IT Modernization Initiatives at NSF

National Science Foundation
Fall Grants Conference

Pittsburgh, PA - November 14 & 15 - Carnegie Mellon University
Agenda

• Recent Updates and Accomplishments
  ▪ Password Management
  ▪ Proposal Compliance Checking
  ▪ NSF Public Access Repository

• Research.gov – Looking Ahead
  ▪ Proposal Submission Modernization
  ▪ Single ID Across All NSF Systems
  ▪ Impact of NSF Move to Alexandria on IT Systems
On August 1, 2016, NSF implemented a more convenient and secure process for resetting NSF passwords for external users of Research.gov, FastLane, and GRFP officials (approximately 40K users as of 10/21/2016)

Why?
• Improve user experience, reduce user calls to the Help Desk, and update technology to deliver more user-friendly features in the future

What do I need to know?
• NSF awardees and proposers will no longer be able to reach out to Sponsored Projects Offices (SPO) to reset their passwords on FastLane and Research.gov
• The last six passwords cannot be reused, and accounts will be locked for five minutes after the tenth unsuccessful password attempt
Recent Proposal Compliance Checking Updates

• The goals of automated compliance checking are to increase competitive fairness and reduce burden on both NSF programs and the research community

• Specific automated compliance checks depend on proposal type selected. New compliance checks were added in July 2016. In January 2017, automated compliance checks will be in effect for three new proposal types (GOALI, RAISE, and FASED), and some warnings will become errors across several proposal types

• Automated proposal compliance checks:
  ▪ Deadline Checks (since January 2016) – A warning in the 24 hours preceding the deadline, and an error when past the deadline. So far, 99.5% of proposals submitted on time
  ▪ Section Exists Checks – Checks on eleven sections
  ▪ Page Count Checks – Checks on length of six sections
  ▪ Budget Checks – Eight checks on rules such as caps on amounts, duration, and amounts matching
  ▪ Other Checks – Five checks related to international travel, and human or animal use rules

- Proposals can be compliance checked during proposal preparation at any point.
Warnings and Errors are displayed after compliance check is selected

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<thead>
<tr>
<th>Proposal Errors</th>
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<tr>
<td>Items listed here will prevent submission. Print this page for reference before returning to the Form Preparation screen.</td>
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- International Activities Country Name(s) box on the "Remainder of the Cover Sheet" is not checked - The International Activities Country Name(s) box is not checked on the "Remainder of the Cover Sheet" but the Primary Place of Performance on the Cover Sheet is outside the U.S., its territories or possessions. To correct this error, please check the International Activities Country Name(s) box on the "Remainder of the Cover Sheet" and list the country where the primary place of performance is located.
Research Administrators can access compliance checking prior to submission through the Research Administration Module.

**Proposals/Supplements/File Updates/Withdrawals**

Documents in Progress

Withdrawals In Progress

Submitted Documents

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**Search for Proposal Documents in Progress by Temporary Proposal ID and/or PI Last Name:**

Temporary Proposal ID: ___________ PI Last Name: ___________

(Enter 7 digits) (Enter at least first two characters)

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**All Documents**

FastLane will automate the enforcement of deadline dates. Proposers should allow sufficient time to submit proposals before 5 PM submitter’s local time on the deadline date(s) shown below or they risk not being able to submit their proposal to NSF.

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03 Documents found, displaying 1 to 10

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<thead>
<tr>
<th>Temp ID</th>
<th>Deadline Date</th>
<th>Type</th>
<th>Access Level</th>
<th>PI Name</th>
<th>Proposal Title</th>
<th>Check</th>
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<tr>
<td>7708679</td>
<td>12/14/2016</td>
<td>Proposal</td>
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NSF Public Access Repository

• NSF’s first repository launched: December 2015
• Effective date of Public Access policy: January 2016
• Video: https://www.research.gov/common/attachment/Desktop/publicaccessvideo.html
• Log into Research.gov
• Launch “Deposit publication” from Research.gov
NSF Public Access Repository: Deposit Walk-through

- NSF-PAR: Deposit Publication
Deposit Publication

Enter the DOI number and click 'Submit' to retrieve the publication information from the publisher. Once you have reviewed the information, click 'Next' to proceed.

* Required Fields

* Enter Digital Object Identifier (DOI) Number:

10.1103/PhysRevA.84.013414  
Submit  Clear  

Where do I find my DOI number?
Deposit Publication

Please deposit the final accepted version of your publication.

* Required Fields

* Final Accepted Version file upload (PDF/A format):

   What does NSF do with my file?

   [Browse...]

   Changed PDF for an award.pdf

   [Delete]
Deposit Publication

1. Retrieve Publication Info ✓  2. Deposit Final Accepted Version ✓  3. Select Award & Acknowledge  4. Review

Please select the award(s) that this publication should be associated with and acknowledge the statement.

