

non-STEM fields and disciplines in knowledge transfer activities;

(3) to enhance education and mentoring of students and faculty in innovation and entrepreneurship through networks, courses, and development of best practices and curricula;

(4) to strengthen the culture of the institution or institutions of higher education to undertake and participate in activities related to innovation and leading to economic or social impact;

(5) to broaden the participation of all types of institutions of higher education in activities to meet STEM workforce needs and promote innovation and knowledge transfer; and

(6) to build lasting partnerships with local and regional businesses, local and State governments, and other relevant entities.

(d) Additional criteria

In selecting grant recipients under this section, the Director shall also consider the extent to which the applicants are able to demonstrate evidence of institutional support for, and commitment to—

(1) achieving the goals of the program as described in subsection (c);

(2) expansion to an institution-wide program if the initial proposal is not for an institution-wide program; and

(3) sustaining any new innovation tools and resources generated from funding under this program.

(e) Limitation

No funds provided under this section may be used to construct or renovate a building or structure.

(Pub. L. 111-358, title V, §508, Jan. 4, 2011, 124 Stat. 4008.)

CODIFICATION

Section was enacted as part of the America COMPETES Reauthorization Act of 2010, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010, and also as part of the National Science Foundation Authorization Act of 2010, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

DEFINITIONS

For definitions of terms used in this section, see section 2 of Pub. L. 111-358, set out as a note under section 6621 of this title, and section 502 of Pub. L. 111-358, set out as a note under section 1862p of this title.

§ 1862p-3. Sustainable chemistry basic research

The Director shall establish a Green Chemistry Basic Research program to award competitive, merit-based grants to support research into green and sustainable chemistry which will lead to clean, safe, and economical alternatives to traditional chemical products and practices. The research program shall provide sustained support for green chemistry research, education, and technology transfer through—

(1) merit-reviewed competitive grants to individual investigators and teams of investigators, including, to the extent practicable, young investigators, for research;

(2) grants to fund collaborative research partnerships among universities, industry, and nonprofit organizations;

(3) symposia, forums, and conferences to increase outreach, collaboration, and dissemination of green chemistry advances and practices; and

(4) education, training, and retraining of undergraduate and graduate students and professional chemists and chemical engineers, including through partnerships with industry, in green chemistry science and engineering.

(Pub. L. 111-358, title V, §509, Jan. 4, 2011, 124 Stat. 4009.)

CODIFICATION

Section was enacted as part of the America COMPETES Reauthorization Act of 2010, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010, and also as part of the National Science Foundation Authorization Act of 2010, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

COORDINATION OF SUSTAINABLE CHEMISTRY RESEARCH AND DEVELOPMENT

Pub. L. 114-329, title I, §114, Jan. 6, 2017, 130 Stat. 2993, provided that:

“(a) IMPORTANCE OF SUSTAINABLE CHEMISTRY.—It is the sense of Congress that—

“(1) the science of chemistry is vital to improving the quality of human life and plays an important role in addressing critical global challenges, including water quality, energy, health care, and agriculture;

“(2) sustainable chemistry can reduce risks to human health and the environment, reduce waste, improve pollution prevention, promote safe and efficient manufacturing, and promote efficient use of resources in developing new materials, processes, and technologies that support viable long-term solutions to a significant number of challenges;

“(3) sustainable chemistry can stimulate innovation, encourage new and creative approaches to problems, create jobs, and save money; and

“(4) a coordinated effort on sustainable chemistry will allow for a greater return on research investment in this area.

“(b) SUSTAINABLE CHEMISTRY BASIC RESEARCH.—Subject to the availability of appropriated funds, the Director of the [National Science] Foundation may continue to carry out the Sustainable Chemistry Basic Research program authorized under section 509 of the National Science Foundation Authorization Act of 2010 (42 U.S.C. 1862p-3).”

DEFINITIONS

For definitions of terms used in this section, see section 502 of Pub. L. 111-358, set out as a note under section 1862p of this title.

§ 1862p-4. Undergraduate broadening participation program

The Foundation shall continue to support the Historically Black Colleges and Universities Undergraduate Program, the Louis Stokes Alliances for Minority Participation program, the Tribal Colleges and Universities Program, and Hispanic-serving institutions as separate programs.

