

Challenges, Opportunities and New Directions

NSF Regional Grants Conference

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Hosted by: **The University of South Florida**



Ask Us Early, Ask Us Often!!

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Coverage

- Challenges, Opportunities & The Long Hard Road Ahead
 - Tom Cooley

- Electronic Initiatives
 - Jean Feldman



**Challenges, Opportunities
& the Long Hard Road
Ahead**

What's the latest on

➤ Challenges and Opportunities

- Political Landscape/Deficit Reduction/Constrained Budgets
- Continuing Management Challenges
- Congress and the Budget
- Research Business Models Subcommittee
- Grants Policy Committee

Challenges

- Political Landscape/Deficit Reduction/Constrained Budgets
 - “War Time” Environment
 - Hurricane Katrina/Rita Relief
 - Economic/Job Uncertainty
 - Export Controls
- Continuing Management Challenges
 - Award Size, Duration and Success Rate
 - Financial Statement Audits (ours & yours)
 - Improper Payments

Hurricane Katrina Relief

- What is happening on the legislative front?
 - Two supplemental funding bills over \$60 billion.
 - A third supplemental is now at OMB for review – on the order of \$200 billion with a fourth supplemental probably early next year
- What is the higher education community in Washington doing?
 - Working with affected universities and host institutions
 - Working to enhance the Administration's third supplemental
- What is the focus of the efforts to help students and institutions?
 - Short-term needs of students and institutions
 - Financial Assistance to host institutions
 - Replacement of lost revenue to institutions
 - Assistance for rebuilding and revitalization
 - Incentives for students and faculty to return

Why do we . . . ?

➔ Several Reasons

- Congressional Intent (laws, regulations, authorizing language, etc.)
 - Example: Improper Payments Improvement Act of 2002
- Administration Practices or policies (OMB guidance, Administration's political platform, etc.)
 - Example: Nanotechnology Initiative
- Agency/Department Policy (grants policies, terms and conditions, operating guidance, etc.)
 - Example: NSF Cost sharing policy
- Community Drivers (NAS, FDP, COGR, AAU, NASCULGC, professional societies, etc.)
 - Example: Success rates, award size and duration

Award Size/Duration

- ➔ Surveys of PI's & Institutions in 2001
- ➔ Study Results Published July 2002
- ➔ New average grant size goal
 - From \$100K/3 years to \$250K/5 years
 - Over time: currently at \$138K/2.9 years
 - Declining success rates (33% → 25%)
- ➔ Trade-offs will have to be made

Financial Statement Audits

- Ours and Yours
 - Issue: Recording expenditures properly
- Federal Government
 - More scrutiny of FCTR's will require more documentation
 - Heightened scrutiny of A-133 reports
 - Site visits to high-risk awardees
- You Guys
 - Better accounting system; segregation of costs
 - Better documentation
 - Clean A-133 audits (OIG reviews/recommendations)

Improper Payments Information Act of 2002

➔ History

- The Federal Government makes more than \$45 billion in improper payments each year in programs that represent \$1 trillion in outlays
- IPIA requires agencies to report on programs or activities with estimated improper payments exceeding \$10 million and detail actions the agency is taking to reduce these improper payments
- OMB further expanded the definition: *An erroneous or improper payment includes any payment that was made to an ineligible recipient or for an ineligible service*
- NSF is the only research grant-making agency required to measure improper use of grant funds. All others are required to report entitlement or block grants programs

Improper Payments Information Act of 2002 (cont'd)

➤ Current Action

- NSF sampled improper payments on all site visits to high-risk grantees as identified in our Award Monitoring Program
- Continue innovative efforts for administering an improper payments program as part of a holistic grants monitoring approach, which assures accurate award institution identity and grant eligibility

- Message: Federal Government following taxpayer funds down to the last dollar



Congress and the Budget:

**The Future is Dimly Lit
and**

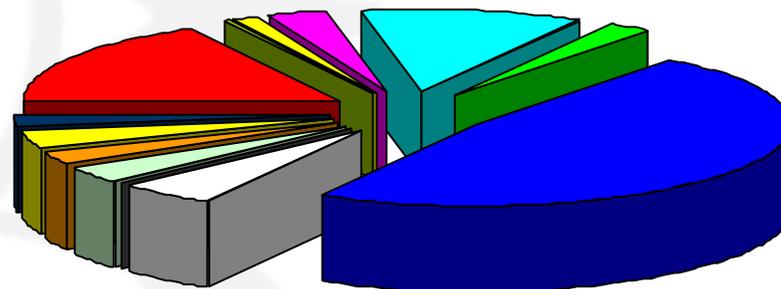
For R&D the Future May be Dim



NSF's Key Congressional Players

- House and Senate Budget Committees
- Authorization Committees
 - House Science Committee/Sub-committees
 - Senate Health, Education, Labor & Pensions Committee
 - Senate Commerce, Science & Transportation Committee
- Appropriations Committees
 - New committee structure: House and Senate – new staff

Role of Appropriations Subcommittees



- In FY 2005, they dispersed > \$820 billion of discretionary funds.
- Work with Congressional leadership and members to address priorities of budget resolution.

