submitted to the *NIST Center for Neutron Research (NCNR) Grants Program* will be reviewed in a two-step process. If a preliminary review determines that the proposal is incomplete or non-responsive to the scope of the stated objectives, the proposal will not be reviewed for technical merit. One copy of any such proposal will be retained for record keeping purposes for three years and all remaining copies will be destroyed. All applications that are complete and responsive to the solicitation will be reviewed for technical merit.

First, an independent, objective panel composed of at least four individuals who are knowledgeable about the particular scientific area described in the Program Description section above that the proposal addresses will conduct a technical review of proposals based on the evaluation criteria. The reviewers will reach a consensus score resulting in a rank order of applicants. If non-Federal reviewers are used, the reviewers may discuss the proposals with each other, but scores will be determined on an individual basis, not as a consensus. Second, the Center Director will make application selections. In making application selections, the Center Director will take into consideration the results of the reviewers' evaluations, the availability of funds, and relevance to the objectives of the *NIST Center for Neutron Research (NCNR) Comprehensive Grants Program*, described above in the Program Description section. The final approval of selected applications and award of financial assistance will be made by the NIST Grants Officer based on compliance with application requirements as published in this notice, compliance with applicable legal and regulatory requirements, and whether the recommended applicants appear to be responsible. Applicants may be asked to modify objectives, work plans, or budgets, and provide supplemental information required by the agency prior to award. NIST may fund all, some, or parts of the applications it receives, or none of them. The decision of the Grants Officer is final.

Unsuccessful applicants will be notified in writing. The Program will retain one copy of each unsuccessful application for three years for record keeping purposes. The remaining copies will be destroyed.

Anticipated Announcement and Award Dates: Awards are anticipated to be made on or about September 30, 2010.

## f. Award Administration Information:

- 1. Award Notices:** Successful finalists will receive a cooperative agreement award document from the Grant Officer. The document will be mailed via surface mail in triplicate. The recipient should have an authorized official at the organization sign and return two copies to the address listed in the award document. The award document will also include the standard terms and conditions, general terms and conditions (if any), and special award conditions (if any) that are applicable.
- 2. Administrative and National Policy Requirements:** The Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements, which are contained in the Federal Register Notice of February 11, 2008 (73 FR 7696), are applicable to this notice. On the form SF-424 items 8.b. and 8.c., the applicant's 9-digit Employer/Taxpayer Identification Number (EIN/TIN) and 9-digit Dun and Bradstreet Data Universal Numbering System (DUNS) number must be consistent with the information on the Central Contractor Registration (CCR) ([www.ccr.gov](http://www.ccr.gov)) and Automated Standard Application for Payment System (ASAP). For complex organizations with multiple EIN/TIN and DUNS numbers, the EIN/TIN and DUNS numbers MUST be the numbers for the applying organization. Organizations that provide incorrect/inconsistent EIN/TIN and DUNS numbers may experience significant delays in receiving funds if their proposal is selected for funding. Please confirm that the EIN/TIN and DUNS numbers are consistent with the information on the CCR and ASAP.

**Collaborations with NIST Employees:** Collaboration with NIST is presumed in the NCNR Comprehensive Grants Program. If any applicant proposes any activities involving specific NIST employees, the statement of work should include a statement of this intention, a description of the collaboration, and prominently identify the NIST employee(s) involved. Any collaboration by a NIST employee must be approved by appropriate NIST management and approval is at the sole discretion of NIST. Prior to beginning the merit review process, NIST will verify the approval of the proposed collaboration. Any unapproved collaboration will be stricken from the proposal prior to the merit review.

**Use of NIST Intellectual Property:** If the applicant anticipates using any NIST-owned intellectual property to carry out the work proposed, the applicant should identify such intellectual property. This information will be used to ensure that no NIST employee involved in the development of the intellectual property will participate in the review process for that competition. In addition, if the applicant intends to use NIST-owned intellectual property, the applicant must comply with all statutes and regulations governing the licensing of Federal government patents and inventions, described at 35 U.S.C. §§ 200-212, 37 C.F.R. Part 401, 15 C.F.R. § 14.36, and in Section B.21 of the Department of Commerce Pre-Award Notification Requirements, 73 FR 7696 (February 11, 2008). Questions about these requirements may be directed to the Office of the Chief Counsel for NIST, 301-975-2803.

Any use of NIST-owned intellectual property by a proposer is at the sole discretion of NIST and will be negotiated on a case-by-case basis if a project is deemed meritorious. The applicant should indicate within the statement of work whether it already has a license to use such intellectual property or whether it intends to seek one.

If any invention made in whole or in part by a NIST employee arises in the course of an award made pursuant to this notice, the United States government may retain its ownership rights in any such invention. Licensing or other disposition of NIST's rights in such invention will be determined solely by NIST, and include the possibility of NIST putting NIST's rights in the intellectual property into the public domain.

