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7555-01-P

NATIONAL SCIENCE FOUNDATION

Privacy Act of 1974; System of Records

AGENCY: National Science Foundation.

ACTION: Notice of a New System of Records.

SUMMARY: The National Science Foundation (NSF) is creating a new system of records: NSF-77 Data Analytics Application Suite. This system is a vital step in NSF's commitment to maintaining U.S. leadership across all fields of science, technology, engineering, mathematics (STEM), and STEM education, and doing so with efficiency, openness, and transparency. The new system of records will aggregate, link, and analyze information reported by individuals and organizations participating in NSF-supported activities along with published information related to the research enterprise. More comprehensive information on NSF-funded research outcomes and the STEM workforce will advance NSF's understanding of its return on investments and the evolution of the scientific landscape. This system will also enable NSF to uphold the scientific community's core values of openness, transparency, honesty, equity, fair competition, and objectivity.

DATES: Persons wishing to comment on the changes set out in this notice may do so on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

Effective Date: This action will be effective without further notice on **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** unless modified by subsequent notice to incorporate comments received from the public.

ADDRESSES: You may submit comments, identified by **[INSERT DOCKET**

NUMBER] by any of the following methods:

• Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.

• E-mail: The Chief Data Officer, Dorothy Aronson, at daronson@nsf.gov. Include [**INSERT DOCKET NUMBER**] in the subject line of the message.

• Mail: Dorothy Aronson, Chief Data Officer, Office of Information and Resource Management, National Science Foundation, 2415 Eisenhower Ave., Alexandria, VA 22331.

Instructions: NSF will post all comments on the NSF's website (https://www.nsf.gov/policies/privacy_act.jsp).   All comments submitted in response to this Notice will become a matter of public record. Therefore, you should submit only information that you wish to make publicly available.

FOR FURTHER INFORMATION CONTACT: If you wish to submit general questions about the proposed new system of records NSF-77, please contact Dorothy Aronson, Chief Data Officer, at daronson@nsf.gov.

SUPPLEMENTARY INFORMATION: As part of the current proposal review and funding process, Principal Investigators (PIs) and other senior personnel already provide their biographic information ("Biographical Sketch"), Current and Pending Support information, and Collaborator and Other Affiliation information in their proposal submissions to NSF. PIs are also required to submit annual project reports describing funded activities. These researcher-supplied details would be matched to scientific literature from scientific journals along with public information on patent grants supplied by the U.S. Patent Office (USPTO).

SYSTEM NAME AND NUMBER:

Data Analytics Application Suite, NSF-77.

SECURITY CLASSIFICATION: None.

SYSTEM LOCATION: National Science Foundation; 2415 Eisenhower Ave.; Alexandria, VA. 22314.

SYSTEM MANAGER(S): The Data Analytics Application Suite will be overseen by the Chief Data Officer.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM: The Data Analytics Application Suite is critical for NSF to appropriately collect, combine, and utilize information obtained from individuals who interact with NSF and information that is publicly available to meet NSF's analysis and evaluation requirements consistent with the following Executive Order and laws: Foundations for Evidence-Based Policymaking Act of 2018 Evidence (44 USC § 3520); Federal Data Strategy (OMB, Memorandum 19-18, 19-23)**;** Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking (EOP, 86 FR 8845); National Defense Authorization Act FY20 (Public Law No: 116-92 Sec.1746); and the National Science Foundation Act of 1950 (Public Law 507-81).

PURPOSE(S) OF THE SYSTEM: The purpose of this system is to enhance NSF's capabilities to collect and analyze data about the scientific research enterprise (participants, outputs, and outcomes) to better assess the effectiveness of NSF's programs and inform funding and policy decisions.

This mission-critical challenge requires gold standard data and analytic techniques such as bibliometrics and network analysis that build upon pre-existing information provided by individuals who interact with NSF, as described in SORNs NSF-12, NSF-50, NSF-51, and NSF-59. These systems collect proposal, participant, fellowship, and reviewer information, and can be paired in the Data Analytics Application Suite with public publication records, patent information, co-author connections and other related information (see

categories). Such pairing of information is necessary for NSF to understand on an organizational, national, and global level the outcomes of its grants to the research community.

Information collected in the Data Analytics Application Suite may be utilized for the following purposes:

(1) To empower NSF's portfolio management and merit review process by providing program officers and leadership with analytics tools that enhance their understanding of existing decision criteria, PI capacity and potential overlap/duplication of proposals and awards.

(2) To evaluate impact and return on investment of awards.

(3) To provide necessary analyses for strategic priorities such as science and research integrity, security, equity, and partnerships.

