NSF PUBLIC ACCESS INITIATIVE

Overview

NSF will launch a Public Access Initiative that will make the results of NSF-funded research broadly available with minimal barriers. NSF's public access policy will accelerate progress in scientific research, encourage citizens to become scientifically literate, and foster creative partnerships with the private sector. Building on progress made in FY 2012 and FY 2013, during FY 2014 NSF will design and test system architecture to manage a subset of NSF-supported research products (at a minimum, journal articles, conference proceedings, and book chapters). During FY 2014 NSF will also pursue capabilities that will capture relevant information from the public access system for seamless inclusion in NSF's reporting and proposal systems. The appropriate organizational structure and unit within the Foundation with operational responsibility will be identified.

Pursuant to the memorandum recently released by OSTP, *Increasing Access to the Results of Federally Funded Scientific Research*¹, NSF intends to articulate a policy and develop plans that will require recipients of NSF funding to deposit a copy of their work in a proposed public access system and to manage the data resulting from their NSF awards. Conditions of deposit are likely to vary, depending on the nature of the product (data or publications), publishers' policies, and the length of time before the publication will be made available free of charge. NSF will consult widely with stakeholders during FY 2013 and FY 2014, before final award terms and policies are established.

Total Funding for NSF Public Access Initiative

(Do	llars in Millions)	1
	FY 2012	
	Enacted/	
	Annualized	FY 2014
FY 2012 Actual	FY 2013 CR	Request
-	-	\$2.50

Goals

NSF will work with concerned communities to establish a mechanism for NSF-funded investigators to make the products of their work available to the public. In order to do this, NSF will:

- 1. **Consult as needed with stakeholders, both inside and outside NSF.** NSF will work closely with stakeholders (scientists, universities, professional associations, private and public research sponsors and philanthropies, and publishers) to articulate public access policies that balance the concerns of all groups.
- 2. Establish policies and make changes to NSF agreements with awardees that will enable public access and ensure compliance. Procedures, terms and conditions for proposals, awards, and reporting are contained in the *Proposal and Award Policies and Procedures Guide (PAPPG)*. Updates and revisions to the PAPPG to align public access requirements with NSF policies and procedures will be made according to the required schedule with appropriate announcements in the Federal Register.

1 www.whitehouse.gov/blog/2013/02/22/expanding-public-access-results-federally-funded-research

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3. Establish a publicly-accessible system architecture through which NSF-funded investigators can make their work available. The requirements and specifications for this system will be developed during the FY 2013-FY 2014 planning phase. Consultations with stakeholders inside and outside of NSF, including scientific communities, professional societies, curatorial and stewardship institutions, publishers, and other stakeholder groups, will provide more specificity concerning attributes of the eventual repository system. NSF expects to consider carefully the merits of leveraging the existing PubMed Central (PMC) infrastructure built by the National Institutes of Health (NIH) and forging an interagency service that meets Administration priorities.² The roles of other federally funded infrastructure (e.g., Department of Energy's Office of Scientific and Technical Information (OSTI) new dataset registering service) will also be considered.

The first implementation of the architecture will focus on peer-reviewed scientific papers, as required by the recent OSTP Memorandum on increasing access to the results of federally funded research.³ Later implementation stages will address other kinds of research products, including data, for which there are fewer established frameworks.

4. Establish mechanisms to integrate with NSF's internal data systems and externally-facing proposal and reporting systems, in a way that creates as little burden on awardees and investigators as possible. How NSF integrates relevant information into its administrative and reporting systems will depend on the eventual system architecture. Because the technology will be fluid and all systems will be updated, this technology development and maintenance will be an ongoing need after the initial build-out.

Investment Framework

The NSF Public Access Initiative will have two structural elements: a planning process, comprising a steering committee and subcommittees focused respectively on publications and data and, eventually, a dedicated organizational unit, which will be directly responsible for administering the repository system. This unit will be advised by a working group made up of representatives from across the Foundation.

