NSF Regional Grants Conference
Challenges, Opportunities & New Directions

April 7-8, 2008

Hosted by: The University of Rhode Island
Providence, Rhode Island
## Ask Early, Ask Often!

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Contact</th>
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</thead>
<tbody>
<tr>
<td>Tom Cooley</td>
<td>Chief Financial Officer &amp; Director, Office of Budget, Finance &amp; Award Management (BFA)</td>
<td><a href="mailto:tcooley@nsf.gov">tcooley@nsf.gov</a> (703) 292-8200</td>
</tr>
</tbody>
</table>
| Mary Santonastasso | Division Director  
Division of Institution & Award Support; Office of Budget, Finance & Award Management (BFA) | msantona@nsf.gov (703) 292-8230 |
Coverage

• Challenges and Opportunities Along The Road Ahead
  – Tom Cooley

• Electronic Initiatives
Challenges & Opportunities Along the Road Ahead

• Backdrop – The overall “environment” includes:
  – The political landscape: a time of change ahead
  – Constrained budgets; sensitivity to earmarking
  – “War time” environment
  – Deficit reduction
  – Economic downturn; mortgage crisis
  – Trade deficit
  – Weakening dollar
Challenges & Opportunities Along the Road Ahead

• There is some good news for R&D

• The America COMPETES Act and the American Competitiveness Initiative
America COMPETES Act

• Signed into law on August 9, 2007
• Shares goals of the American Competitiveness Initiative (ACI)
• Focuses on three primary areas of importance:
  – Increasing research investment;
  – Strengthening educational opportunities in science, technology, engineering, and mathematics from elementary through graduate school;
  – Developing an innovation infrastructure.
America COMPETES Act (Cont’d)

• Highlights
  – Doubles NSF Funding from $5.6 billion in FY2006 to $11.2 billion in FY 2011
  – Authorizes the National Institute of Standards and Technology (NIST) from approximately $703 million in FY 2008 to approximately $937 million in FY 2011
  – Doubles Department of Energy’s Office of Science funding over ten years
  – Innovation Acceleration Research Program directs federal agencies funding research in science and technology to set as a goal dedicating approximately 8% of their R&D budgets toward high-risk frontier research
  – Directs NASA to increase funding for basic research
America COMPETES Act (Cont’d)

• Goals:
  – Boost physical sciences
  – More attention to math and science education in public schools
  – Focus on applied energy research
  – Make Research and Experimentation Federal tax credit permanent

• Limitations (as proposed in FY 2007):
  – Flat lines NIH for next 5 years
  – Freezes NASA’s spending on earth and space sciences
Congress and the Budget: The Future Appears Bright
NSF’s Key Congressional Players

• New Congress - major shift of leadership and likely further changes for 2009

• 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 staff all around
Percentage Composition of Federal Government Outlays

- National Defense
- Net Interest
- All Other
- Payments to Individuals

<table>
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<tr>
<th>Year</th>
<th>Current $</th>
<th>1940</th>
<th>1971</th>
<th>2008</th>
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<tr>
<td></td>
<td></td>
<td>9.5B</td>
<td>210.2B</td>
<td>2,901.9B</td>
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$1,760B
$361B
$261B
$607B

NSF National Science Foundation

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## R&D Budget

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<th>Budget Authority</th>
<th>2009 Proposed</th>
<th>Percent Change</th>
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<tr>
<td>Defense</td>
<td>80,494</td>
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<tr>
<td>Health and Human Services</td>
<td>29,480</td>
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<tr>
<td>NASA</td>
<td>10,737</td>
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<tr>
<td>Energy</td>
<td>10,558</td>
<td>8%</td>
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<tr>
<td>National Science Foundation</td>
<td>5,201</td>
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<tr>
<td>Agriculture/USDA</td>
<td>1,952</td>
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<td>Veterans Affairs</td>
<td>884</td>
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<td>Commerce</td>
<td>1,157</td>
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<tr>
<td>Homeland Security</td>
<td>3,287</td>
<td>188%</td>
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<td>Transportation</td>
<td>901</td>
<td>9%</td>
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<tr>
<td>Interior</td>
<td>617</td>
<td>-9%</td>
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<tr>
<td>Environmental Protection Agency</td>
<td>550</td>
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<tr>
<td>Other</td>
<td>1,145</td>
<td>0%</td>
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<td><strong>TOTAL</strong></td>
<td><strong>146,963</strong></td>
<td><strong>3%</strong></td>
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FY 2009 R&D Request (without earmarks; preliminary)
Percent Change from FY 2008 excluding '08 earmarks