(4) To understand the dynamics of the global scientific landscape, explore opportunities for investment and collaboration, and inform research conducted for NSF.

(5) To support NSF's function as a leading federal agency for graduate student funding by tracking career development, mentorship, and outcomes of education grants and other training activities.

(6) To merge internal data to facilitate agency organizational efficiency and portfolio analysis.

(7) To identify inconsistencies in information reported by individuals to NSF related to submitted proposals, terms and conditions, and project reports of an NSF award or other funding opportunity.

(8) To inform pre-onboarding and onboarding evaluations of NSF staff. For the purpose of this SORN, 'staff' applies to NSF employees, contractors,

Intergovernmental Personnel Act (IPA) assignees, and Visiting Scientists, Engineers, and Educators (VSEEs), as well as fellows and interns.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM: The system will include information on the following groups of individuals: PIs and senior personnel submitting proposals to NSF; graduate students, postdoctoral researchers and undergraduate students who have either participated in NSF funded research, or received funding from NSF; fellows funded by NSF; researchers who have published academic articles or other related material in the public domain; individuals who publish media related to science and technology; individuals who publicly report work and titles in science and technology related sectors (industry, non-profits, education, governments).

CATEGORIES OF RECORDS IN THE SYSTEM: Records will be collected to connect NSF proposals, award, and participant information to dimensions including publication record and career development. Combined, the Data Analytics Application Suite will include the following: proposal and award information; annual and final project reports; research participants supported under NSF grants; research articles, conference presentations, reviews, protocols, datasets, and other DOI-citable S&T materials created by the author; co-author connections; citations of other papers present in the author's publications as well as citations of the item by future publications; funded awards from other agencies that have supported the author's work; patents filed; job positions and titles obtained, as displayed in public platforms; undergraduate, graduate and postdoctoral training; academic, professional and institutional appointments; mainstream articles and other media sources; publication content (abstract, grant acknowledgement, etc.)

RECORD SOURCE CATEGORIES: Proposal and fellowship Information is

supplied by individuals at time of proposal submission. In the case of awardees, updates are submitted annually to NSF in the form of annual and final project reports. Publication and patent information published by PIs will be obtained from third parties that compile related public information. Such resources include, but are not limited to, Clarivate (Web of Science), Elsevier (Scopus), Dimensions, USPTO, PubMed, arxiv databases, ORCID, and Google Scholar.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND PURPOSES OF SUCH USES:

The following NSF standard routine uses apply:

1. Members of Congress. Information from a system may be disclosed to congressional offices in response to inquiries from the congressional offices made at the request of the individual to whom the record pertains.

2. Freedom of Information Act/Privacy Act Compliance. Information from a system may be disclosed to the Department of Justice or the Office of Management and Budget in order to obtain advice regarding NSF's obligations under the Freedom of Information Act and the Privacy Act.

3. Counsel. Information from a system may be disclosed to NSF's legal representatives, including the Department of Justice and other outside counsel, where the agency is a party in litigation or has an interest in litigation, including when any of the following is a party to litigation or has an interest in such litigation: (a) NSF, or any component thereof; (b) any NSF employee in his or her official capacity; (c) any NSF employee in his or her individual capacity, where the Department of Justice has agreed to, or is considering a request to, represent the employee; or (d) the United States, where NSF determines that litigation is likely to affect the agency or any of its components.

4. National Archives, General Services Administration. Information from a system may be disclosed to representatives of the General Services Administration and the National Archives and Records Administration (NARA) during the course of records management inspections conducted under the authority of 44 U.S.C. 2904 and 2906.

5. Response to an Actual or Suspected Compromise or Breach of Personally Identifiable Information. Information from a system may be disclosed to appropriate agencies, entities, and persons when (a) NSF suspects or has confirmed that the security or confidentiality of information in the system of records has been compromised; (b) NSF has determined that as a result of the suspected or confirmed compromise there is a risk of harm to economic or property interests, identity theft or fraud, or harm to the security or integrity of this system or other systems or programs (whether maintained by NSF or another agency or entity) that rely upon the compromised information; and (c) the disclosure made to such agencies, entities, and persons is reasonably necessary to assist with NSF's efforts to respond to the suspected or confirmed compromise and prevent, minimize, or remedy such harm.

6. Courts. Information from a system may be disclosed to the Department of Justice or other agencies in the event of a pending court or formal administrative proceeding, when records are relevant to that proceeding, for the purpose of representing the government, or in the course of presenting evidence, or they may be produced to parties or counsel involved in the proceeding in the course of pre-trial discovery.