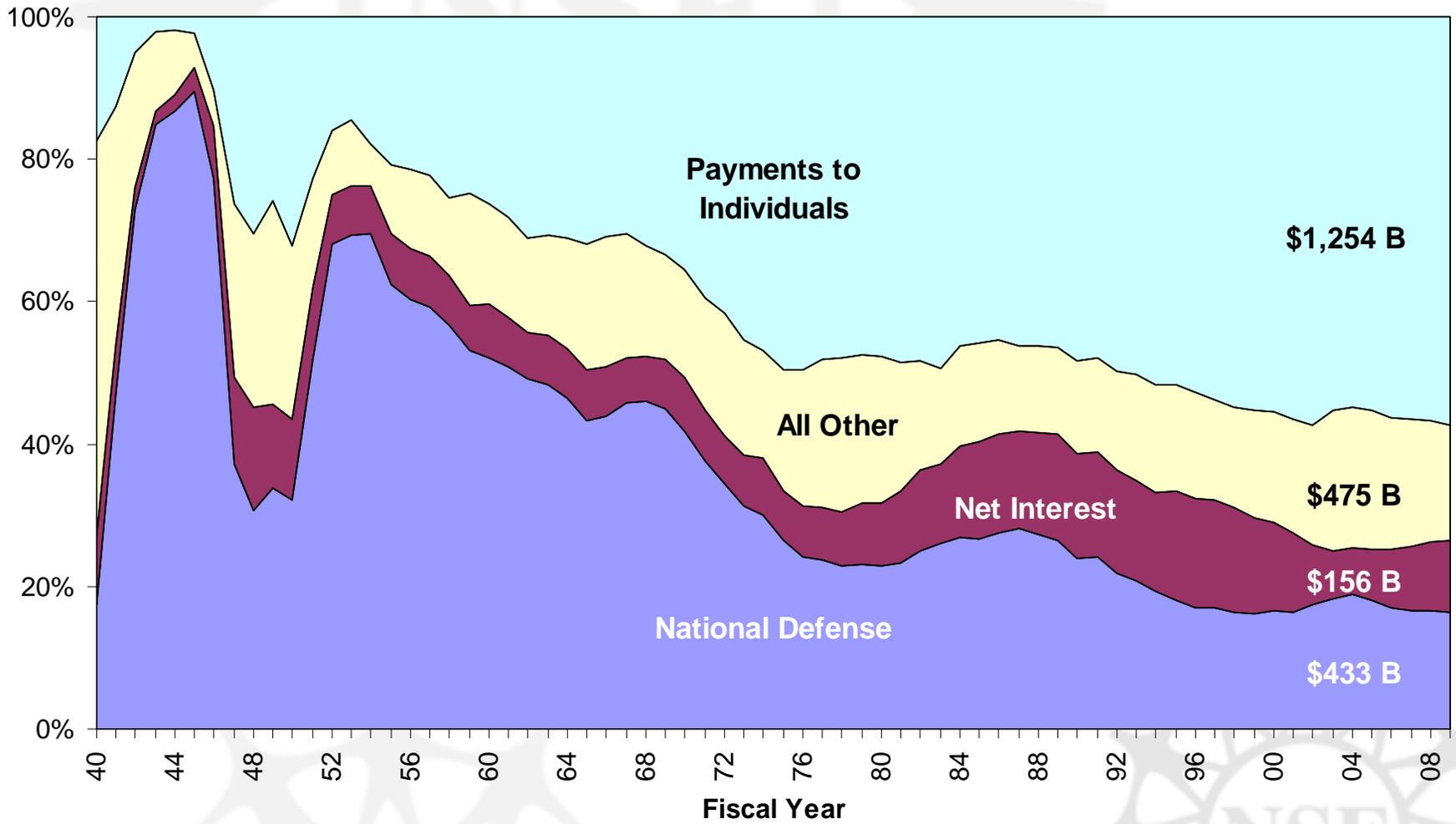


Subcommittee Changes for FY 2006

New Subcommittees for NSF

- Both the House and Senate reorganized their Appropriations Subcommittee structures.
- The House reduced its number of subcommittees from 13 to 10. As a result, NSF is now under the purview of the Science, State, Justice and Commerce Subcommittee.
- The Senate reduced its number of subcommittees from 13 to 12; NSF is now under the purview of the new Commerce-Justice-Science Subcommittee.
- The Subcommittees are distributing ~\$840 billion for FY 2006.

