



**National Science Foundation
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Dear Colleague Letter: Beyond the Genome: IOS Funding Opportunities FY 2012 - 2013

Directorate for Biological Sciences
Office of the Assistant Director
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With the completion of DNA sequences for an increasing number of species, organismal biologists are now beginning to unravel the complex mechanisms that interrelate genomes, phenotypes, and behaviors, from molecular to organismal scales. The Division of Integrative Organismal Systems (IOS) recognizes a critical need to support training at all levels and in a wide range of institutions, so that new research tools and resources will readily be utilized by organismal biologists who seek to understand how organisms function, adapt, and evolve to their every-changing environments. IOS intends to provide support for the following activities in addition to those announced in specialized Program Solicitations:

Mid-Career Supplements in Organismal Biology

The Mid-Career Investigator Awards in Integrative Organismal Science (MCA-IOS) will provide opportunities for mid-career researchers/scientists to acquire the skills to use genomics and bioinformatics tools and/or novel technologies to answer organismal questions. Especially encouraged are supplement requests from investigators trained in whole organism physiology, developmental biology and the evolution of developmental processes, nervous system development, structure, and function, physiological processes, functional morphology, symbioses, interactions of organisms with biotic and abiotic environments, and animal behavior.

A "mid-career" investigator is defined here as any researcher who is post-tenure and not retired. In **FY 2012 and FY 2013**, supplemental funding will be available for existing IOS awards to support research visits, for participation in training opportunities in other laboratories, and for the use of genome research facilities not available at the applicant's institution. If necessary, funds may also be requested for salary support of the applicant during the training period(s). Proposers are encouraged to take advantage of opportunities to develop new curriculum or course offerings that build on outcomes of the MCA-IOS activities. Mid-Career supplements can be requested by an eligible Investigator to supplement their own grant or by any funded PI to host a Mid Career researcher. Investigators interested in the MCA-IOS opportunity must contact a Program Director for further guidance prior to submission of a supplement request.

Training Workshops

Training in the use of modern techniques and approaches, e.g. genomics and bioinformatics, for organismal research, will be essential to disseminate these approaches to the broader organismal community at all career stages, from graduate student to senior scientist. IOS intends to support one or more new hands-on workshops that provide one to three-week residential training experiences in wet lab and/or bioinformatics approaches to organismal research. These workshops are expected to include explicit plans for recruitment of a diverse cadre of participants as well plans for assessment of impacts. Proposers must contact a Program Director for further guidance prior to submission of a proposal. Applicants should follow the guidelines for workshops in the Grant Proposal Guide (http://www.nsf.gov/pubs/policydocs/pappguide/nsf11001/gpg_2.jsp#IID8) and submit an unsolicited proposal using the IOS Conferences/Workshops/EAGERS/Other Program Code.

Research Experiences for Teachers (RET) and Research Assistantships for High School students (RAHSS)

IOS intends to continue support for RET http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf12075 and RAHSS http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf12078 research opportunities through supplemental funding and encourages proposers to consider their inclusion in preliminary proposals and invited full proposals submitted to the FY 2013 IOS Core Program Solicitation.

Sincerely,

John C. Wingfield
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National Science Foundation