



National Science Foundation
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Dear Colleague Letter: Enabling Partnerships to Enable Science ("Tools")

Directorate for Biological Sciences
Office of the Assistant Director
Subject: Enabling Partnerships to Enable Science ("Tools")

Dear Colleague:

The Division of Integrative Organismal Systems (IOS) in the Biological Sciences Directorate recognizes the need for resource and tool development to stimulate progress across all areas of biology supported by IOS. Therefore, in FY 2010, IOS is augmenting funding to support the collaborative development of enabling tools and resources. Examples of such needs might include, but are not limited to:

- High-throughput measurements on individual organisms in laboratory and field settings
- High-accuracy measurements in the field
- Wireless data collection
- Imaging of live organisms and associated analysis tools
- Data analysis tools
- Genomic resources

IOS Principal Investigators (PIs) would benefit greatly from new tools and resources that could be developed for use in their research. PIs who are developing tools and resources, and who may wish to collaborate with IOS scientists, often lack strong collaborative connections to potential end-users. This hinders their ability to discuss specific end-user needs as tools are being developed, and limits understanding of the common characteristics of tools and resources that are needed across the discipline. Accordingly, NSF intends to use a Wiki, a social networking vehicle, to facilitate and increase the number of collaborations between end-users and investigators who develop tools and resources, and to promote downstream dissemination and development of outcomes. On the Wiki, principal investigators will be able to describe their needs for tools and resources, and others will be able to describe their expertise and interest in developing such resources.

Potential applicants are strongly encouraged to register for the Wiki to take advantage of the opportunity to network with potential collaborators. The Wiki will be accessible at

<https://extwiki.nsf.gov/signup.action> for first-time users who must register for an account. Once registered, users will be directed to the main page of the NSF Wiki. From the main page menu, users should click the link for this activity to access the Home page for "Tools." Users will then need to read and agree to the Terms and Conditions for use of the "Tools" Wiki space before gaining access. Registered users with an account may access the "Users and Developers Comments" page at <https://extwiki.nsf.gov/display/tools/USER+and+DEVELOPER+Comments>.

Interested investigators are encouraged to submit Grants for Rapid Response Research (RAPID) or Early Concept Grants for Exploratory Research (EAGER), which include tool and resource development projects derived from collaborative interactions initiated on the Wiki, to any

program or cluster in IOS (see *Grant Proposal Guide* at http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg). Development of tools and resources may be part of a hypothesis-driven project or may be the focus of an entire project.

The guidelines for RAPID and EAGER proposals should be reviewed carefully prior to submission to ensure that the proposed research fits the criteria for these funding opportunities. Specifically, RAPID proposals must address projects "...having a severe urgency with regard to availability of, or access to data, facilities, or specialized equipment..." as described in the *Grant Proposal Guide*. The *Grant Proposal Guide* states, "The EAGER funding mechanism may be used to support exploratory work in its early stages on untested, but potentially transformative, research ideas or approaches. This work may be considered especially 'high risk-high payoff' in the sense that it, for example, involves radically different approaches, applies new expertise, or engages novel disciplinary or interdisciplinary perspectives." Principal investigators must contact the program officer in IOS whose expertise is most germane to the proposed project prior to submission of either a RAPID or EAGER proposal. NSF is particularly interested in projects that establish new and appropriate collaborations to develop the tools and resources. The most competitive proposals will include a compelling rationale describing how development of the resources or tools will result in significant scientific progress in one or more areas of organismal biology.

This is not a special competition or new program. Relevant proposals are to be submitted to an existing cluster/program in IOS. Applicable programmatic areas may be found on the cluster web pages accessible from the IOS home page at <http://www.nsf.gov/div/index.jsp?div=IOS> .

RAPID and EAGER proposals received by June 1, 2010 will receive full consideration for funding. RAPID proposals will receive expedited review and funding decisions consistent with the urgent nature of such requests. The review process will follow standard practices for RAPIDS and EAGERS as described in the *Grant Proposal Guide*. We look forward to discussing your ideas.

Sincerely,

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National Science Foundation