Percentage Composition of Federal Government Outlays



Total Outlays for FY 2004 = \$ 2,318 Billion

FY 2005 and 2006 R&D Budget Highlights

FY 2005

- ➔ DHS: 20 % over 2004
- ➔ Agriculture: 7.8 % over 2004
- ➔ Defense: 7.9 % over 2004
- ➔ NASA: 2.0 % over 2004
- ➔ NIH: 2.6 % over 2004
- ➔ Commerce: 4.6 % over 2004
- ➔ Energy: \$3.3 B in 2005
- ➔ USGS: 0.3 % under 2004
- ➔ EPA: 2.8 % under 2004

FY 2006*

- ➔ DHS: 23.8 % over 2005
- ➔ Agriculture: 15.6 % under 2005
- ➔ Defense: 0.6 % over 2005
- ➔ NASA: 4.9 % over 2005
- ➔ NIH: 0.5 % over 2005
- ➔ Commerce: \$565 M - NOAA
- ➔ Energy: \$3.0 B in 2006
- ➔ USGS: 4.6 % under 2005
- ➔ EPA: Decrease to \$569 M

* Impact of appropriations not yet known

R&D Budget

| Budget Authority (dollar amounts in millions) | 2006 Proposed* | Percent Change |
|--|-------------------|-------------------|
| Defense | 70,839 | 1% |
| Health and Human Services | 28,807 | 0% |
| NASA | 11,527 | 5% |
| Energy | 8,528 | -1% |
| National Science Foundation | 4,194 | 3% |
| Agriculture/USDA | 2,039 | -16% |
| Veterans Affairs | 786 | 0% |
| Commerce | 1,013 | -11% |
| Homeland Security | 1,467 | 24% |
| Transportation | 808 | 8% |
| Interior | 582 | -5% |
| Environmental Protection Agency | 569 | -1% |
| Other | 1,145 | -8% |
| TOTAL | 132,304 | 1% |

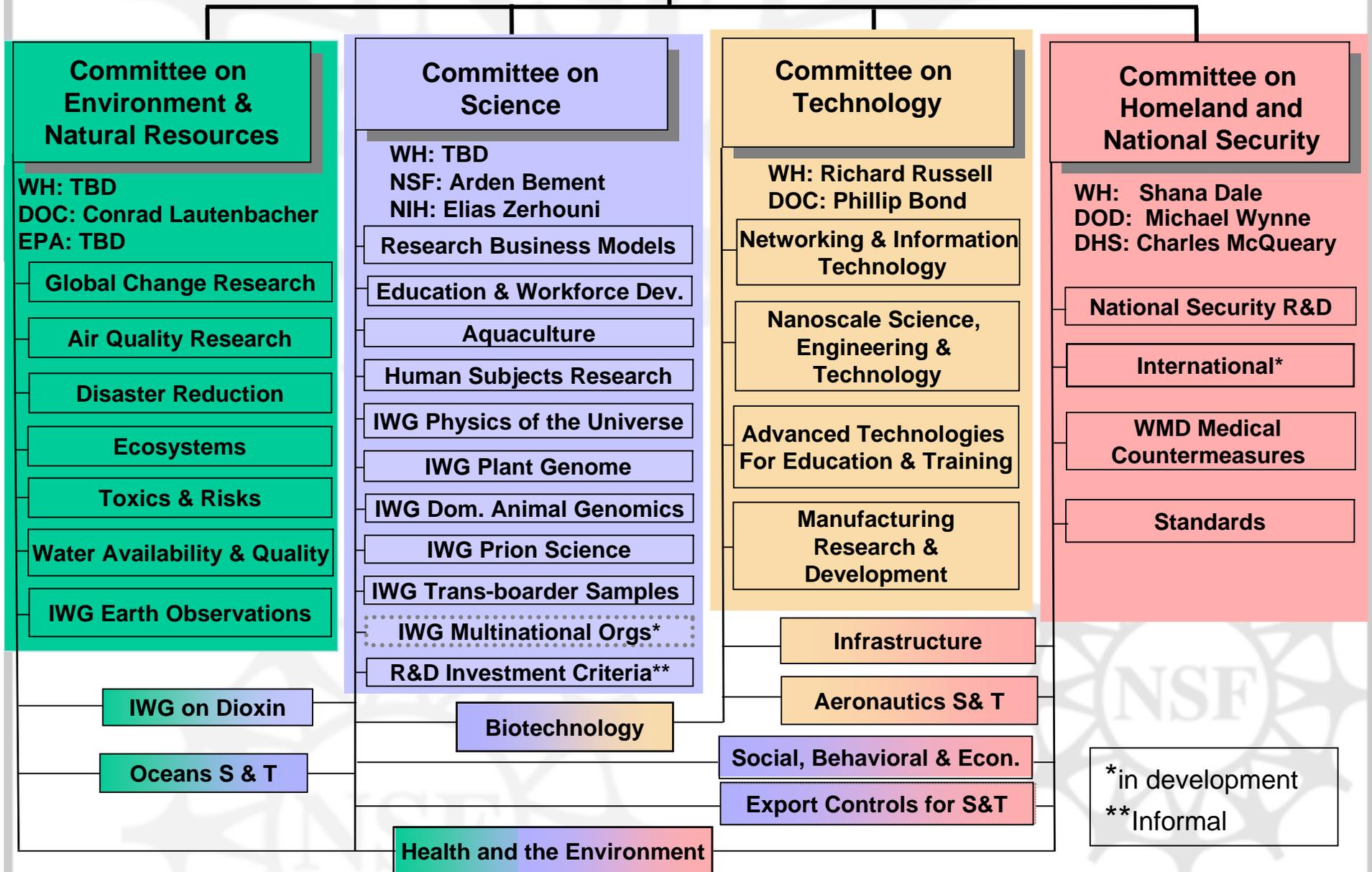
* Impact of appropriations not yet known

