



NSF Regional Grants Conference

Austin, TX

Biological Sciences Directorate

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Biological Sciences Directorate

*Promoting and advancing
scientific progress in biology*





Recent Funding History of BIO FY 2002-2011



Millions

\$1,000

FY 2009 Current Plan + ARRA Funding

\$900

\$800

\$700

\$600

\$500

\$400

FY02

FY03

FY04

FY05

FY06

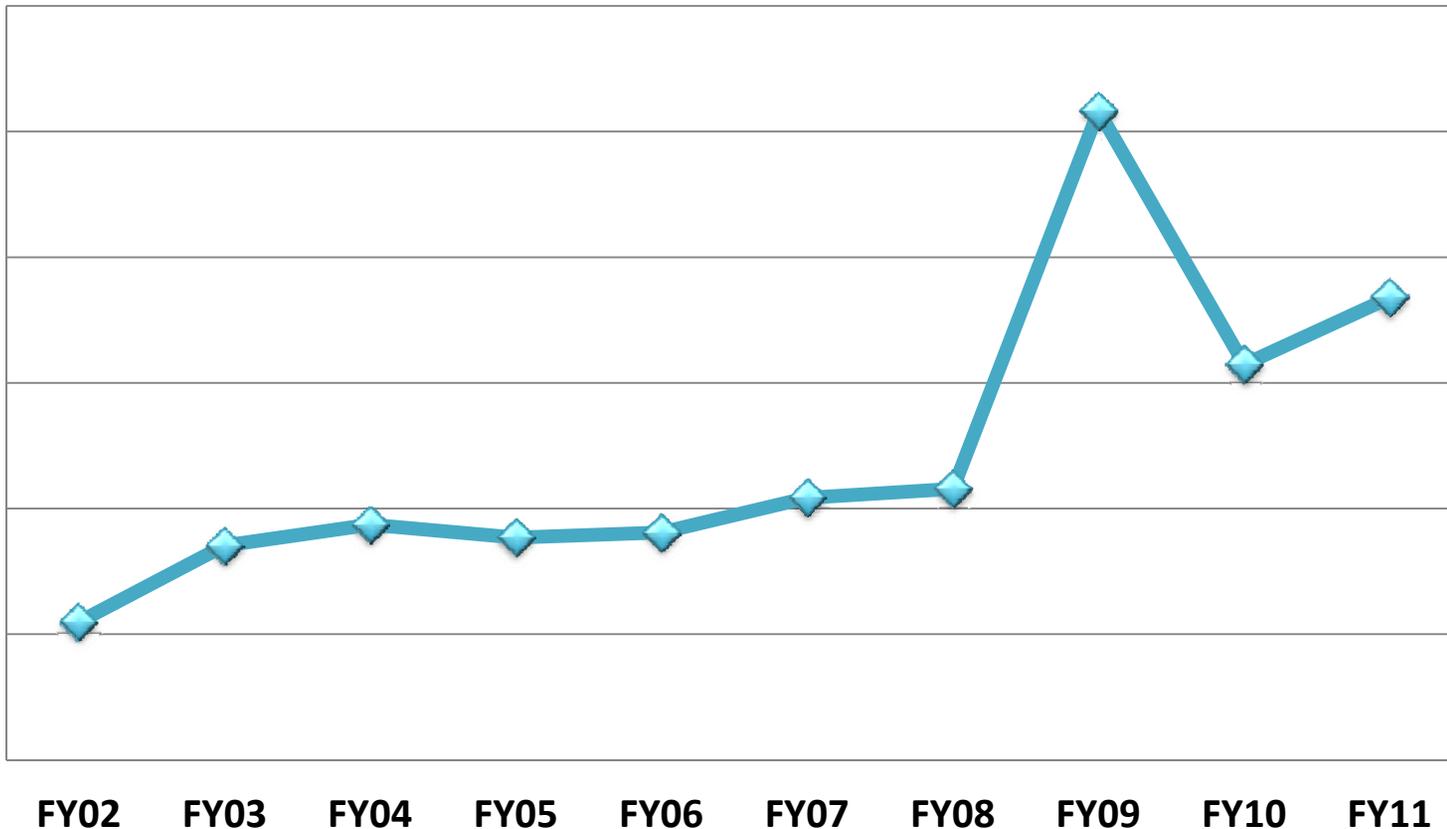
FY07

FY08

FY09

FY10

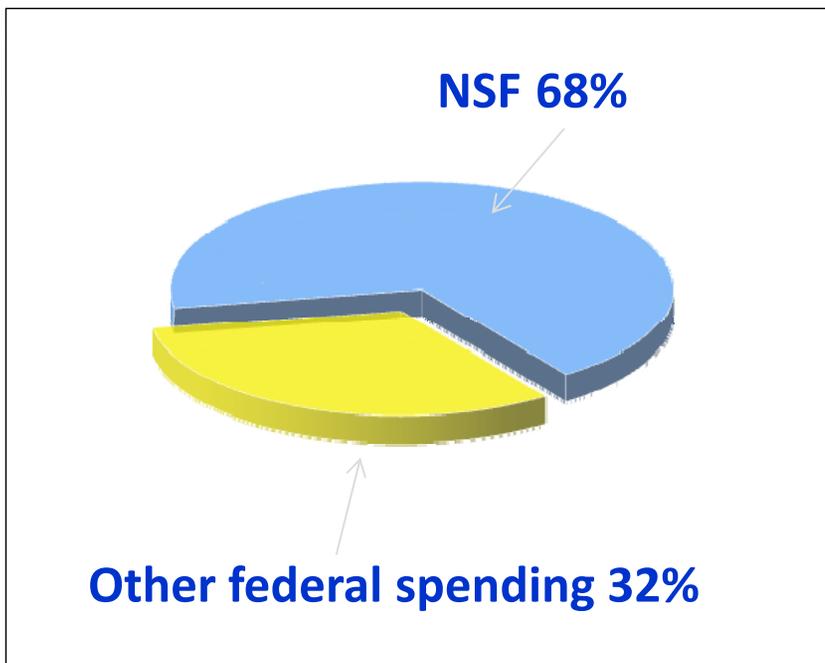
FY11



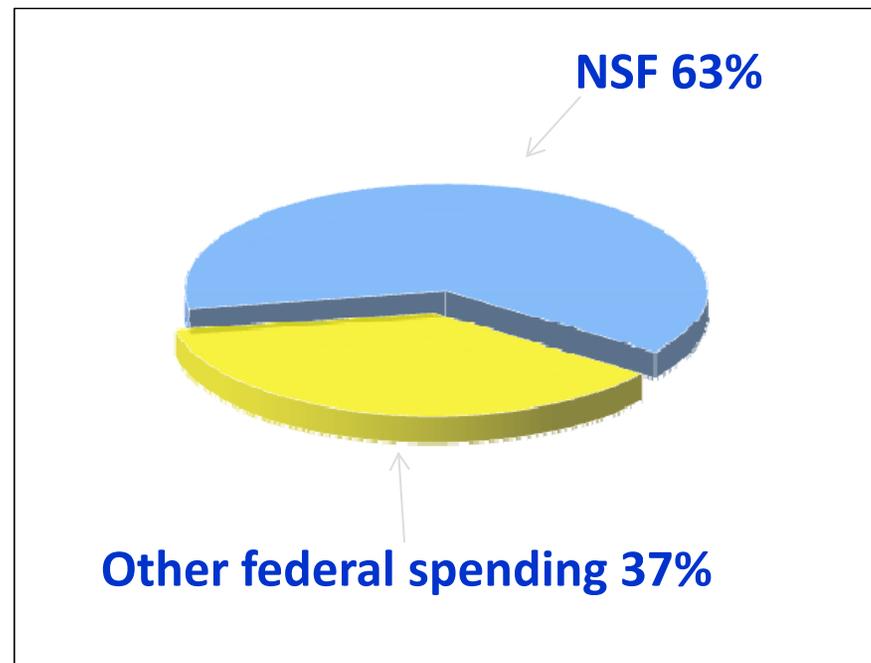


BIO Support for Basic Research

Federal Support for Basic Research
in Non-Medical Biological Sciences
at Academic Institutions



Federal Support for Basic Research
in Environmental Biology at
Academic Institutions



http://www.nsf.gov



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National Science Foundation
WHERE DISCOVERIES BEGIN

SEARCH
NSF Web Site

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2008: Year in Review

FEATURES 1 2 3 4

Funding Opportunities

- Find Funding Opportunities
- Upcoming Due Dates
- Funding Trends

Program Areas
Select One

Quick Links

Search Funding Opportunities

About NSF
General Information About NSF

Special Notices

- National Science Board STEM Education Recommendations for the Obama Administration
- New Proposal and Award Policies and Procedures Guide Available, Effective April 6, 2009.