(Pub. L. 111-358, title V, §512, Jan. 4, 2011, 124 Stat. 4011.)

CODIFICATION

Section was enacted as part of the America COMPETES Reauthorization Act of 2010, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science

Reauthorization Act of 2010, and also as part of the National Science Foundation Authorization Act of 2010, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

DEFINITIONS

For definitions of terms used in this section, see section 502 of Pub. L. 111-358, set out as a note under section 1862p of this title.

§ 1862p-5. Research experiences for high school students

The Director shall permit specialized STEM high schools conducting research to participate in major data collection initiatives from universities, corporations, or government labs under a research grant from the Foundation, as part of the research proposal.

(Pub. L. 111-358, title V, §513, Jan. 4, 2011, 124 Stat. 4011.)

CODIFICATION

Section was enacted as part of the America COMPETES Reauthorization Act of 2010, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010, and also as part of the National Science Foundation Authorization Act of 2010, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

DEFINITIONS

For definitions of terms used in this section, see section 2 of Pub. L. 111-358, set out as a note under section 6621 of this title, and section 502 of Pub. L. 111-358, set out as a note under section 1862p of this title.

§ 1862p-6. Research experiences for undergraduates

(a) Research sites

The Director shall award grants, on a merit-reviewed, competitive basis, to institutions of higher education, nonprofit organizations, or consortia of such institutions and organizations, for sites designated by the Director to provide research experiences for 6 or more undergraduate STEM students for sites designated at primarily undergraduate institutions of higher education and 10 or more undergraduate STEM students for all other sites, with consideration given to the goal of promoting the participation of individuals identified in section 1885a or 1885b of this title. The Director shall ensure that—

(1) at least half of the students participating in a program funded by a grant under this subsection at each site shall be recruited from institutions of higher education where research opportunities in STEM are limited, including 2-year institutions;

(2) the awards provide undergraduate research experiences in a wide range of STEM disciplines;

(3) the awards support a variety of projects, including independent investigator-led projects, interdisciplinary projects, and multi-institutional projects (including virtual projects);

(4) students participating in each program funded have mentors, including during the academic year to the extent practicable, to help connect the students' research experiences to the overall academic course of study

and to help students achieve success in courses of study leading to a baccalaureate degree in a STEM field;

(5) mentors and students are supported with appropriate salary or stipends; and

(6) student participants are tracked, for employment and continued matriculation in STEM fields, through receipt of the undergraduate degree and for at least 3 years thereafter.

(b) Inclusion of undergraduates in standard research grants

The Director shall require that every recipient of a research grant from the Foundation proposing to include 1 or more students enrolled in certificate, associate, or baccalaureate degree programs in carrying out the research under the grant shall request support, including stipend support, for such undergraduate students as part of the research proposal itself rather than as a supplement to the research proposal, unless such undergraduate participation was not foreseeable at the time of the original proposal.

(Pub. L. 111-358, title V, §514, Jan. 4, 2011, 124 Stat. 4011.)

CODIFICATION

Section was enacted as part of the America COMPETES Reauthorization Act of 2010, also known as the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010, and also as part of the National Science Foundation Authorization Act of 2010, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

DEFINITIONS

For definitions of terms used in this section, see section 2 of Pub. L. 111-358, set out as a note under section 6621 of this title, and section 502 of Pub. L. 111-358, set out as a note under section 1862p of this title.

§ 1862p-7. STEM industry internship programs

(a) In general

The Director may award grants, on a competitive, merit-reviewed basis, to institutions of higher education, or consortia thereof, to establish or expand partnerships with local or regional private sector entities, for the purpose of providing undergraduate students with integrated internship experiences that connect private sector internship experiences with the students' STEM coursework. The partnerships may also include industry or professional associations.

(b) Internship program

The grants awarded under subsection (a) may include internship programs in the manufacturing sector.

(c)¹ Use of grant funds

Grants under this section may be used—

(1) to develop and implement hands-on learning opportunities;

(2) to develop curricula and instructional materials related to industry, including the manufacturing sector;

(3) to perform outreach to secondary schools;

¹ So in original. Two subsecs. (c) have been enacted.