

the advisory committee established under subsection (a) and section 19134 of this title;

(B) serve as the point of contact on Federal engineering biology activities for government organizations, academia, industry, professional societies, State governments, interested citizen groups, and others to exchange technical and programmatic information;

(C) oversee interagency coordination of the Initiative, including by encouraging and supporting joint agency solicitation and selection of applications for funding of activities under the Initiative, as appropriate;

(D) conduct public outreach, including dissemination of findings and recommendations of the advisory committee, as appropriate;

(E) serve as the coordinator of ethical, legal, environmental, safety, security, and other appropriate societal input; and

(F) promote access to, and early application of, the technologies, innovations, and expertise derived from Initiative activities to agency missions and systems across the Federal Government, and to United States industry, including startup companies.

(2) Funding

The Director of the Office of Science and Technology Policy, in coordination with each participating Federal department and agency, as appropriate, shall develop and annually update an estimate of the funds necessary to carry out the activities of the Initiative Coordination Office and submit such estimate with an agreed summary of contributions from each agency to Congress as part of the President's annual budget request to Congress.

(3) Termination

The Initiative Coordination Office established under this subsection shall terminate on the date that is 10 years after August 9, 2022.

(d) Rule of construction

Nothing in this section may be construed to alter the policies, processes, or practices of individual Federal agencies in effect on the day before August 9, 2022, relating to the conduct of biomedical research and advanced development, including the solicitation and review of extramural research proposals.

(Pub. L. 117–167, div. B, title IV, §10403, Aug. 9, 2022, 136 Stat. 1602.)

§ 19134. Advisory committee on engineering biology research and development

(a) In general

The agency co-chair of the interagency committee established under section 19133 of this title shall, in consultation with the Office of Science and Technology Policy, designate or establish an advisory committee on engineering biology research and development (in this section referred to as the “advisory committee”) to be composed of not fewer than 12 members, including representatives of research and academic institutions, industry, and nongovernmental entities, who are qualified to provide advice on the Initiative.

(b) Assessment

The advisory committee shall assess the following:

(1) The current state of United States competitiveness in engineering biology, including the scope and scale of United States investments in engineering biology research and development in the international context.

(2) Current market barriers to commercialization of engineering biology products, processes, and tools in the United States.

(3) Progress made in implementing the Initiative.

(4) The need to revise the Initiative.

(5) The balance of activities and funding across the Initiative.

(6) Whether the strategic plan developed or updated by the interagency committee established under section 19133 of this title is helping to maintain United States leadership in engineering biology.

(7) Whether ethical, legal, environmental, safety, security, and other appropriate societal issues are adequately addressed by the Initiative.

(c) Reports

Beginning not later than two years after August 9, 2022, and not less frequently than once every five years thereafter, the advisory committee shall submit to the President, the Committee on Science, Space, and Technology, the Committee on Energy and Commerce, and the Committee on Agriculture of the House of Representatives, and the Committee on Commerce, Science, and Transportation, the Committee on Health, Education, Labor, and Pensions, and the Committee on Agriculture, Nutrition, and Forestry of the Senate, a report on the following:

(1) The findings of the advisory committee's assessment under subsection (b).

(2) The advisory committee's recommendations for ways to improve the Initiative.

(d) Application of Federal Advisory Committee Act

Section 14 of the Federal Advisory Committee Act (5 U.S.C. App.)¹ shall not apply to the advisory committee.

(e) Termination

The advisory committee established under subsection (a) shall terminate on the date that is 10 years after August 9, 2022.

(Pub. L. 117–167, div. B, title IV, §10404, Aug. 9, 2022, 136 Stat. 1605.)

Editorial Notes

REFERENCES IN TEXT

Section 14 of the Federal Advisory Committee Act, referred to in subsec. (d), is section 14 of Pub. L. 92–463, which was set out in the Appendix to Title 5, Government Organization and Employees, and was repealed and restated as section 1013 of Title 5 by Pub. L. 117–286, §§3(a), 7, Dec. 27, 2022, 136 Stat. 4204, 4361.