- DOE Science: -21%
- NSF: 16%
- DHS
- DOT
- DOE energy
- DOD weapons
- NOAA
- NIST
- DOD "S&T"
- DOE defense
- NASA
- NIH
- EPA
- VA
- USDA
- USGS

Source: AAAS, based on OMB R&D data and agency estimates for FY 2009.
DOD "S&T" = DOD R&D in "6.1" through "6.3" categories plus medical research.
DOD weapons = DOD R&D in "6.4" and higher categories. R&D earmarks as tabulated by AAAS from final 2008 appropriations in December 2007 analyses. FEB. '08 PRELIMINARY © 2008 AAAS
So, where’s the $$$$$$?

• Basic Research ($29.2 B out of $145.4 B):
  – DOD: +4.0 %
  – NIH:  +0.1 %
  – NASA: -9.1 %
  – DOE/Sci. +16.7 %
  – NSF  +17.4 %
  – USDA: -6.8 %
  – Commerce: +83.3 %
  – Interior: -7.0 %
  – DHS:  +12.8 %
# Highlights

<table>
<thead>
<tr>
<th>Program</th>
<th>FY08</th>
<th>FY09</th>
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<tr>
<td>Climate Change</td>
<td>$205.25 M</td>
<td>$220.60 M</td>
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<td>Cyberinfrastructure</td>
<td>$628.80</td>
<td>$681.95 M</td>
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<td>NNI</td>
<td>$388.69</td>
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<td>N&amp;ITR&amp;D</td>
<td>$931.48</td>
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<td>CAREER</td>
<td>$167.76</td>
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<td>REU</td>
<td>$57.73</td>
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<td>RUI</td>
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<td>STCs</td>
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<td>$76.02 M</td>
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## R&RA

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<th>Directorate</th>
<th>FY 2009 Increase</th>
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<td>BIO</td>
<td>10.3 %</td>
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<tr>
<td>CISE</td>
<td>19.5 %</td>
</tr>
<tr>
<td>ENG</td>
<td>19.2 %</td>
</tr>
<tr>
<td>GEO</td>
<td>12.8 %</td>
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<tr>
<td>MPS</td>
<td>20.2 %</td>
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<tr>
<td>SBE</td>
<td>8.5 %</td>
</tr>
<tr>
<td>OPP</td>
<td>10.9 %</td>
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<tr>
<td>OIA</td>
<td>18.8 %</td>
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# EHR

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<th>Division</th>
<th>FY 2009 Increase</th>
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<tr>
<td>DRL</td>
<td>5.8 %</td>
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<tr>
<td>DUE</td>
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<tr>
<td>DGE</td>
<td>19.1 %</td>
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<tr>
<td>HRD</td>
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## MREFC

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<th>Program</th>
<th>FY 2008</th>
<th>FY 2009</th>
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<td>AdvLIGO</td>
<td>$32.75</td>
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<td>AARV</td>
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<td>ALMA</td>
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<td>IceCube</td>
<td>$25.91</td>
<td>$11.33 M</td>
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<tr>
<td>ATST</td>
<td>-0-</td>
<td>$2.50 M</td>
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Along the Road Ahead

• There are some continuing “challenges” for our community:
  – Policies and procedures at Federal agencies “all over the map”
  – Compliance looming large
  – NSF: Difficult to balance award size, duration and success rates
  – Audits continue to frustrate, but efforts to address quality of single audits (A-133) underway
Politics and Procedures: What are the Touch Points?

