

JOINT DMS/NIGMS INITIATIVE TO SUPPORT RESEARCH AT THE INTERFACE OF THE BIOLOGICAL AND MATHEMATICAL SCIENCES**Sponsor Deadline: September 23, 2013****Award Amount: \$100,000 to \$400,000 per year (total costs) with duration of 3-5 years****Eligible Disciplines: Mathematics, statistics, computer science, biology, biomedical sciences**

The Division of Mathematical Sciences in the Directorate for Mathematical and Physical Sciences at the National Science Foundation and the National Institute of General Medical Sciences at the National Institutes of Health plan to support research in mathematics and statistics on questions in the biological and biomedical sciences. This competition is designed to encourage new collaborations, as well as to support existing ones. Research teams that include scientists from both the life sciences community and the mathematical and statistical sciences communities are encouraged. Proposals from individual investigators will need to make the case that the individual has expertise in both fields. Successful proposals will either involve the formulation of new mathematical, computational or statistical models and tools whose analysis poses significant mathematical challenges or identify innovative mathematics or statistics needed to solve an important biological problem.

Examples of areas of research that are appropriate under this competition include the following:

- Evolutionary or ecological population dynamics;
- Differentiation and developmental processes;
- Explanatory and predictive models of cellular behavior;
- Molecular and cellular networks;
- Novel and unique approaches to the prediction of molecular structure;
- Simulations of the human systemic responses to burn, trauma and other injury;
- New approaches to understanding system-wide effects of pharmacological agents and anesthetics, and their genetic and environmental modifiers.

Application Information:

- Investigators are strongly encouraged to talk with an NIGMS or NSF contact person before submitting a proposal.

The following instructions deviate from guidelines in the GPG and NSF Grants.gov Application Guide:

- **Project Description:** The project description should consist of two distinct parts. (1) No more than 12 pages addressing the NSF criterion of Intellectual Merit. Note that this NSF criterion corresponds with the NIH criteria of Significance, Investigators, Innovation,

Approach, and Environment. (2) Up to 3 additional pages addressing the NSF criterion of Broader Impacts.

- **Results from Prior NSF and/or NIH Support:** If any PI or co-PI identified on the project has received NSF or NIH funding in the past five years, information on the award(s) is required. Each PI and co-PI who has received more than one award (excluding amendments) must report on the award most closely related to the proposal.
- **Biographical Sketches:** Biographical Sketches are limited to **THREE PAGES** each (in contrast to the two page limit in the GPG) and are required for all senior personnel. **In addition to the information required by the GPG, each Biographical Sketch MUST INCLUDE a paragraph describing that person's role in the project.**
- **Protection of Human Subjects/Use and Care of Vertebrate Animals:** Both NSF and NIH have rules regarding the use of human subjects and/or vertebrate animals in research. Proposals that involve human subjects or use vertebrate animals **MUST INCLUDE** the information required by both agencies.
- The review will be conducted jointly by NSF and NIH. Both NIH and NSF review criteria will be used in evaluating proposals. Upon conclusion of the review process, meritorious proposals may be recommended for funding by either NIGMS or NSF, at the option of the agencies, not the proposer. Subsequent grant administration procedures will be in accordance with the individual policies of the awarding agency.

Additional Information:

More information on this program can be found at
<http://www.nsf.gov/pubs/2013/nsf13570/nsf13570.htm?org=NSF>.

Recent award recipient from Harvard: Jeremy Gunawardena (Systems Biology, HMS, 2009).

Questions regarding this proposal announcement or submission can be directed to Jennifer Corby (617-495-1590, jcorby@fas.harvard.edu) or Susan Gomes (496-9448, susan_gomes@harvard.edu).

Deadlines:

OSP Deadline: September 16, 2013 by 5pm

Sponsor Deadline: September 23, 2013 by 5pm