§ 19135. Agency activities

(a) National Science Foundation

As part of the Initiative, the National Science Foundation shall carry out the following:

¹ See References in Text note below.

(1) Support research in engineering biology and biomanufacturing through individual grants, collaborative grants, and through interdisciplinary research centers.

(2) Support research on the environmental, legal, ethical, and social implications of engineering biology.

(3) Provide support for research instrumentation, equipment, and cyberinfrastructure for engineering biology disciplines, including support for research, development, optimization, and validation of novel technologies to enable the dynamic study of molecular processes in situ.

(4) Support curriculum development and research experiences for secondary, undergraduate, and graduate students in engineering biology and biomanufacturing, including through support for graduate fellowships and traineeships in engineering biology.

(5) Award grants, on a competitive basis, to enable institutions to support graduate students and postdoctoral fellows who perform some of their engineering biology research in an industry setting.

(b) Department of Commerce

(1) National Institute of Standards and Technology

As part of the Initiative, the Director of the National Institute of Standards and Technology shall carry out the following:

(A) Advance the development of standard reference materials and measurements, including to promote interoperability between new component technologies and processes for engineering biology and biomanufacturing discovery, innovation, and production processes.

(B) Establish new data tools, techniques, and processes necessary to advance engineering biology and biomanufacturing.

(C) Provide access to user facilities with advanced or unique equipment, services, materials, and other resources to industry, institutions of higher education, nonprofit organizations, and government agencies to perform research and testing.

(D) Provide technical expertise to inform the potential development of guidelines or safeguards for new products, processes, and systems of engineering biology.

(2) National Oceanic and Atmospheric Administration

As part of the initiative, the Administrator of the National Oceanic and Atmospheric Administration shall carry out the following:

(A) Conduct and support research in omics and associated bioinformatic sciences and develop tools and products to improve ecosystem stewardship, monitoring, management, assessments, and forecasts, consistent with the mission of the agency.

(B) Collaborate with other agencies to understand potential environmental threats and safeguards related to engineering biology.

(c) Department of Energy

As part of the Initiative, the Secretary of Energy shall carry out the following:

(1) Conduct and support research, development, demonstration, and commercial application activities in engineering biology, including in the areas of synthetic biology, advanced biofuel and bioproduct development, biobased materials, and environmental remediation.

(2) Support the development, optimization and validation of novel, scalable tools and technologies to enable the dynamic study of molecular processes in situ.

(3) Provide access to user facilities with advanced or unique equipment, services, materials, and other resources, including secure access to high-performance computing, as appropriate, to industry, institutions of higher education, nonprofit organizations, and government agencies to perform research and testing;¹

(4) Strengthen collaboration between the Office of Science and the Energy Efficiency and Renewable Energy Office to help transfer fundamental research results to industry and accelerate commercial applications.

(d) Department of Defense

As part of the Initiative, the Secretary of Defense shall carry out the following:

(1) Conduct and support research and development in engineering biology and associated data and information sciences.

(2) Support curriculum development and research experiences in engineering biology and associated data and information sciences across the military education system, including the service academies, professional military education, and military graduate education.

(3) Assess risks of potential national security and economic security threats relating to engineering biology.

(e) National Aeronautics and Space Administration

As part of the Initiative, the National Aeronautics and Space Administration shall carry out the following:

(1) Conduct and support research in engineering biology, including in synthetic biology, and related to Earth and space sciences, aeronautics, space technology, and space exploration and experimentation, consistent with the priorities established in the National Academies' decadal surveys.

(2) Award grants, on a competitive basis, that enable institutions to support graduate students and postdoctoral fellows who perform some of their engineering biology research in an industry setting.

(f) Department of Agriculture

As part of the Initiative, the Secretary of Agriculture shall support research and development in engineering biology through the Agricultural Research Service, the National Institute of Food and Agriculture programs and grants, and the Office of the Chief Scientist.

