

## Increasing Diversity in the STEM Workforce by Reducing the Impact of Bias: Summary of Agency Final Report

### National Science Foundation (NSF)

NSF is actively addressing **implicit individual bias** through an array of innovative methods. First, NSF participates in the annual Federal Equal Opportunity Recruitment Program (FEORP) report to OPM, which is an important recruiting initiative designed to eliminate underrepresentation of minorities and women in the Federal workforce. Second, NSF produces an annual Merit Review Report that provides raw data on its merit review processes and outcomes. Third, NSF regularly conducts pilots on its merit review systems, including using virtual panelists, which has the potential to reduce bias by removing a range of participation barriers. Fourth, it is planning to conduct several experiments this coming year on implicit bias training and other topics critical to ensuring effective and fair merit review.

To address **implicit institutional bias**, NSF has developed a mandatory course, Training for Managing Diversity, which entails extensive education and training for senior level executives, managers, and supervisors, including on implicit bias. Its Human Resource Management (HRM) division analyzes workforce data in combination with the Federal Employee Viewpoint Survey (FEVS) to effectively understand NSF's current demographic profile and associated job satisfaction. Through these analyses, programs can target the right employee subgroups for attention and aid. NSF ensures equal opportunity in all phases of employment through Management Directive-715, NSF's annual EEO program status report, which identifies potential barriers and defines ways to remove them related to the employment of women, minorities and individuals with disabilities.

NSF has **explicit policies about bias** for its own staff and external stakeholders as well that directly include EEO complaints and compliance. The Office of Diversity and Inclusion (ODI) handles these complaints and encourages the Foundation's commitment to an environment free of harassment and discrimination. NSF's EO and diversity programs promote inclusiveness in STEM enterprises through annual identified target actions, including: 1) attain six of six elements of a model EEO agency; 2) implement at least one ODI action within the NSF's D&I Strategic Plan; and 3) perform two compliance desk reviews under the applicable anti-discrimination laws. The Office of Integrative Activities (OIA) manages the work of the congressionally-mandated Committee on Equal Opportunities in Science and Engineering (CEOSE), which advises NSF on policies and programs to encourage the full participation of women, underrepresented minorities, and persons with disabilities in all levels of the STEM enterprise. In its 2011-2012 report to Congress, the committee challenged NSF to develop a big, bold initiative. NSF responded in FY 2016 with INCLUDES, Inclusion across the Nation of Communities of Learners that have been Underrepresented Discoverers in Engineering and Science. In **federally funded institutions of higher education STEM educational and workforce environments**, NSF uses numerous approaches to address bias. For example, it invests about \$700 million in Broadening Participation programs, including the Louis Stokes Alliances for Minority Participation (LSAMP). NSF also invests in institutional transformation, for example, through the ADVANCE (Advancement of Women in Academic Science and Engineering Careers) program, which increases the participation of women in STEM careers. Lastly, the Foundation's **explicit** external policies include nondiscrimination obligations and compliance with Title IX, both of which are monitored by ODI.