2023 Equity Action Plan Summary

National Science Foundation

Delivering equity through NSF

In continuing to advance the progress of science, maintain our Nation's scientific leadership and global competitiveness, and safeguard our National Security, the National Science Foundation (NSF) will deliberately recruit, educate, train, and retain more scientists, engineers, and computer scientists to leverage the wide-ranging talent that society offers. This cohort includes underrepresented populations and underserved communities that remain the most prominent untapped Science, Technology, Engineering, and Mathematics (STEM) talent pools in the United States. Moreover, the Foundation will encourage all Americans' full participation and deliberately strive to eliminate systemic barriers to their success. Through this approach, NSF will continue to advance strategies that integrate the missing millions of STEM talent, thus creating opportunities for previously marginalized communities to contribute to the scientific enterprise.

New strategies to advance equity

NSF has identified five areas of focus for its 2023 Equity Action Plan through internal assessments, feedback from program offices, engagement with local communities via outreach events, existing evidence, and more. NSF will continue to engage the public on these action areas, its progress, and next steps throughout the year and beyond.

1. *Implement NSF's Revised Public Access Plan to increase equitable access to NSF-funded research. When researchers and institutions cannot pay unrestricted access fees charged by journals to make their research results available without a paywall and embargo, their work may be subject to an optional 12-month publication embargo for federally funded peer-reviewed research articles. This interim delay behind a paywall limits immediate access to work produced by under-resourced researchers and the potential impact of their research in the short term. To address these barriers and others, NSF will:*

   - Implement NSF's revised [Public Access Plan](#) (June 2023). All NSF-funded research peer-reviewed scholarly publications will be made freely available and publicly accessible in the NSF Public Access Repository ([NSF-PAR](#)) without embargo, and associated scientific data will be made available via the journal publications and in appropriate disciplinary repositories. This action will help to ensure that the ability to obtain funding, publish, and have NSF-funded research cited and used in furthering research, education, and new economic activity will not be dependent upon a researcher's ability to pay open access publication fees, and will be managed by processes that limit the additional burden on researchers.

New strategies to advance equity

- Engage with impacted communities to provide opportunities for researchers, publishers, universities, libraries, and the public to alert NSF to equity challenges that should be addressed during implementation.

- Gather input from NSF staff to inform policy implementation – this cross-agency participation will continue to implement the updated public access plan equitably.

2. *Increase participation in Federal Acquisition Regulations (FAR)-based solicitations and awards to promote an inclusive contracting environment.* *NSF has engaged with Minority Serving Institutions (MSIs) and small businesses to better understand and address common procurement barriers: lack of access to NSF staff and solicitations for NSF procurement actions, which hinder the creation of an equitable and inclusive contracting environment for MSIs and small businesses. Additionally, MSIs' and small businesses' experience with the complexity of the federal contracting framework, which can hinder existing and new entrants from accessing the federal acquisition process. To address these barriers and others, NSF will:*

- Encourage participation by ensuring that any outreach events will allow for virtual participation, reducing and eliminating the financial burden of requiring in-person attendance.

- Host training sessions for NSF's Acquisition Workforce on effective market research and acquisition planning.

- Increase public notifications, known as "Sources Sought" notices, to identify potential sources, including MSI and small business concerns.

New strategies to advance equity

- Utilize market research results and engagement with potential offerors to establish small business participation goals for specific awards to enhance small business inclusion in that industry. This will also enable MSIs and small businesses to offer services and supplies while building experience and capacity to perform as prime contractors for federal awards.

- Monitor progress every quarter against published acquisition information and small business contracting to track progress against goals issued by the U.S. Small Business Administration (SBA).

3. *Optimize demographic data collection to support robust equity assessments. Currently, NSF has incomplete data on the demography of principal investigators (PIs), reviewers, post-doctoral fellows, teachers, and students. The limited data hampers NSF's ability to evaluate the impacts of existing investments on different demographic groups and to use evidence to support efforts to advance equity for individuals who are members of groups underrepresented in STEM. To address these barriers and others, NSF will:*

- Expand the demographic data collection for additional participant types, including reviewers and Graduate Research Fellowship Program (GRFP) applicants, as part of the user profile within Research.gov.