• 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, NASULGC, professional societies, etc.)
    • Example: Success rates, award size and duration
Financial Statement Audits

• Ours and Yours
  – Issue: Recording expenditures properly

• Federal Government’s Area of Improvements
  – More scrutiny of FCTR’s will require more documentation
  – Heightened scrutiny of A-133 reports
  – Site visits to high-risk awardees

• Your Area of Improvements
  – Better accounting system; segregation of costs
  – Better documentation
  – Clean A-133 audits (OIG reviews/recommendations)
Research Business Models (RBM) Subcommittee, Committee on Science, National Science and Technology Council

• Federal cross-agency coordination to address important policy implications
  — Arising from the changing nature of interdisciplinary and collaborative research
  — Examine the effects of these changes on business models for the conduct of scientific research sponsored by the Federal government.

• Outreach with the FDP, COGR, SRA, NCURA, and others continues
RBM: Current Activities

• Multiple PIs
• Research Terms & Conditions
• Interim Progress Reports
• Conflict of Interest Policy
• Voluntary Institutional Compliance Program Guidance
• Enhanced A-133 compliance supplement on sub-recipient monitoring
Outreach and Communication

• Likely to have additional regional public meetings
  – Possibly in conjunction with the Grants Policy Committee and Grants.gov

• Will continue outreach through FDP, SRA, NCURA, COGR, etc.

• See the RBM web site for the latest news http://rbm.nih.gov/
Grants Policy Committee

• Stakeholder webcast held on March 18, 2008
  – FFATA Subaward pilot update
  – Post Award Work Group update regarding the Performance Progress Report Form
  – GPC update on Strategic Planning and Product Development
  – http://www.grants.gov/aboutgrants/grants_news.jsp

• Next webcast: Fall 2008
Federal Funding Accountability & Transparency Act (FFATA)

- Task Force formed (Nov. 2006 - led by OMB)
- FederalSpending.gov launched (Feb. 2007)
- Data elements defined
- Impact: Place of performance
- Next Step: Pilot grantee and sub-awardee data
Electronic Initiatives
What’s the Latest On?

- Grants.gov
- Grants Management Line of Business (GMLoB)
- Research.gov
Grants.gov – Purpose & Goals

• A single source for finding grant opportunities
• A standardized manner of locating and learning more about funding opportunities
• A single, secure and reliable source for applying for Federal grants online
• A simplified grant application process with reduction of paperwork
• A unified interface for all agencies to announce their grant opportunities, and for all grant applicants to find and apply for those opportunities
NSF Grants.gov Implementation in 2008

• Unless otherwise specified, optional submission for the vast majority of NSF programs

• Will not be used until a Grants.gov solution has been developed for:
  – Separately submitted collaborative proposals
  – Fellowship programs that require submission of reference letters
GMLOB’s Background, Vision, and Goals

Background
• High volume of grants money spread over many agencies/programs:
  – Over $526 billion spent on grants in FY04
  – 26 primary grant-making agencies
  – Over 900 programs

Vision
• A government-wide solution supporting end-to-end grants management activities

Goals
• Improve customer service
• Reduce cost
• Increase standards and streamlining
Consortium-Based Operating Model

• Operating Model
  – Grants management community will process grants in a decentralized way using common business processes supported by shared technical services.

• Consortia-based implementation approach
  – Consortia are agency work teams that align around shared business interests to define a common solution to meet its members needs. Each consortium will have one lead agency and one or more member agencies.

• Consortium Leads
  – National Science Foundation: Research.gov
  – Department of Education: G5
  – Administration for Children and Families under Health and Human Services: GrantSolutions.gov
GMLOB Current Status

- Agencies have begun partnering with Consortia. They are developing implementation plans for migration.
- Agencies with unique requirements outside the scope of Consortia are implementing grants management solutions in line with GMLOB’s goals.
- Benefits to grantees:
  - Reduction in paper based processes
  - Reduction in redundant reporting requirements
  - Standardized application and post-award processes
  - Increased help-desk knowledge and availability
Why NSF was Chosen as a Consortium Lead

• Focus on the research community
• Recognized for high standards by customers
• Leadership position in the grants community
• 12 years of experience and capabilities as shown by FastLane
• Unique operating model—menu of high-value services for both Federal partners and the research community
NSF GMLoB Consortium Guiding Principles

- The approach will be deliberate, modular, conservative, and research community focused.
- Research community must directly benefit from this initiative.
- Whatever we do, we are going to do it well.
- Low cost, high impact offerings that deliver value to grantees will be implemented first.
- The initiative must focus on improvement; cost avoidance, not just cost savings.
Research.gov
What is Research.gov?