(g) Environmental Protection Agency

As part of the Initiative, the Environmental Protection Agency shall support research on

¹ So in original. The semicolon preceding the period probably should not appear.

how products, processes, and systems of engineering biology will affect or can protect the environment.

(h) Department of Health and Human Services

As part of the Initiative, the Secretary of Health and Human Services, as appropriate and consistent with activities of the Department of Health and Human Services in effect on the day before August 9, 2022, shall carry out the following:

- (1) Support research and development to advance the understanding and application of engineering biology for human health.
- (2) Support relevant interdisciplinary research and coordination.
- (3) Support activities necessary to facilitate oversight of relevant emerging biotechnologies.

(Pub. L. 117–167, div. B, title IV, §10406, Aug. 9, 2022, 136 Stat. 1606.)

§ 19136. Rule of construction

Nothing in this subchapter may be construed to require public disclosure of information that is exempt from mandatory disclosure under section 552 of title 5.

(Pub. L. 117–167, div. B, title IV, §10407, Aug. 9, 2022, 136 Stat. 1609.)

SUBCHAPTER V—BROADENING PARTICIPATION IN SCIENCE

PART A—STEM OPPORTUNITIES

§ 19151. Federal research agency policies for caregivers

(a) OSTP guidance

Not later than 12 months after August 9, 2022, the Director, in consultation with the heads of relevant agencies, shall provide guidance to each Federal research agency to establish policies that—

- (1) apply to all—
 - (A) research awards granted by such agency; and
 - (B) principal investigators of such research and their trainees, including postdoctoral researchers and graduate students, who have caregiving responsibilities, including care for a newborn or newly adopted child and care for an immediate family member who has a disability or a serious health condition; and
- (2) provide, to the extent feasible—
 - (A) flexibility in timing for the initiation of approved research awards granted by such agency;
 - (B) no-cost extensions of such research awards;
 - (C) award supplements, as appropriate, to research awards to sustain research activities conducted under such awards; and
 - (D) any other appropriate accommodations at the discretion of the director of each such agency.

(b) Uniformity of guidance

In providing guidance under subsection (a), the Director shall encourage uniformity, to the

extent practicable, and consistency in the policies established pursuant to such guidance across all Federal research agencies.

(c) Establishment of policies

Consistent, to the extent practicable, with the guidance under subsection (a), Federal research agencies shall—

- (1) maintain or develop and implement policies for individuals described in paragraph (1)(B) of such subsection; and
- (2) broadly disseminate in easily accessible formats such policies to current and potential award recipients.

(d) Data on usage

Federal research agencies shall consider—

- (1) collecting data, including demographic data that can be disaggregated by sex, geographic location, and socioeconomic indicators, which may include employment status, occupation, educational attainment, parental education, and income, on the usage of the policies under subsection (c), at both institutions of higher education and Federal laboratories; and
- (2) reporting such data on an annual basis to the Director in such form as required by the Director.

(Pub. L. 117–167, div. B, title V, §10501, Aug. 9, 2022, 136 Stat. 1609.)

§ 19152. Collection and reporting of data on Federal research awards

(a) Collection of data

(1) In general

Each Federal research agency shall collect, as practicable, with respect to all applications for merit-reviewed research and development awards made by such agency, standardized record-level annual information on demographics, primary field, award type, institution type, review rating, budget request, funding outcome, and awarded budget.

(2) Uniformity and standardization

The Director, in consultation with the heads of each Federal research agency, shall establish, and update as necessary, a policy to ensure uniformity and standardization of the data collection required under paragraph (1).

(3) Record-level data

(A) Requirement

Beginning not later than two years after the issuance of the policy under paragraph (2) to Federal research agencies, and on an annual basis thereafter, each Federal research agency shall submit to the National Center for Science and Engineering Statistics record-level data collected under paragraph (1) in the form required by the Director of the National Science Foundation.

(B) Previous data

As part of the first submission under subparagraph (A), each Federal research agency, to the extent practicable, shall also submit comparable record-level data, if it is available to the agency, for the five years preceding the date of such submission, or an