Test News See All

- Evidence of Earliest Known Domestic Horses Found in Kazakhstan
Released March 5, 2009
Press Release
- Geologic Findings Undermine Theories of Permian Mass Extinction Timing
Released March 2, 2009
Press Release

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Biological Sciences Directorate



**Division of
Biological
Infrastructure
(DBI)**

Empowering biological discovery

**Division of
Environmental
Biology
(DEB)**

*Populations, species, communities
and ecosystems*

**Integrative
Organismal
Systems
(IOS)**

*Integrative understanding of
organisms' structure and function*

**Molecular &
Cellular
Biosciences
(MCB)**

*Life processes at the molecular,
subcellular and cellular levels*



Division of Biological Infrastructure



Human Resources

Research Experiences for Undergraduates (Sites); Postdoctoral Research Fellowships

Research Resources

Biological databases and informatics; biological research collections; instrumentation and instrument development; improvements in field stations and marine laboratories



Division of Environmental Biology



NSF 11-573

Population and Community Ecology

Theoretical or conceptual understanding of population ecology, species interactions and community dynamics

Ecosystem Science

Whole-system ecological processes and relationships; Long-Term Ecological Research (LTER)

Evolutionary Processes

Microevolutionary processes and their macroevolutionary consequences

Systematics and Biodiversity Science

Diversity, systematics, and evolutionary history of organisms in natural systems



Integrative Organismal Systems

NSF 11-572



Behavioral Systems

Development, function, mechanisms and evolutionary history of behavior

Developmental Systems

Interacting developmental processes shared by all organisms and those that produce diversity

Neural Systems

Complex function of the nervous system; information extraction and integration; adaptive behavior; learning

Physiological & Structural Systems

Interacting physiological and structural systems within environmental and evolutionary contexts

Plant Genome Research Program

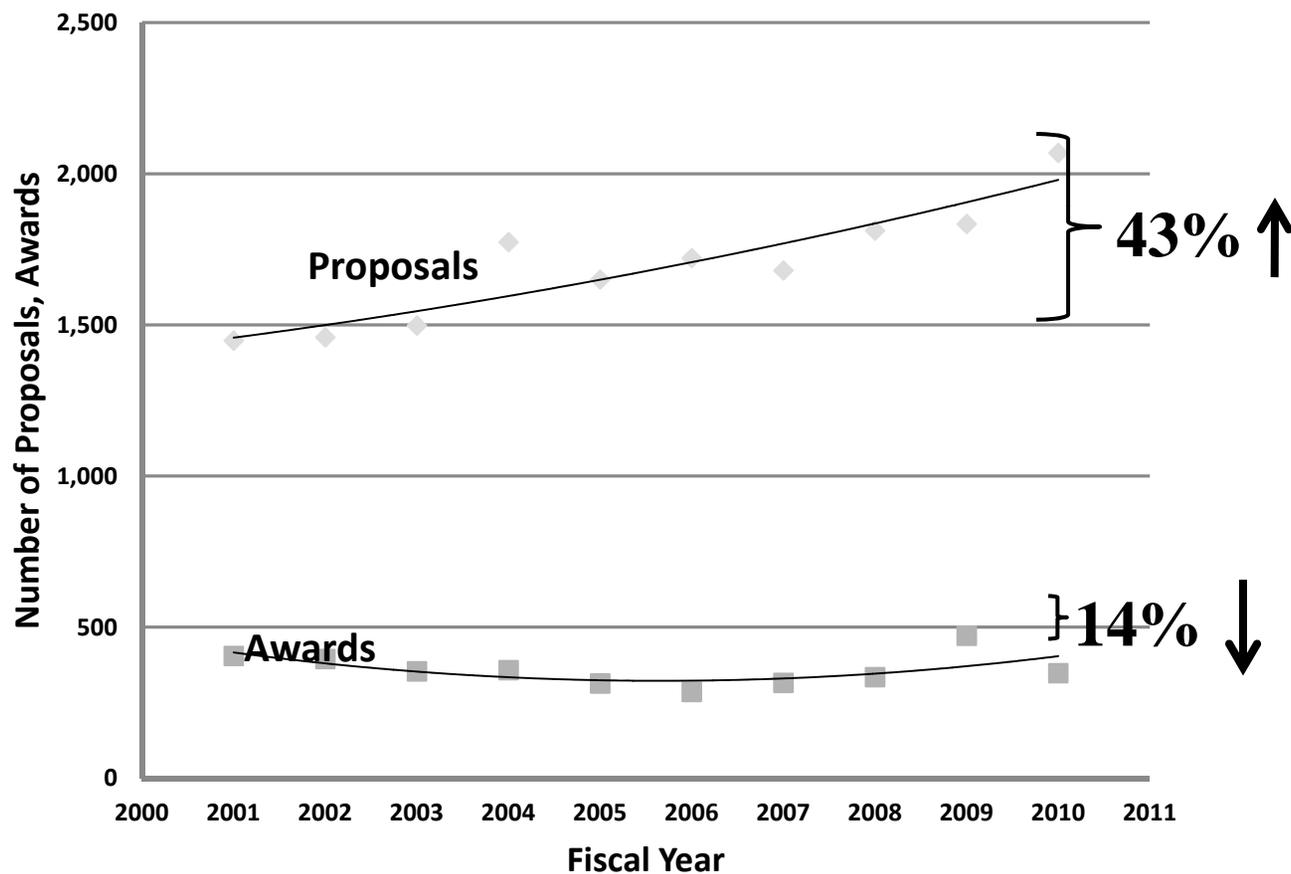
Structures and functions of plant genomes