* Required Fields

* Select Award ID:

1464151 - CRIT: CSR: Online Performance Modeling of Opaque C...

* Acknowledgement 📁

I acknowledge the Federal Government’s license as set forth in the "Copyrighted Materials" article of the NSF Grant General Conditions.

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Deposit Publication

1. Retrieve Publication Info
2. Deposit Final Accepted Version
3. Select Award & Acknowledge
4. Review

DOI Number: 10.1103/PhysRevA.84.013414
Publication Title: Pythagorean coupling: Complete population transfer in a four-state system
Journal Name: Physical Review A

*Please note: It may take up to 6 hours for the publication to appear in your Project Report and be visible in the NSF Public Access Repository.
• Confirmation Page
• Manage deposited publications
NSF Public Access Repository

- Offers full-text access to all NSF-affiliated accepted manuscripts or articles after a 12-month embargo or administrative interval
- NSF uses services provided by the publisher community, including:
  - CHORUS (Clearinghouse for Open Research of the United States)
  - Crossref
  - International Standard Serial Number (ISSN). Over the next year, additional metadata and links to articles will be added as they are submitted to NSF, with anticipated annual growth of 40,000 publicly-accessible articles and manuscripts
• Proposal Submission Modernization

• Single ID Across All NSF Systems

• NSF Move to Alexandria
PSM 2015 Survey

The problem statement

- Ease of Use: 33%
- Webpage Layout not Intuitive: 40%
- Administrative Burden: PI - 25%, SPO - 10%

Suggestions for potential solutions

- Data Pre-population: 60%
- Just-in-Time Proposal Submission: 55%
- Revision of NSF Solicitations: 55%
- Expanded Compliance Checking: PI - 75%, SPO - 80%

Results based on over 16,000 responses from the June 2015 survey sent to 116,638 researchers
Proposal Submission Modernization Vision

• Modernize the applications supporting the merit review process and the user experience

• Reduce administrative burden to the research community and NSF staff associated with preparation, submission, and management of proposals

• Increase efficiencies in proposal preparation, submission, and management

• Improve data quality

• Capture proposal content in a way that supports data analysis
Follows an Agile process to develop, review, and refine wireframes (webpage mockups) that leverages knowledge of the existing pain points.

Engages external users throughout the process to ensure the overall approach, workflows, and wireframes are consistent with user needs.

Develops features and enhancements to be deployed incrementally (future pilot activity).

**Identify Pain Points and Draft Improvements**
- Leverage helpdesk data, 2015 PSM survey, etc. to identify improvement opportunities and create initial concepts

**Review Concepts with NSF Staff Working Group**
- Review initial concepts and discuss at working group sessions
- Refine as needed

**Review Wireframes with External Users**
- Present and test wireframes with external users to validate and refine
- Usability sessions, FDP, ERA Forum, etc.

**Internal Validation and Execution**
- Brief working group, elevate/resolve issues, and begin development
- Deliver enhancements incrementally
Proposal Submission Modernization

- Volunteer for future one-on-one usability testing
  - Sign up with the conference moderators, presenter, or conference representatives at the Registration Desk

- Join the NSF ERA Forum, a new initiative to gather opinions, perspectives, and feedback about NSF electronic research administration activities
  - Sign up by sending an email to: NSF-ERA-FORUM-subscribe-request@listserv.nsf.gov
  - For more information visit: https://www.nsf.gov/bfa/dias/policy/era_forum.jsp

- View the video presentation to the Federal Demonstration Partnership
  - http://sites.nationalacademies.org/PGA/fdp/PGA_174472
Single ID for all NSF systems

• NSF will introduce a new way to register and manage user profiles using ONE single identify (single ID) across all NSF Systems

• Streamlines all NSF system registrations to a single process
  ▪ One user name and password. One account for all relevant systems
  ▪ Central way to request or sign up for roles/access to systems

• Administrators will no longer need to create accounts and maintain profile information, which allows them to focus on approving and managing roles for their organizations
Impact of NSF Move to Alexandria on IT Systems

• NSF headquarters relocation to Alexandria starting Summer 2017

• System outages in support of the move tentatively scheduled for July 4th weekend

• Monitor advisories on Research.gov or FastLane or sign up for listserv by emailing: system_updates-subscribe-request@listserv.nsf.gov
• Listserv for updates on events and enhancements to Research.gov and/or FastLane: system_updates-subscribe-request@listserv.nsf.gov

• NSF Public Access
• Compliance Checks

• Password Reset

• Proposal Submission Modernization
  ▪ https://www.nsf.gov/bfa/dias/policy/era_forum.jsp