- Improve demographic data collection from undergraduate and graduate students, post-doctoral fellows, and teachers who apply for and participate in NSF-funded programs through the continued expansion of the Education and Training Application (ETAP) system, which is designed to help them find and apply to education and training opportunities funded by NSF.

New strategies to advance equity

- Monitor overall trends in participation in NSF programs by demographic characteristics.

4. **_Enhance NSF's harassment prevention efforts to further reduce sexual and other forms of harassment._** _Survivors of sexual harassment experience a host of effects, which may include reduced job satisfaction and performance, lower academic achievement, reduced earning power, and harm to physical and mental well-being. The negative impacts of sexual harassment extend across all disciplines, races, and classes. To address these barriers and others, NSF will:_

- Continue establishing and expanding NSF's Sexual Assault/Harassment Prevention and Response (SAHPR) Office.
- Launch the first U.S. Antarctic Program Climate Survey focused on the incidence and prevalence of sexual assault, harassment, and misconduct.
- Conduct pilots to evaluate NSF's off-campus and off-site research proposal requirement that extends beyond self-certification (the current requirement) and requires that grant applicants submit a plan for creating and maintaining a safe and inclusive working environment as a part of the merit review process.
- Continue to conduct outreach and benchmarking with federal partners and international entities on promising policies, practices, and procedures for creating and maintaining safe and inclusive environments.
- Implement the NSF Accountability Framework via the NSF SAHPR Office to help ensure that individuals who commit sexual assault / sexual harassment are held accountable based on the most relevant organizational policies and legal standards.

New strategies to advance equity

- Extend the reach of NSF harassment prevention efforts to research activities at field sites and on research vessels through targeted outreach, proactive compliance efforts, and policy development.

5. ***Create opportunities everywhere to reach the "Missing Millions" and diversify STEM.*** *The National Science Board (NSB) conceptualized the "Missing Millions" as the difference between the demographics of the research community and the nation's demographics. It charged NSF with reducing this talent gap across all demographic groups, including gender, race and ethnicity, and persons with disabilities. To address these barriers and others, NSF will:*

- Broaden the STEM ecosystem by expanding NSF's programmatic efforts and highlighting existing funding opportunities to under-resourced and underserved communities (K-12, undergraduate, graduate, and post-doctoral students).

- Augment leadership development and advancement opportunities at MSIs and other emerging research institutions through capacity-building initiatives such as Growing Research Access for Nationally Transformative Equity and Diversity ([GRANTED](#)).

- Increase institution and faculty engagement in NSF's research programs and activities from those institutions not currently well represented in NSF's research programs via GRANTED, the [Established Program to Stimulate Competitive Research (EPSCoR)](#), and other capacity-building program efforts.

What NSF accomplished

Below is a sampling of NSF's progress delivering on equity and racial justice since its first Equity Action Plan in 2022.

- As a result of its ongoing efforts to increase participation in FAR-based solicitation and awards processes, NSF is on track to meet and exceed agency goals for small business participation for a consecutive fiscal year. This forecast follows the A+ grade NSF received on its FY22 scorecard in July for exceeding all its small business goals.

- To further address sexual and other forms of harassment, NSF's Office of Equity and Civil Rights (OECR) is finalizing the recruitment and selection of a Sexual Assault/Harassment Prevention and Response (SAHPR) Program Manager.

- In August, OECR also released a [Dear Colleague letter](#), which encourages applicants to submit research proposals to NSF-funding opportunities that address harassment in STEM education and research settings and workplaces

- NSF's chief diversity and inclusion officer has collaborated with a dedicated team of program directors to leverage its review and awards process to ensure the Foundation's funded programs can reach the broad pool of untapped scientific talent. These discussions have yielded critical insights into how NSF can better support the inclusion of underrepresented scientists.