Community Workload



IOS Proposal Submissions and Awards





Preliminary Proposal Format

- Cover sheet
 - Title must begin with “{DIV} Preliminary Proposal:”
- Narrative limited to 4 pages
 - Intellectual Merit
 - Broader Impacts
- Biographical Sketches
- No budget is required
 - Enter \$2 in requested amount box on cover page
- In Single Copy Documents: list of COIs
- *Appendices or other supplementary documents are **NOT** allowed*





Solicitations NOT affected include (but are not limited to):

- Assembling the Tree of Life - ATOL
- CAREER
- Dynamics of Coupled Natural and Human Systems - CNH
- Dimensions of Biodiversity
- Ecology and Evolution of Infectious Diseases - EEID
- Opportunities for Promoting Understanding through Synthesis - OPUS
- Research Coordination Networks – RCN
- Doctoral Dissertation Improvement Grants – DDIG
- Plant Genome Research Program - PGRP

ALL programs in IOS and DEB will continue to accept:

- Conference and workshop proposals
- EAGERs
- RAPIDs
- Supplements to existing awards





Molecular and Cellular Biosciences



Biomolecular Dynamics, Structure and Function

Molecular biophysics and biochemistry; general principles of macromolecular structure, dynamics, and mechanisms

Cellular Processes

Membrane organization and function; organelle biogenesis, maintenance, and trafficking; cytoskeletal dynamics, cell division and motility

Genetic Mechanisms

Gene expression and epigenetics; chromosome dynamics, DNA replication, repair, recombination and inheritance; evolution of genes and genomes

Networks and Regulation

Signaling and metabolic networks; the minimal cell, synthetic biology and the origins of life; environmental interactions and microbial communities



MCB Solicitation (NSF 11-545)

What are the major changes?

- Shift from a 6-month to an 8-month cycle; provides an additional 2 months to revise previously declined proposals.
- Proposal intake will occur 3 times over 2 years instead of 4. ***Next deadline is May 21, 2012.***
- 6-month proposal processing timeframe will not be affected with the new 8-month proposal cycle.
- PI can serve as a PI or co-PI on only one regular investigator- initiated research proposal per cycle.





Summary Points



- New opportunities – www.nsf.gov
- BIO Program Directors – www.nsf.gov/about/career_opps/rotators/
- Program Solicitations / Dear Colleague Letters
- Proposal & Award Policies & Procedures Guide

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