Opportunities

- Research Business Models Subcommittee, Committee on Science, National Science and Technology Council
 - Coordinating across Federal agencies to address important policy implications arising from the changing nature of interdisciplinary and collaborative research, and
 - examining the effects of these changes on business models for the conduct of scientific research sponsored by the Federal government.
 - Working with the FDP, COGR, and others

Current NSTC
Structure
April 2005

**NSTC
Director, OSTP**



Research Business Models (Cont')

SUCCESS!

- Three of Ten Initiatives Approved in January '05!
 - Dr. Marburger, Director, OSTP signed a memo to research agency heads to implement a policy to acknowledge multiple PIs
 - Dr. Kathie Olsen, Assoc. Dir. For Science, OSTP and the Controller, OMB signed a memo endorsing the FDP subagreement as an effective practice
 - FDP "research terms" were published in the Federal Register as a proposal to implement more broadly and routinely across all agencies (were due 2/29)
- See the RBM web site for the latest news
<http://rbm.nih.gov/>

Research Business Models (Cont')

CONTINUING PROGRESS!

Several Activities are in the Pipeline

- Streamlined and consistent progress report formats across agencies-
 - will be discussed at May FDP meeting
 - will also be published in the Federal Register for comments
- Enhanced A-133 compliance supplement on subrecipient monitoring
 - Describe risk management and streamlined review for "Prime" subrecipients with satisfactory audits
 - Possible implementation in the 2006 compliance supplement

Research Business Models (Cont')

Activities in the Pipeline (cont'd)

- ▶ Uniform Conflict of Interest policy
 - Request for Information may be published for comment this Spring, if it's not confused by NIH issues
 - When finalized, for assistance awards, it could be published in OMB Circular A-110
- ▶ Models of Support for Instrument Operations and Maintenance (O/M)
 - Will address a variety of effective practices in supporting O/M for mid-size instrumentation
 - May attempt to address both institutional and agency practices that enhance ability to deal with unanticipated future O/M requirements

Conflict of Interest

- New Intramural Policy at NIH
- Extramural policies in place at NIH and NSF
- Community seeking broader clarification, government-wide
- RBM attempting to provide such clarification

Federal Government Future Directions

➤ Consolidation:

- Started with payroll functions
- Spreading to include:
 - Financial accounting functions
 - Grants management functions
 - Procurement functions
 - Human resources functions

➤ Streamlining:

- Grants.gov: FIND and APPLY
- 424R&R dataset
- Terms and Conditions
- Project Reports





Electronic Initiatives



What's the Latest On?

- Grants.gov
- Grants Management Lines of Business (GMLoB)

The Grants.gov Initiative

- Mandate - President's Management Agenda and PL 106-107
- Originally called the E-Grants Initiative
- Participation includes 26+ Grants-making agencies of the Federal Government
- Provides a single, unified "storefront" for all customers of Federal grants to find and apply electronically
 - Grants.gov Find – Launched in February 2003
 - Grants.gov Apply– Launched in October 2003

SF 424 (R&R) Background Information

- There was early recognition that the SF 424, as a stand-alone package, would not be appropriate for research proposals;
- Developing a research specific application package was vital for the research agencies;
- Rule imposed was two or more agencies required element for inclusion in the dataset; and
- Application has been built into “components.” With the exception of the Cover Page, all other components are optional. Agency will specify in the announcement or agency specific instructions which components are required.