**Research Projects Involving Human Subjects, Human Tissue, Data or Recordings Involving Human Subjects:** Any proposal that includes research involving human subjects, human tissue, data or recordings involving human subjects must meet the requirements of the Common Rule for the Protection of Human Subjects, codified for the Department of Commerce at 15 CFR part 27. In addition, any proposal that includes research on these topics must be in compliance with any statutory requirements imposed upon the Department of Health and Human Services (DHHS) and other federal agencies regarding these topics, all

regulatory policies and guidance adopted by DHHS, the Food and Drug Administration, and other Federal agencies on these topics, and all Presidential statements of policy on these topics.

NIST will accept the submission of human subjects protocols that have been approved by Institutional Review Boards (IRBs) possessing a current registration filed with DHHS and to be performed by institutions possessing a current registration filed with DHHS and to be performed by institutions possessing a current, valid Federal-Wide Assurance (FWA) from DHHS. NIST will not issue a Single Project Assurance (SPA) for any IRB reviewing any human subjects protocol proposed to NIST.

President Obama has issued Executive Order No. 13,505 (74 FR. 10667, March 9, 2009), revoking previous Executive Orders and Presidential statements regarding the use of human embryonic stem cells in research. On July 30, 2009, President Obama issued a memorandum directing that agencies that support and conduct stem cell research adopt the "National Institutes of Health Guidelines for Human Stem Cell Research" (NIH Guidelines), which became effective on July 7, 2009, "to the fullest extent practicable in light of legal authorities and obligations." On September 21, 2009, the Department of Commerce submitted to the Office of Management and Budget a statement of compliance with the NIH Guidelines. In accordance with the President's memorandum, the NIH Guidelines, and the Department of Commerce statement of compliance, NIST will support and conduct research using only human embryonic stem cell lines that have been approved by NIH in accordance with the NIH Guidelines and will review such research in accordance with the Common Rule and NIST implementing procedures, as appropriate. NIST will not support or conduct any type of research that the NIH Guidelines prohibit NIH from funding. NIST will follow any additional policies or guidance issued by the Administration on this topic.

**Research Projects Involving Vertebrate Animals:** Any proposal that includes research involving vertebrate animals must be in compliance with the National Research Council's "Guide for the Care and Use of Laboratory Animals" which can be obtained from National Academy Press, 2101 Constitution Avenue, NW., Washington, DC 20055. In addition, such proposals must meet the requirements of the Animal Welfare Act (7 U.S.C. § 2131 et seq.), 9 C.F.R. Parts 1, 2, and 3, and if appropriate, 21 C.F.R. Part 58. These regulations do not apply to proposed research using pre-existing images of animals or to research plans that do not include live animals that are being cared for, euthanized, or used by the project participants to accomplish research goals, teaching, or testing. These regulations also do not apply to obtaining animal materials from commercial processors of animal products or to animal cell lines or tissues from tissue banks.

**Limitation of Liability:** Funding for the program listed in this announcement is contingent upon the availability of Fiscal year 2010 appropriations under The Consolidated Appropriations Act, 2010, Pub. L. 111-117. In no event will the Department of Commerce or NIST be responsible for proposal preparation costs if this program fails to receive funding or is cancelled because of other agency priorities. Publication of this announcement does not oblige NIST to award any specific project or to obligate any available funds. Funding of any award under the program announced in this notice is subject to the availability of funds.

**Collaborations making use of Federal Facilities:** All applications should include a description of any work proposed to be performed using Federal Facilities.

If an applicant proposes use of NIST facilities, the statement of work should include a statement of this intention and a description of the facilities. Any use of NIST facilities must be approved by appropriate NIST management and is at the sole discretion of NIST. Prior to beginning the merit review process, NIST will verify the availability of the facilities and approval of the proposed usage. Any unapproved facility use will be stricken from the proposal prior to the merit review. Examples of some facilities that may be available for collaborations are listed on the NIST Technology Services web site, <http://ts.nist.gov/>.

3. Reporting: Recipients will be required to submit, on a semi-annual basis for the periods ending March 31 and September 30 of each year, a technical progress report and a SF-425, Federal Financial Report. From time to time, and in accordance with the Uniform Administrative Requirements and other terms and conditions governing the award, the recipient may need to submit property and patent reports.

g. Agency Contact(s): Program questions should be addressed to Dr. Dan Neumann, NIST Center for Neutron Research, National Institute of Standards and Technology, 100 Bureau Drive, Stop 6102, Gaithersburg, Maryland 20899-6102, Tel: (301) 975-5252, E-mail: [dan@nist.gov](mailto:dan@nist.gov). Grants Administration questions should be addressed to: Grants and Agreements Management Division; National Institute of Standards and Technology; 100 Bureau Drive, Stop 1650; Gaithersburg, MD 20899-1650; Tel: (301) 975-6328. For assistance with using Grants.gov contact [support@grants.gov](mailto:support@grants.gov) or call 800-518-4726. Assistance from the Grants.gov Help Desk will be available around the clock every day, with the exception of Federal holidays. Help Desk service will resume at 7:00 a.m. Eastern Time the day after Federal holidays.