



National Science Foundation
4201 Wilson Boulevard
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Dear Colleague Letter: Describing the Conduct of Science in the Information Age

Directorate for Social, Behavioral, & Economic Sciences (SBE)

New digital technologies and datasets are transforming the practice of science. Science is now increasingly computational, data-intensive, and collaborative because digital technologies provide new ways for scientists to identify and contact key research partners to begin collaborations; to create scientific information, data, and knowledge; and to disseminate, replicate, and reuse it. These same technologies are creating opportunities for funding agencies to promote scientific collaboration, to demonstrate the benefits of science, and to foster the replication and reuse of scientific information.¹

At the same time, US science agencies are being asked to use evidence to inform policy and operational decisions: developing data sets, measuring outcomes, and evaluating performance. These agencies are also asked to identify cost-saving efforts that will improve operational efficiency and reduce redundancy.²

One way in which these goals can be advanced is to change the way in which scientists document their activities and resulting outcomes by using new technologies and incentive structures.³ Examples of new approaches include the national platform developed in Brazil⁴ and the institutional platform VIVO.⁵ Two National Science and Technology Council interagency groups - Research Business Models⁶ and Science of Science Policy,⁷ in conjunction with the Federal Demonstration Partnership - are investigating approaches to reduce researcher burden by facilitating semi-automatic collection of data of the type required for proposal biosketches and grant technical reports. The effort includes consideration of a persistent researcher ID to reduce name ambiguity.⁸

The purpose of this Dear Colleague Letter is to advise you about funding opportunities at the National Science Foundation for the research community to propose research workshops that identify and develop data, models, and tools to help inform this effort.

Workshop proposals that address the following research issues are particularly encouraged:

- Advancing scientific communication both nationally and internationally by:
 - fostering the replication of scientific research,
 - ensuring attribution for the intellectual contributions of researchers,
 - enabling the location and identification of collaborators across disciplines, and
 - developing platforms that facilitate the reporting and dissemination of scholarly activities and outputs.
- Advancing the measurement of scientific activity both nationally and internationally by:
 - identifying sources of information about researchers' productivity and impact, and
 - developing ways in which researchers' scientific activity can be automatically captured and validated.

Workshop proposals that include domain scientists in any science or engineering field, as well as Science of Science and Innovation Policy (SciSIP) researchers, are strongly encouraged.

This is not a new program. Investigators should follow the guidelines of the SciSIP program description (http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501084) to ensure that eligibility requirements are met, and to e-mail a SciSIP program officer to discuss prospective proposal topics. All proposals under this funding opportunity should be submitted to the SciSIP program [09-7626] by August 9, 2012 with the proposal title preceded by the text "DCL WORKSHOP". These proposals will then be evaluated on an ongoing basis.

Sincerely,

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¹ <http://www.nsf.gov/pubs/2011/oise11003/index.jsp>

² <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-30.pdf>

³ <http://beyond-impact.org/>

⁴ LATTES - The LATTES Platform serves as the major source of person-related information for all federal agencies in Brazil and has been adopted by almost 20 different countries in South America and Europe:
<http://lattes.cnpq.br/english/index.htm>

⁵ <http://vivoweb.org/>

⁶ <http://rbm.nih.gov/>

⁷ <http://scienceofsciencepolicy.net/>

⁸ <http://nexus.od.nih.gov/all/2011/07/22/on-the-drawing-board-fed-wide-researcher-profiles/>