SF 424 (R&R) Components

- Cover Pages 1 and 2 – (Includes certification and assurance language)
- Research and Related Project/Performance Site Location(s)
- Research and Related Other Project Information
- Research and Related Senior/Key Person Profile(s)
- Research and Related Personal Data (PD/PI and co-PD/PI only)
- Research and Related Budget



APPLICATION FOR FEDERAL ASSISTANCE SF 424 (R&R)

1. TYPE OF SUBMISSION

- Pre-application
- Application
- Changed/Corrected Application

2. DATE SUBMITTED

Applicant Identifier

3. DATE RECEIVED BY STATE

State Application Identifier

4. DATE RECEIVED BY GRANTS.GOV

Federal Identifier

5. APPLICANT INFORMATION

Organizational DUNS: _____

Legal Name: _____

Department: _____ Division: _____

Address 1: _____ Address 2: _____

City: _____ County: _____ State: _____ ZIP Code: _____

Country: _____

Person to be contacted on matters involving this application

Prefix: _____ First Name: _____ Middle Name: _____ Last Name: _____ Suffix: _____

Phone Number: _____ Fax Number: _____ Email: _____

6. EMPLOYER IDENTIFICATION NUMBER (EIN) or (TIN):

7. TYPE OF APPLICANT: (enter appropriate letter in box)
[13-Nonprofits without 501(c)(3) IRS status, other than institutions of high]

8. TYPE OF APPLICATION: New

Resubmission Renewal Continuation Revision

Other (Specify): _____

Small Business Organization Type

Women Owned Socially and Economically Disadvantaged

If Revision, mark appropriate box(es).

A. Increase Award B. Decrease Award C. Increase Duration

D. Decrease Duration E. Other (specify): _____

9. NAME OF FEDERAL AGENCY:

Is this application being submitted to other agencies?

What other Agencies? _____

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:

TITLE: _____

11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:

12. AREAS AFFECTED BY PROJECT (cities, countries, states, etc.)

13. PROPOSED PROJECT:

Start Date _____ Ending Date _____

14. CONGRESSIONAL DISTRICTS OF:

a. Applicant _____ b. Project _____

15. PROJECT DIRECTOR/PRINCIPAL INVESTIGATOR CONTACT INFORMATION

Prefix: _____ First Name: _____ Middle Name: _____ Last Name: _____ Suffix: _____

Position/Title: _____ Organization Name: _____

Department: _____ Division: _____

Address 1: _____ Address 2: _____

City: _____ State: _____ ZIP Code: _____ Country: _____



RESEARCH & RELATED Other Project Information

1. Are Human Subjects Involved? Yes No

1.a. *If YES to Human Subjects*

Is the IRB review Pending? Yes No

IRB Approval Date:

Exemption Number: 1 2 3 4 5 6

Human Subject Assurance Number:

2. Are Vertebrate Animals Used? Yes No

2.a. *If YES to Vertebrate Animals*

Is the IACUC review Pending? Yes No

IACUC Approval Date:

Animal Welfare Assurance Number

3. Is proprietary/privileged information included in the application? Yes No

4.a. Does this project have an actual or potential impact on the environment? Yes No

4.b. If yes, please explain:

4.c. If this project has an actual or potential impact on the environment, has an exemption been authorized or an environmental assessment (EA) or environmental impact statement (EIS) been performed? Yes No

4.d. If yes, please explain:

5.a. Does this project involve activities outside the U.S. or partnership with International Collaborators? Yes No

5.b. Provide countries with which international cooperative activities are involved:

5.c. Optional Explanation:

