

analysis for why such data cannot be provided.

**(b) Reporting of data**

The Director of the National Science Foundation shall publish statistical summary data, as practicable, collected under this section, disaggregated and cross-tabulated by race, ethnicity, sex, socioeconomic indicators, which may include employment status, occupation, educational attainment, parental education, and income, geographic location, and years since completion of doctoral degree, including in conjunction with the National Science Foundation's report required by section 1885d of this title.

(Pub. L. 117-167, div. B, title V, §10502, Aug. 9, 2022, 136 Stat. 1610.)

**§ 19153. Policies for review of Federal research awards**

**(a) Assessment of policies**

Federal research agencies shall regularly assess, and update as necessary, policies, and practices to remove or reduce cultural and institutional barriers limiting the recruitment, retention, and success of groups historically underrepresented in STEM research careers, including policies and practices relevant to the unbiased review of Federal research applications.

**(b) Considerations and activities**

In carrying out the requirements under subsection (a), Federal research agencies shall—

- (1) review current levels of participation of groups historically underrepresented in STEM in peer-review panels and consider approaches for expanding their participation;
- (2) analyze the data collected under section 19152 of this title, including funding rates of proposals from all groups, including those historically underrepresented in STEM;
- (3) collect and disseminate best practices to remove or reduce cultural and institutional barriers limiting the recruitment, retention, and success of groups historically underrepresented in STEM research careers; and
- (4) implement evidence-based policies and practices to achieve the goals of this section.

(Pub. L. 117-167, div. B, title V, §10503, Aug. 9, 2022, 136 Stat. 1610.)

**§ 19154. Collection of data on demographics of faculty**

**(a) Collection of data**

**(1) In general**

Not later than 5 years after August 9, 2022, and at least every five years thereafter, the Director of the National Science Foundation shall carry out a survey to collect data from award recipients on the demographics of STEM faculty, by broad fields of STEM, at different types of institutions of higher education that receive Federal research funding.

**(2) Survey considerations**

To the extent practicable, the Director of the National Science Foundation shall survey, by sex, race, socioeconomic indicators, which

may include employment status, occupation, educational attainment, parental education, and income, geographic location, ethnicity, citizenship status, and years since completion of doctoral degree—

- (A) the number and percentage of faculty;
- (B) the number and percentage of faculty at each rank;
- (C) the number and percentage of faculty who are in nontenure-track positions, including teaching and research;
- (D) the number and percentage of faculty who are reviewed for promotion, including tenure, and the percentage of that number who are promoted, including being awarded tenure;
- (E) faculty years in rank;
- (F) the number and percentage of faculty to leave tenure-track positions;
- (G) the number and percentage of faculty hired, by rank; and
- (H) the number and percentage of faculty in leadership positions.

**(b) Existing surveys**

The Director of the National Science Foundation, may, in modifying or expanding existing Federal surveys of higher education (as necessary)—

- (1) take into account the considerations under subsection (a)(2) by collaborating with statistical centers at other Federal agencies; or
- (2) make an award to an institution of higher education or nonprofit organization (or consortia thereof) to take such considerations into account.

**(c) Reporting data**

The Director of the National Science Foundation shall publish statistical summary data collected under this section, including as part of the National Science Foundation's report required by section 1885d of this title.

**(d) Authorization of appropriations**

There are authorized to be appropriated to the Director of the National Science Foundation \$4,000,000 in each of fiscal years 2023 through 2025 to develop and carry out the initial survey required under subsection (a).

(Pub. L. 117-167, div. B, title V, §10504, Aug. 9, 2022, 136 Stat. 1611.)

**§ 19155. Cultural and institutional barriers to expanding the academic and Federal STEM workforce**

**(a) Best practices**

**(1) Development of guidance**

Not later than 12 months after August 9, 2022, the Director, in consultation with the interagency working group on inclusion in STEM and utilizing existing guidance already developed by Federal research agencies where applicable, shall broadly disseminate to entities that receive Federal research funding best practices for—

- (A) conducting periodic climate surveys of STEM departments and divisions, with a particular focus on identifying and addressing any cultural or institutional barriers to

the recruitment, retention, or advancement of groups historically underrepresented in STEM studies and careers; and

(B) providing educational opportunities, including workshops, for STEM professionals to learn about current research on effective practices for unbiased recruitment, evaluation, and promotion of undergraduate and graduate students and research personnel.

