

(D) produce public-facing reports of the findings from such testing for a general audience;

(E) develop policies and procedures accounting for the legal and social implications of activities under this paragraph when working with a foreign entity of concern (as such term is defined in section 19221 of this title);

(F) establish procedures to prioritize testing of biometrics identification technologies developed by entities headquartered in the United States; and

(G) conduct such other activities as determined necessary by the Director.

**(c) GAO report to Congress**

Not later than 18 months after August 9, 2022, the Comptroller General of the United States shall submit a detailed report to Congress on the impact of biometric identification technologies on historically marginalized communities, including low-income communities and minority religious, racial, and ethnic groups. Such report should be made publicly available on an internet website.

(Pub. L. 117–167, div. B, title II, §10226, Aug. 9, 2022, 136 Stat. 1479.)

**§ 18935. Dissemination of resources for research institutions**

**(a) Dissemination of resources for research institutions**

**(1) In general**

Not later than one year after August 9, 2022, the Director shall, using the authorities of the Director under subsections (c)(15) and (e)(1)(A)(ix) of section 272 of title 15, disseminate and make publicly available tailored resources to help qualifying institutions identify, assess, manage, and reduce their cybersecurity risk related to conducting research.

**(2) Requirements**

The Director shall ensure that the resources disseminated pursuant to paragraph (1)—

(A) are generally applicable and usable by a wide range of qualifying institutions;

(B) vary with the nature and size of the qualifying institutions, and the nature and sensitivity of the data collected or stored on the information systems or devices of the qualifying institutions;

(C) include elements that promote awareness of simple, basic controls, a workplace cybersecurity culture, and third-party stakeholder relationships, to assist qualifying institutions in mitigating common cybersecurity risks;

(D) include case studies, examples, and scenarios of practical application;

(E) are outcomes-based and can be implemented using a variety of technologies that are commercial and off-the-shelf; and

(F) to the extent practicable, are based on international technical standards.

**(3) National cybersecurity awareness and education program**

The Director shall ensure that the resources disseminated under paragraph (1) are con-

sistent with the efforts of the Director under section 7443 of title 15.

**(4) Updates**

The Director shall review periodically and update the resources under paragraph (1) as the Director determines appropriate.

**(5) Voluntary resources**

The use of the resources disseminated under paragraph (1) shall be considered voluntary.

**(b) Other Federal cybersecurity requirements**

Nothing in this section may be construed to supersede, alter, or otherwise affect any cybersecurity requirements applicable to Federal agencies.

**(c) Definitions**

In this section:

**(1) Qualifying institutions**

The term “qualifying institutions” means institutions of higher education that are awarded in excess of \$50,000,000 per year in total Federal research funding.

**(2) Resources**

The term “resources” means guidelines, tools, best practices, technical standards, methodologies, and other ways of providing information.

(Pub. L. 117–167, div. B, title II, §10229, Aug. 9, 2022, 136 Stat. 1481.)

**§ 18936. Neutron scattering**

**(a) Strategic plan for the Institute neutron reactor**

The Director shall develop a strategic plan for the future of the NIST Center for Neutron Research after the current neutron reactor is decommissioned, including—

(1) a succession plan for the reactor, including a roadmap with timeline and milestones;

(2) conceptual design of a new reactor and accompanying facilities, as appropriate; and

(3) a plan to minimize disruptions to the user community during the transition.

**(b) Coordination with the Department of Energy**

The Secretary, acting through the Director, shall coordinate with the Secretary of Energy on issues related to Federal support for neutron science, including estimation of long-term needs for research using neutron sources, and planning efforts for future facilities to meet such needs.

**(c) Report to Congress**

Not later than 30 months after August 9, 2022, the Director shall submit to Congress the plan required under subsection (a), and shall notify Congress of any substantial updates to such plan in subsequent years.

(Pub. L. 117–167, div. B, title II, §10231, Aug. 9, 2022, 136 Stat. 1483.)