6. Project Summary/Abstract

7. Facilities & Other Resources

8. Equipment

9. Bibliography & References Cited

10. Current and Pending Support

11. Project Narrative

12. Other Attachment

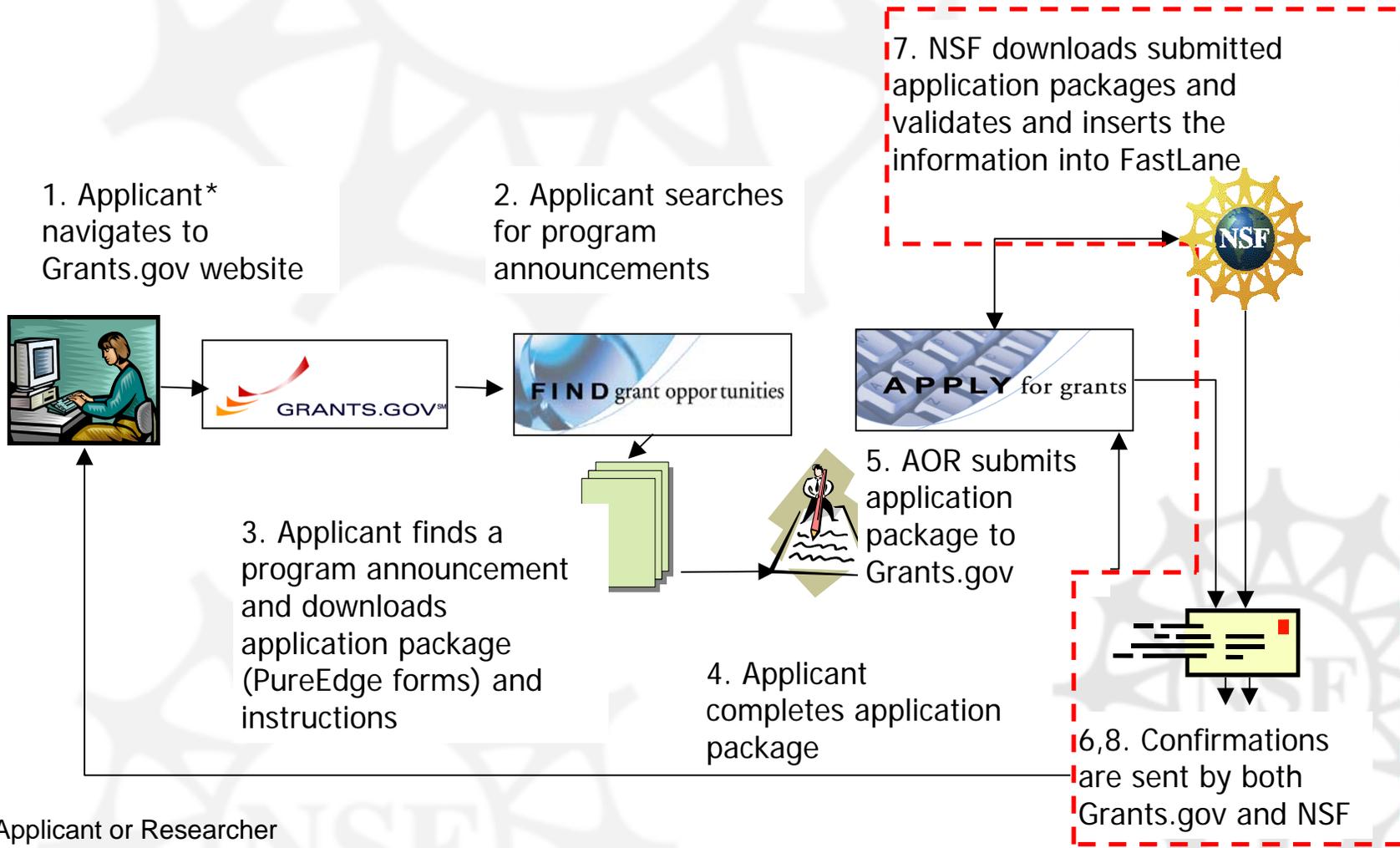
Grants.gov Current Status and Next Steps

- All 26 grant-making agencies are required to post all discretionary grant programs in the Grants.gov Find
- OMB has directed agencies to post in Grants.gov Apply:
 - 25% of their funding opportunities in FY 2005;
 - 75% of their funding opportunities in FY 2006;
 - 100% of their funding opportunities in FY 2007.

Grants.gov and NSF

- NSF is able to accept proposals through Grants.gov
- Unless otherwise specified in the funding opportunity, FastLane may be used to submit proposals to NSF
- 23 application packages were posted to Grants.gov for submission in FY 2005 (that met the 25% goal)
- 75% of NSF's application packages will be posted to Grants.gov for submission in FY 2006.
- Application package will include:
 - SF 424 (R&R) and the NSF's Grants.gov Application Guide

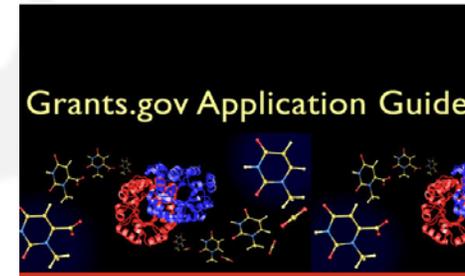
Submitting an Application to NSF through Grants.gov