Research.gov…

• Offers a web portal, www.research.gov, that enables institutions and grantees to access a menu of grants management services for multiple federal agencies in one location.

• Focuses on providing high-value grants management services to meet the specific needs of the research community and of research grant-making agencies and programs.

• Is taking a phased approach to offer services that align with the needs of the research community and federal partner agencies.

• Aims to ease the grants administrative burden, one of the greatest challenges faced by the research community.

• Is a research-oriented solution for delivering Grants Management Line of Business (GMLOB) Consortium services.
NSF Grants Management Environment

“Find” Funding Opportunities and “Apply” for Grants

End-to-End Proposal, Award and Financial Management Functions

Users can log into FastLane & Research.gov using the same user name, NSF ID and password
Benefits to the Research Community

• Simplifies the research community’s access to information and grant services for multiple federal agencies

• Facilitates timely notification of the award review process and decisions

• Provides modern online capabilities for conducting business with federal research agencies

• Helps researchers manage their grants portfolio

• Saves time by providing fast and easy access to participating agencies’ grants management services

• Helps researchers comply with federal-wide reporting requirements
Research.gov Released!

• In December 2007, NSF released initial public-facing service offerings, including:
  – Research Spending and Results
  – Policy Library
  – Research Headlines

• In February 2008, NSF released initial business services for registered grantees in Beta mode:
  – Grants Application Status
  – Institution and User Management
Research.gov Partner Agencies

• Research.gov is partnering with agencies who are:
  – Devoted to promoting the federal-wide research mission
  – Committed to serving the research community

• Research.gov’s current partners include:
  – National Aeronautics and Space Administration
  – Department of Defense Research
  – USDA’s Cooperative State Research, Education, and Extension Service

• NSF will be working with these agencies to extend Research.gov services to their grantees
Research Spending and Results

- Research Spending and Results – The public can search for detailed award information, including publication citations and award abstracts.
Policy Library and Research Headlines

Policy Library – The public can find Federal and agency-specific policies, guidelines and procedures for use by Federal agencies and the awardee community.

Research Headlines - The public can view highlighted research activities from NSF and CSREES.
Research.gov  Beta Business Services

- Grant Application Status – Sponsored Projects Offices and Principal Investigators (PIs) can check the status of proposals submitted to NSF and CSREES as they are received and reviewed.

- They can also view:
  - A history of submissions
  - Panel summaries and reviews (PIs only)

- Institution and User Management – Allows the Institution Administrator to add users and manage their roles and profiles.
This is Just the Beginning…

- **Research.gov** will deliver services based on the priorities of the research community. Candidate upcoming service offerings include:
  - **Principal Investigator/Reviewer Profile Update Service** - Integrated online tool to allow Principal Investigators and Reviewers to update their profile in one easy place.
  - **Program Officer Service** - Tools for program officers to find information and manage their grant portfolios.
  - **Federal Financial Report** - Online tool to complete and submit grant financial reports using the new government-wide standard form.
  - **Research Performance Progress Reports** - Online tool to complete and submit research performance progress reports using the new government-wide research and related dataset.
  - **Research Spending and Results Sub-award Search** - Sub-award information from NSF and partner agencies available to be searched by the public.
  - **Payments and Cash Requests** - Online tools to request electronic funds disbursement and payment.
Visit Research.gov!

Please visit Research.gov at:

www.research.gov

For more information, contact:

The Research.gov Team

(703)-292-8150

gmlob@nsf.gov
<table>
<thead>
<tr>
<th>NSF Websites</th>
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<td><a href="http://www.nsf.gov/nsb/">http://www.nsf.gov/nsb/</a></td>
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