Limited Submission Funding Opportunity

National Science Foundation: Software Infrastructure for Sustained Innovation - S2I2


FOA#: NSF 15-553


This solicitation is focused on the Scientific Software Innovation Institutes (S²I²).

Scientific Software Innovation Institutes (S²I²) will focus on the establishment of long-term hubs of excellence in software infrastructure and technologies, which will serve a research community of substantial size and disciplinary breadth. These institutes will provide expertise, processes and architectures, resources, and implementation mechanism to transform computational science and engineering innovations and community software into robust and sustained software infrastructure for enabling science and engineering, which in turn will transform research practices and productivity.

S²I² awards are subdivided into Conceptualization and Implementation Awards.

Conceptualization Awards are planning awards aimed at organizing an interdisciplinary community and understanding their software requirements and challenges. Example activities include focused workshops, special sessions at professional meetings, sandpits, focus groups, etc. These awards will typically be 1 year in duration.

Specific NSF unit interests follow, though these are not meant to limit potential proposals:

- The CISE Division of Advanced Cyberinfrastructure is particularly interested in proposals that address the set of broad issues related to general SI² software, including sustainability, software lifecycle/ecosystem, governance, verification & validation, reproducibility, etc.
- The Biological Sciences Directorate is particularly interested in proposals that focus on high priority research problems and that will significantly leverage existing investments in ways that transform the infrastructure in support of BIO and BIO-related research. For further information about BIO's interests in S²I² see the Dear Colleague Letter of November 22, 2011 (NSF-12-019).
• The Engineering Directorate is not participating in the conceptualization portion of this solicitation.
• The MPS/Astronomy Division will consider supporting proposals that would have a clearly demonstrated impact on a significant portion of the astronomy research community.
• The MPS/Materials Research Division is particularly interested in proposals that advance priorities in the Materials Genome Initiative.
• The MPS/Division of Mathematical Sciences is particularly interested in proposals that include the creation, development, and application of new mathematical and statistical theories and tools.
• The MPS/Physics Division will consider proposals that will significantly advance fundamental research in Physics.

Implementation Awards:
Implementation proposals may only be submitted in the specific topic(s) listed in this solicitation, which define particular areas in which NSF sees a need for an institute as evidenced by prior community activity, for example, an institute conceptualization award, a Research Coordination Network (RCN) award, etc., and has reserved budget resources from the directorates and divisions that would be impacted by such an institute.

Future versions of this solicitation will permit response in different topics, in response to community activities, such as S2I2 Conceptualization awards.

The specific institute implementation topics for this solicitation are:

1. Chemical and Materials Research Software Institute (CMRSI)
2. Science Gateways Software Institute (SGSI)

For additional information, please see http://www.nsf.gov/pubs/2015/nsf15553/nsf15553.htm.

LIMIT ON NUMBER OF PROPOSALS PER ORGANIZATION
Each organization may only submit one proposal of each class (Conceptualization, CMRSI implementation, SGSI Implementation).

KEY DATES
Internal Letter of Intent Due: March 24, 2015 (by midnight)
Sponsor Implementation Proposals due: June 3, 2015
Sponsor Conceptualization Proposals Due: Accepted anytime

SUBMITTING A MANDATORY LETTER OF INTENT
Faculty members interested in this funding opportunity are required to submit a letter of intent (LOI). An LOI is required but not binding.

1. Click here to access the LOI form.
2. Name the LOI as follows: “LastName-FirstInitial-LOI-NSF-S2I2”, replacing “LastName” with your last name and “First Initial” with your first initial.
3. Click on the Vault ticket: https://vault2.northwestern.edu/xythoswfs/webui/_xy-e6481404_1-t_bxA25E7

4. Click the Upload button.
5. Click the Browse button and navigate to your file on your hard drive or network.
6. Click the OK button.

Note: You will get a tiny confirmation message upon upload. If you do not see it, you may contact Karen Cielo k-cielo@northwestern.edu for a confirmation.

COLLABORATION OPPORTUNITIES
The Office of Research Development offers assistance in identifying and facilitating collaborations, putting together interdisciplinary teams, programmatic and administrative development of large, cross-school proposals, and leveraging institutional resources for outreach and education. Contact Fruma Yehiely (yehiely@northwestern.edu), Director of ORD, for more information.

CONTACT AND ADDITIONAL INFORMATION
Fruma Yehiely, Director of ORD, 847-491-1074, yehiely@northwestern.edu
Limited Submissions web site: http://www.research.northwestern.edu/ord/funding/limited-submissions/