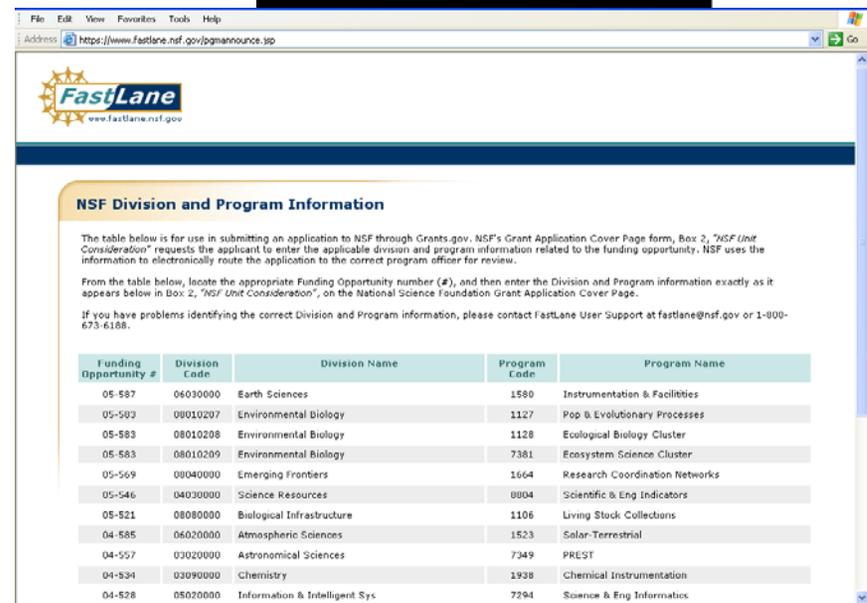
* Applicant or Researcher

Highlights of NSF Grants.gov Implementation Process

- ➔ NSF's Grants.gov Application Guide – has been posted with application package and on Policy website
- ➔ A HTML page for proposers to select the NSF unit of consideration and enter on NSF Cover Page
- ➔ Process to register new organizations and individuals with FastLane using information provided with the proposal submitted via Grants.gov



A Guide for Preparation and Submission of NSF Applications via Grants.gov

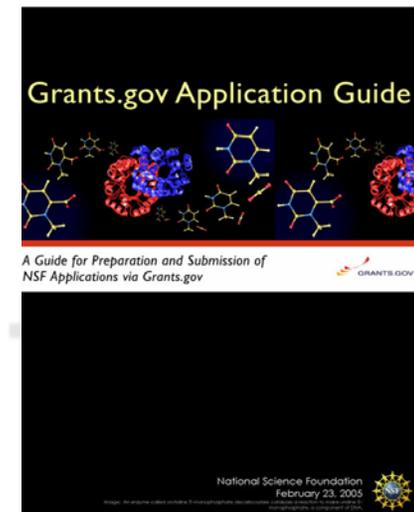


The screenshot shows a web browser window with the address <https://www.fastlane.nsf.gov/pgannounce.jsp>. The page features the FastLane logo and a section titled "NSF Division and Program Information". Below the title, there is explanatory text and a table with five columns: Funding Opportunity #, Division Code, Division Name, Program Code, and Program Name. The table lists various funding opportunities and their corresponding division and program details.

| Funding Opportunity # | Division Code | Division Name | Program Code | Program Name |
|-----------------------|---------------|-------------------------------|--------------|--------------------------------|
| 05-587 | 06030000 | Earth Sciences | 1580 | Instrumentation & Facilities |
| 05-503 | 08010207 | Environmental Biology | 1127 | Pop. & Evolutionary Processes |
| 05-583 | 08010208 | Environmental Biology | 1128 | Ecological Biology Cluster |
| 05-583 | 08010209 | Environmental Biology | 7381 | Ecosystem Science Cluster |
| 05-569 | 08040000 | Emerging Frontiers | 1664 | Research Coordination Networks |
| 05-546 | 04030000 | Science Resources | 0804 | Scientific & Eng Indicators |
| 05-521 | 08080000 | Biological Infrastructure | 1106 | Living Stock Collections |
| 04-585 | 06020000 | Atmospheric Sciences | 1523 | Solar-Terrestrial |
| 04-557 | 03020000 | Astronomical Sciences | 7349 | PREST |
| 04-534 | 03090000 | Chemistry | 1938 | Chemical Instrumentation |
| 04-528 | 05020000 | Information & Intelligent Sys | 7294 | Science & Eng Informatics |