7. Contractors. Information from a system may be disclosed to contractors, agents, experts, consultants, or others performing work on a contract, service,

cooperative agreement, job, or other activity for NSF and who have a need to access the information in the performance of their duties or activities for NSF.

8. Audit. Information from a system may be disclosed to government agencies and other entities authorized to perform audits, including financial and other audits, of the agency and its activities.

9. Law Enforcement. Information from a system may be disclosed to appropriate federal, state, or local agencies responsible for investigating, prosecuting, enforcing, or implementing a statute, rule, regulation, or order, to disclose pertinent information when NSF becomes aware of an indication of a violation or potential violation of civil or criminal law or regulation.

10. Disclosure When Requesting Information. Information from a system may be disclosed to federal, state, or local agencies which maintain civil, criminal, or other relevant enforcement information or other pertinent information, such as current licenses, if necessary, to obtain information relevant to an agency decision concerning the hiring or retention of an employee, the issuance of a security clearance, the letting of a contract, or the issuance of a license, grant, or other benefit.

11. To the news media and the public when: (1) a matter has become public knowledge, (2) the NSF Office of the Director determines that disclosure is necessary to preserve confidence in the integrity of NSF or is necessary to demonstrate the accountability of NSF's officers, employees, or individuals covered by this system, or (3) the Office of the Director determines that there exists a legitimate public interest in the disclosure of the information, except to the extent that the Office of the Director determines in any of these situations that

disclosure of specific information in the context of a particular case would constitute an unwarranted invasion of personal privacy.

12. Information obtained from the system that demonstrate a potential inconsistency with NSF's disclosure requirements for submitted proposals, terms and conditions of an NSF award, and project reports, may be shared with the organizations that submitted the proposal to cross-reference and verify information.

13. Information obtained from the system that demonstrate an inconsistency with NSF's disclosure requirements for submitted proposals, terms and conditions of an award, and project reports, may be disclosed to appropriate federal agencies to inform efforts related to national and research security. This includes law enforcement, security, and intelligence agencies, or relevant agency components. This includes OIG, FBI, CIA, DOD, DOJ, DHS, FDA, NSA, DIA, NRO, and ODNI. Additionally, information may be disclosed to federal agencies contributing to cross-governmental forums on research security such as the National Science and Technology Council Subcommittee on Research Security (OSTP, NIH, DOE, NASA, NIST, NOAA, USGS, FDA, OMB, NSC, USPTO, EPA, DOT, DoEd, USDA, DOS). All inconsistencies will be verified according to internal guidelines and review processes. For the purpose of this routine use, personally identifiable information shared with agencies will be restricted to information about senior personnel only and coordinated with the Office of the Inspector General (OIG).

14. Information from the system may be shared with federal science and technology agencies to improve portfolio management, coordinate initiatives, and enhance the government's understanding of the scientific landscape.

POLICIES AND PRACTICES FOR STORAGE OF RECORDS: Records are

stored on electronic digital media. NSF proposal information, product information including publication and patent information, and Data Analytics Application Suite outputs will be located on secure NSF servers managed by the Division of Information Systems (DIS). The storage and integrity of public bibliometric and patent information is the responsibility of external vendors (e.g., Clarivate/Elsevier) and USPTO.

POLICIES AND PRACTICES FOR RETRIEVAL OF RECORDS: Information of individuals who interact with NSF will be retrieved by the individual's name, email, persistent identifiers (e.g., ORCID), or NSF identifier (NSF ID).

POLICIES AND PRACTICES FOR RETENTION AND DISPOSAL OF RECORDS: Data will be retained according to the General Records Schedules 1.2, item 030, and 5.6, item 170.

ADMINISTRATIVE, TECHNICAL, AND PHYSICAL SAFEGUARDS: All data are maintained on NSF internal servers, which are managed under federal security protocols. The public bibliometric data and USTPO patent information is also stored in the same security certified environment.

RECORD ACCESS PROCEDURES: Individuals seeking to access their record information stored on the Data Analytics Application Suite are required to follow the procedures found at 45 CFR part 613.

CONTESTING RECORD PROCEDURES: Individuals seeking to contest their record information generated by the Data Analytics Application Suite are required to follow the procedures found at 45 CFR part 613.

NOTIFICATION PROCEDURES: Individuals request access or contesting records with the Data Analytics Application Suite will be notified according to the procures found at 45 CFR part 613.

EXEMPTIONS PROMULGATED FOR THE SYSTEM: None.

HISTORY: None.

Dated: November 4, 2021.

Suzanne H. Plimpton,

Reports Clearance Officer,

National Science Foundation.