**§ 18937. Artificial intelligence**

The Director shall continue to support the development of artificial intelligence and data science, and carry out the activities of the National Artificial Intelligence Initiative Act of 2020 authorized in division E of the National De-

fense Authorization Act for Fiscal Year 2021 (Public Law 116-283), including through—

(1) expanding the Institute’s capabilities, including scientific staff and research infrastructure;

(2) supporting measurement research and development for advanced computer chips and hardware designed for artificial intelligence systems;

(3) supporting the development of technical standards and guidelines that promote safe and trustworthy artificial intelligence systems, such as enhancing the accuracy, explainability, privacy, reliability, robustness, safety, security, and mitigation of harmful bias in artificial intelligence systems;

(4) creating a framework for managing risks associated with artificial intelligence systems; and

(5) developing and publishing cybersecurity tools, encryption methods, and best practices for artificial intelligence and data science.

(Pub. L. 117-167, div. B, title II, §10232(a), Aug. 9, 2022, 136 Stat. 1484.)

#### Editorial Notes

##### REFERENCES IN TEXT

The National Artificial Intelligence Initiative Act of 2020, referred to in introductory provisions of subsec. (a), is div. E of Pub. L. 116-283, Jan. 1, 2021, 134 Stat. 4523, which is classified principally to chapter 119 of Title 15, Commerce and Trade. For complete classification of div. E to the Code, see Short Title note set out under section 9401 of Title 15 and Tables.

Division E of the National Defense Authorization Act for Fiscal Year 2021, referred to in introductory provisions of subsec. (a), is div. E of Pub. L. 116-283, Jan. 1, 2021, 134 Stat. 3388, also known as the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021. For complete classification of this Act to the Code, see Tables.

#### § 18938. Sustainable chemistry research and education

In accordance with section 9303 of title 15, the Director shall carry out activities in support of sustainable chemistry, including coordinating and partnering with academia, industry, non-profit organizations, and other entities in activities to support clean, safe, and economic alternatives, technologies, and methodologies to traditional chemical products and processes.

(Pub. L. 117-167, div. B, title II, §10233, Aug. 9, 2022, 136 Stat. 1484.)

#### § 18939. Premise plumbing research

##### (a) In general

The Secretary, acting through the Director, shall create a program, in consultation with the Environmental Protection Agency, for premise plumbing research, including to—

(1) conduct metrology research on premise plumbing in relation to water safety, security, efficiency, sustainability, and resilience; and

(2) coordinate research activities with academia, the private sector, nonprofit organizations, and other Federal agencies.

##### (b) Definitions

For purposes of this section, the term “premise plumbing” means the water distribu-

tion system located within the property lines of a property, including all buildings and permanent structures on such property. Such term includes building supply and distribution pipes, fixtures, fittings, water heaters, water-treating and water-using equipment, and all respective joints, connections, devices, and appurtenances.

(Pub. L. 117-167, div. B, title II, §10234, Aug. 9, 2022, 136 Stat. 1485.)

#### § 18940. Dr. David Satcher Cybersecurity Education Grant Program

##### (a) Authorization of grants

###### (1) In general

Subject to the availability of appropriations, the Director shall carry out the Dr. David Satcher Cybersecurity Education Grant Program by—

(A) awarding grants to assist institutions of higher education that have an enrollment of needy students, historically Black colleges and universities, Tribal Colleges and Universities, and minority-serving institutions, to establish or expand cybersecurity programs, to build and upgrade institutional capacity to better support new or existing cybersecurity programs, including cybersecurity partnerships with public and private entities, and to support such institutions on the path to producing qualified entrants in the cybersecurity workforce or becoming a National Center of Academic Excellence in Cybersecurity; and

(B) awarding grants to build capacity at institutions of higher education that have an enrollment of needy students, historically Black colleges and universities, Tribal Colleges and Universities, and minority-serving institutions, to expand cybersecurity education opportunities, cybersecurity programs, cybersecurity research, and cybersecurity partnerships with public and private entities.

###### (2) Reservation

The Director shall award not less than 50 percent of the amount available for grants under this section to historically Black colleges and universities, Tribal Colleges and Universities, and minority-serving institutions.

###### (3) Coordination

The Director shall carry out this section in coordination with appropriate Federal agencies, including the Departments of Homeland Security, Education, and Labor.

###### (4) Sunset

The Director’s authority to award grants under paragraph (1) shall terminate on the date that is 5 years after the date the Director first awards a grant under paragraph (1).

##### (b) Applications

An eligible institution seeking a grant under subsection (a) shall submit an application to the Director at such time, in such manner, and containing such information as the Director may reasonably require, including a statement of how the institution will use the funds awarded