In FY 2013 and FY 2014, NSF will undertake planning and development activities including, but not limited to, the plans required by the OSTP memorandum, Increasing Access to the Results of Federally Funded Scientific Research, and will establish a process for determining which organization will be designated with responsibility for this activity. This will be pursued through a small working group composed of representatives from the Office of Information and Resource Management (OIRM) and the Office of Budget, Finance, and Award Management (BFA), individuals with relevant expertise recruited from the program directorates and offices, and other units of the Foundation as appropriate. This responsibility is expected to require two full-time equivalents (a newly-created position for a lead of the activity with one additional position for support functions). The lead official will oversee contracts and Memorandum of Understandings (MOUs) for piloting, testing, and services and will coordinate the design and requirements discussions associated with the contract. This will include articulating overall requirements for the initial roll out and for subsequent and potentially more complex implementations, monitoring the performance of the system and its uptake within the scientific community, and updating the system capabilities as necessary. These individuals will also coordinate the interface between the information in the Public Access system and other administrative units in the Foundation and will participate in discussions with the NSF Policy Office and various consultative activities. These may include coordination with publishers, professional societies, curatorial and stewardship institutions, and other organizations that manage the information and data infrastructure. During the early years, travel

² www.ncbi.nlm.nih.gov/pmc/

³ www.whitehouse.gov/sites/default/files/microsites/ostp/ostp public access memo 2013.pdf

will be required. Associated with this will be a standing working group with membership drawn from the NSF science staff to foster communication and information exchange.

In addition, the Division of Information Systems will develop and build appropriate technology to link the content from the repository with NSF's internal proposal and reporting systems. Other units of the Foundation, notably the Office of Legislative and Public Affairs (OLPA), the Office of the General Counsel (OGC), and the NSF Policy Office will contribute through efforts of public outreach and for updates to the PAPPG. The program directorates and offices may also undertake Public Access outreach activities with their respective communities at their discretion. Program directorates and offices will also be engaged to ensure that they have a role in developing, testing, and evaluating the system.

Public Access Initiative Funding and Estimates

(Dollars in Millions)

(Donais	III WIIIIOIIS)		
		FY 2012	
		Enacted/	
	FY 2012	Annualized	FY 2014
Activity	Actual	FY 2013 CR	Request
Goal 1, Stakeholder Consultation	-	-	\$1.25
Goal 2, NSF Policy Changes	-	-	-
Goal 3, Public Data Repository	-	-	0.50
Goal 4, Internal NSF System Changes	-	-	0.75
Total	-	-	\$2.50

Totals may not add due to rounding.

FY 2014 Request

A key activity in 2014 will be developing and testing the first implementation of the NSF Public Access system. This will include: (1) integration of relevant elements with the NSF internal and external systems; (2) identifying appropriate partners based on consideration of alternatives, capabilities, and requirements; (3) extensive testing prior to launch (anticipated in FY 2015), which will require implementing appropriate interagency agreements or third-party contracts; (4) defining the nature of post-launch monitoring; and (5) developing and evaluating system metrics, which include both performance and usage metrics. In this first implementation (FY 2015), NSF anticipates that only peer-reviewed papers will be accommodated within the system. After it is clear that the system works effectively for these kinds of works, NSF will begin to consider other kinds of work products, to take place in FY 2015 and beyond. Implementation of plans for managing data may require more extensive study and more time.

Preparation for a successful launch in FY 2015 will also necessitate coordination with the NSF Policy Office and with OLPA to ensure that relevant changes have been appropriately communicated with relevant constituencies. All of the programs across the Foundation will be impacted, therefore, coordination with the staff in the directorates and offices, and with senior management through working groups will be critical for effective communication and implementation with awardees.

Anticipated FY 2014 investments:

- Staffing, travel, and outreach;
- Ongoing contract for external repository services; and
- Ongoing development and maintenance of technology for interface between repository and NSF systems.

FY 2015 and Beyond

Beyond 2014, NSF expects to launch the system, monitor its use, and expand it strategically based on performance and usage metrics, as well as responses from the research community and other stakeholders. When the system is functioning robustly, NSF will begin the process of adding additional types of research products and additional functionality. Within two years of the launch for first implementation, NSF will revisit and update the plan and evaluate the project from the perspective of its support for the research process. This effort will engage directorates and offices, the NSB, OSTP, other agencies, and stakeholder groups.