NSF's Grants.gov Application Guide

- Note Section 3.2.1, Creating PDF Files
 - Non-Adobe Acrobat Users
 - Can use Convert Files to PDF available under Quick Links in FastLane through Proposal Preparation or Research Administration
 - Adobe 6.0/7.0 Users
 - Must use FastLane Job Options File



NSF Grants.gov Apply Challenges

- Subaward capability will be available to the agencies and NSF will include the subaward form in the NSF application package by early 2006
 - Approximately 20% of NSF proposals contain subawards
- Separately submitted collaborative proposals cannot be submitted through Grants.gov at this time
 - Approximately 10% of NSF proposals are separately submitted collaborative proposals
- Applicant System to System Process – MIT and InfoEd are testing the entire end-to-end business process with NSF

Lines of Business Opportunities

- Common Solution
 - A business process and/or technology based shared service made available to government agencies.
- Business Driven (vs. Technology Driven)
 - Solutions address distinct business improvements that directly impact LoB performance goals.
- Developed Through Architectural Processes
 - Solutions are developed through a set of common and repeatable processes and tools.
- Current LoBs
 - Financial Management (FMLOB)
 - Human Resources Management (HRLOB)
 - Grants Management (GMLoB)
 - Federal Health Architecture (FHALOB)
 - Case Management (CMLOB)

Grants Management Line of Business (GMLoB)

- ➔ Big dollars spread over many agencies/programs:
 - \$ 540 B
 - 26 agencies
 - > 900 programs
- ➔ Significant spending on Grant Management systems. Fiscal Year 2005:
 - \$144 million Development Modernization and Enhancement
 - \$3.8 billion in Operations and Maintenance
- ➔ Opportunities for increased efficiencies, improved oversight and management, and customer-centric focus

GMLoB – Vision & Goals

| | |
|--------|--|
| Vision | A government-wide solution to support end-to-end grants management activities that promote citizen access, customer service, and agency financial and technical stewardship. |
| Goals | <ul style="list-style-type: none">➔ Improve customer access to grant opportunities➔ Increase efficiency of the submission process➔ Improve decision making➔ Integrate with Financial Management processes➔ Improve the efficiency of the reporting procedures in order to increase the usable information content➔ Optimize the post-award and closeout actions |

GMLoB Participating Agencies

Managing Partners:

- ➔ National Science Foundation
- ➔ Department of Health and Human Services

Participating Agencies:

- ➔ Department of Agriculture
- ➔ Department of Veterans Affairs
- ➔ Department of Commerce
- ➔ Agency for International Development
- ➔ Department of Defense
- ➔ Corporation for National Service
- ➔ Department of Education
- ➔ Environmental Protection Agency
- ➔ Department of Energy
- ➔ Department of Homeland Security
- ➔ Institute for Museum and Library Services
- ➔ Department of Housing and Urban Development
- ➔ NASA
- ➔ Department of the Interior
- ➔ National Archives and Records Administration
- ➔ Department of Justice
- ➔ National Endowment for the Arts
- ➔ Department of Labor
- ➔ National Endowment for the Humanities
- ➔ Department of State
- ➔ Department of Transportation
- ➔ Small Business Administration
- ➔ Department of the Treasury
- ➔ Social Security Administration

GMLoB - Accomplishments

- GMLoB operating model and approach
- Common Grants Management process
- Evaluation of Request for Information
- Common solution white paper
- Target architecture
- Business case development

GMLoB – Current Status

- Governance established
 - HHS and NSF to be co-leads in implementation
 - Grants Executive Board to provide guidance and oversight
 - Grants Policy Committee to continue Policy Development and input and liaison to Grants Executive Board
- GMLoB and Grants.gov have begun to discuss streamlining opportunities in back office and front office processes and data
- Managing partners are working with Grants Executive Board to identify initial 3 consortia
 - Prove the concept
 - Standardize methodologies and consortia operating model
 - Identify additional consortia in late FY06 / early FY07

GMLoB - Process for Identifying Consortia

➔ Purpose

- Develop transparent process for the grant-making community to recommend initial 3 consortia that are most prepared to move ahead

➔ Outcome

- At least three named consortia
- Agreement by the grants-making community to move forward with the named consortia

➔ Approach

- Ask agencies to submit a “Declaration of Intent” to communicate interest in leading a consortium or participating in one as a member
- Assemble committee out of the Grants Executive Board to rank Declarations of Intent and recommend 3 consortia leads

GMLoB – Next Steps

- Recommend and name initial 3 consortia
- Work with consortia to develop action plans
- Reach out to grantee community
- Begin documenting policy, technical, data, process guidelines and standards
- Ensure consistency with common operating model and common business process
- Share learning across consortia