

**National Science Foundation
4201 Wilson Boulevard
Arlington, Virginia 22230**

December 9, 2008

Directorate for Social, Behavioral, and Economic Sciences
NSF 09-19

Subject: Integrating HSD Goals into Core SBE Programs

Dear Colleague:

Following the innovations of the recently ended Human and Social Dynamics (HSD) priority area, the Directorate for Social, Behavioral & Economic Sciences (SBE) now encourages submission of research proposals to the regular SBE programs covering three areas. There will be new funds available in the Divisions to support these activities where they differ in scope or scale from the traditional core of the programs.

1. Complexity Science. We recognize that the concept of complex systems means different things in different areas, and we encourage work on

- *complex systems* incorporating analyses of the interaction of simpler systems to explain observed complexity;
- *the dynamics of complex systems*, for example “tipping points,” where many things change dramatically at one time, and “emergent phenomena,” such as phase transitions in which complex phenomena emerge despite being underdetermined by ambient conditioning factors.

2. Large-scale Interdisciplinary Research. We also invite the submission to our programs of large-scale interdisciplinary projects that advance the understanding of the dynamics of human systems. We expect to make a small number of awards of up to \$1.2 million.

HSD funded interdisciplinary research teams using methods from different fields to understand the dynamics of human action and development, as well as knowledge about organizational, cultural, and societal adaptation and change. We encourage proposals that address such matters with an integrated approach drawing on more than one discipline. The PI must be from a discipline appropriate for the host program but collaborators may be from any area of science, not just the SBE sciences.

Investigators should contact the most appropriate SBE Program Officer to determine if their ideas respond to this activity's goals. If it is deemed responsive, the program officer will ask for a two-page description of the proposed project in advance of submission of a full proposal to facilitate the processes of joint review and/or funding. The review process will follow standard NSF practices agreed upon by the programs participating in a proposal's review, with awards determined in a directorate-wide process.

3. Infrastructure. We now encourage proposals for infrastructure development to our programs after discussion with the most relevant SBE Program Officer. This includes but is not limited to cyberinfrastructure, instrumentation, shared data bases, repositories, consortia, etc. SBE will consider both free-standing proposals for infrastructure and requests for research resources not typically available within the context of SBE research proposals.

There are no special competitions or new programs for these three areas. Relevant proposals will be submitted to an existing SBE program according to the program's regular target or deadline dates.

One of the key topics of HSD-funded work in each of these three areas concerns the relation between human activities and environmental change. We will continue to accept and encourage proposals on this topic both through the SBE programs and through cross-cutting competitions going beyond the Directorate.

Links to SBE's programs and target dates, including Program Officer information, are available at:

For the Division of Behavioral and Cognitive Sciences:
<http://www.nsf.gov/div/index.jsp?div=BCS>

For the Division of Social and Economic Sciences:
<http://www.nsf.gov/div/index.jsp?div=SES>

Sincerely,



David Lightfoot
Assistant Director
Directorate for Social, Behavioral, and Economic Sciences