**(2) Establishment of policies**

Consistent with the guidance developed under paragraph (1)—

(A) The Director of the National Science Foundation, in consultation with the heads of Federal research agencies, shall develop a policy that—

(i) applies to, at a minimum, doctoral degree granting institutions that receive Federal research funding; and

(ii) requires each such institution, not later than 3 years after August 9, 2022, and to the extent practicable, to report to the Director of the National Science Foundation on activities and policies developed and implemented based on the guidance disseminated under paragraph (1); and

(B) each Federal research agency with a Federal laboratory shall maintain or develop and implement practices and policies for the purposes described in paragraph (1) for such laboratory and, not later than three years after August 9, 2022, each Federal laboratory shall report to the head of such agency on such practices and policies.

**(b) Report to Congress**

Not later than four years after August 9, 2022, the Director of the National Science Foundation shall submit a report to Congress that includes a summary and analysis of the types and frequency of activities and policies developed and carried out under subsection (a) based on the reports submitted under paragraph (2) of such subsection.

(Pub. L. 117–167, div. B, title V, §10505, Aug. 9, 2022, 136 Stat. 1612.)

**§ 19156. Existing activities**

A Federal research agency may satisfy requirements under this part through activities and programs in existence as of August 9, 2022.

(Pub. L. 117–167, div. B, title V, §10506, Aug. 9, 2022, 136 Stat. 1612.)

**§ 19157. Merit review**

Nothing in this part may be construed as altering any intellectual or broader impacts criteria at Federal research agencies for evaluating award applications.

(Pub. L. 117–167, div. B, title V, §10508, Aug. 9, 2022, 136 Stat. 1613.)

**Editorial Notes**

REFERENCES IN TEXT

This part, referred to in text, was in the original “this subtitle”, meaning subtitle A (§§10501–10510) of

title V of div. B of Pub. L. 117–167, Aug. 9, 2022, 136 Stat. 1609, which is classified principally to this part. For complete classification of subtitle A to the Code, see Tables.

**§ 19158. Definition**

In this part, the term “Director” means the Director of the Office of Science and Technology Policy.

(Pub. L. 117–167, div. B, title V, §10510, Aug. 9, 2022, 136 Stat. 1613.)

PART B—RURAL STEM EDUCATION RESEARCH

**§ 19171. Definition**

In this part, the term “Director” means the Director of the National Science Foundation.

(Pub. L. 117–167, div. B, title V, §10511, Aug. 9, 2022, 136 Stat. 1613.)

**§ 19172. National Science Foundation rural STEM activities**

**(a) Preparing rural STEM educators**

**(1) In general**

The Director shall make awards on a merit-reviewed, competitive basis to institutions of higher education or nonprofit organizations (or a consortium thereof) for research and development activities to advance innovative approaches to support and sustain high-quality STEM teaching in rural schools.

**(2) Use of funds**

**(A) In general**

Awards made under this subsection shall be used for the research and development activities referred to in paragraph (1), which may include—

(i) engaging rural educators, principals, or other school leaders of students in pre-kindergarten through grade 12 in professional learning opportunities to enhance STEM knowledge, including computer science, and develop best practices;

(ii) supporting research on effective STEM teaching and school leadership practices in rural settings, including the use of rubrics and mastery-based grading practices to assess student performance when employing the transdisciplinary teaching approach for STEM disciplines;

(iii) designing and developing pre-service and in-service training resources to assist such rural educators, principals, and other school leaders in adopting transdisciplinary teaching practices across STEM courses;

(iv) coordinating with local partners to adapt STEM teaching practices to leverage local, natural, and community assets in order to support in-place learning in rural areas;

(v) providing hands-on training and research opportunities for rural educators described in clause (i) at Federal laboratories or institutions of higher education, or in industry;

(vi) developing training and best practices for educators who teach multiple grade levels within a STEM discipline;