110TH CONGRESS
1ST SESSION

S. 761

AN ACT

To invest in innovation and education to improve the competitiveness of the United States in the global economy.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''America COMPETES Act'' or the ''America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Act''.

SEC. 2. ORGANIZATION OF ACT INTO DIVISIONS; TABLE OF CONTENTS.

(a) DIVISIONS.—This Act is organized into 5 divisions as follows:

(1) DIVISION A.—Commerce and Science.

(2) DIVISION B.—Department of Energy.

(3) DIVISION B.—Education.

(4) DIVISION D.—National Science Foundation.

(5) DIVISION E.—General Provisions.

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

DIVISION E—GENERAL PROVISIONS

"CHAPTER 5—NUCLEAR SCIENCE EDUCATION

"SEC. 3191. NUCLEAR SCIENCE TALENT EXPANSION PROGRAM FOR INSTITUTIONS OF HIGHER EDUCATION.

''(a) PURPOSES.—The purposes of this section are—

''(1) to address the decline in the number of and resources available to nuclear science programs of institutions of higher education; and

''(2) to increase the number of graduates with degrees in nuclear science, an area of strategic importance to the economic competitiveness and energy security of the United States.

''(b) DEFINITION OF NUCLEAR SCIENCE.—In this section, the term 'nuclear science' includes—

''(1) nuclear science;

''(2) nuclear engineering;

''(3) nuclear chemistry;

''(4) radio chemistry; and

''(5) health physics.

''(c) ESTABLISHMENT.—The Secretary, acting through the Director, shall establish in accordance with this section a program to expand and enhance institution of higher education nuclear science educational capabilities.

''(d) NUCLEAR SCIENCE PROGRAM EXPANSION GRANTS FOR INSTITUTIONS OF HIGHER EDUCATION.—

''(1) IN GENERAL.—The Secretary, acting through the Director, shall award up to 3 competitive grants for each fiscal year to institutions of higher education that establish new academic degree programs in nuclear science.

''(2) ELIGIBILITY.—To be eligible for a grant under this subsection, an applicant shall partner with a National Laboratory or other eligible nuclear-related entity, as determined by the Secretary.

''(3) CRITERIA.—Criteria for a grant awarded under this subsection shall be based on—

''(A) the potential to attract new students to the program;

''(B) academic rigor; and

''(C) the ability to offer hands-on learning opportunities.

''(4) DURATION AND AMOUNT.—

''(A) DURATION.—A grant under this subsection shall be 5 years in duration.

''(B) AMOUNT.—An institution of higher education that receives a grant under this subsection shall be eligible for up to $1,000,000 for each year of the grant period.

''(5) USE OF FUNDS.—An institution of higher education that receives a grant under this subsection may use the grant to—

''(A) recruit and retain new faculty;

''(B) develop core and specialized course content;

''(C) encourage collaboration between faculty and researchers in the nuclear science field; or

''(D) support outreach efforts to recruit students.

''(e) NUCLEAR SCIENCE COMPETITIVENESS GRANTS FOR INSTITUTIONS OF HIGHER EDUCATION.—

''(1) IN GENERAL.—The Secretary, acting through the Director shall award up to 10 competitive grants for each fiscal year to institutions of higher education with existing academic degree programs that produce graduates in nuclear science.

''(2) CRITERIA.—Criteria for a grant awarded under this subsection shall be based on the potential for increasing the number and academic quality of graduates in the nuclear sciences who enter into careers in nuclear-related fields.

''(3) DURATION AND AMOUNT.—

''(A) DURATION.—A grant under this subsection shall be 5 years in duration.

''(B) AMOUNT.—An institution of higher education that receives a grant under this subsection shall be eligible for up to $500,000 for each year of the grant period.

''(4) USE OF FUNDS.—An institution of higher education that receives a grant under this subsection may use the grant to—

''(A) increase the number of graduates in nuclear science that enter into careers in the nuclear science field;

''(B) enhance the teaching of advanced nuclear technologies;

''(C) aggressively pursue collaboration opportunities with industry and National Laboratories;

''(D) bolster or sustain nuclear infrastructure and research facilities of the institution of higher education, such as research and training reactors or laboratories; and

''(E) provide tuition assistance and stipends to undergraduate and graduate students.

''(f) AUTHORIZATION OF APPROPRIATIONS.—

''(1) NUCLEAR SCIENCE PROGRAM EXPANSION GRANTS FOR INSTITUTIONS OF HIGHER EDUCATION.—There are authorized to be appropriated to carry out subsection (d)—

''(A) $9,000,000 for fiscal year 2008;

''(B) $13,000,000 for fiscal year 2009;

''(C) $18,000,000 for fiscal year 2010; and

''(D) $22,500,000 for fiscal year 2011.

''(2) NUCLEAR SCIENCE COMPETITIVENESS GRANTS FOR INSTITUTIONS OF HIGHER EDUCATION.—There are authorized to be appropriated to carry out subsection (e)—

''(A) $11,000,000 for fiscal year 2008;

''(B) $16,500,000 for fiscal year 2009;

''(C) $22,000,000 for fiscal year 2010; and

''(D) $27,500,000 for fiscal year 2011.

SEC. 2008. PROTECTING AMERICA'S COMPETITIVE EDGE (PACE) GRADUATE FELLOWSHIP PROGRAM.

(a) DEFINITION OF ELIGIBLE STUDENT.—In this section, the term ''eligible student'' means a student who attends an institution of higher education that offers a doctoral degree in a field relevant to a mission area of the Department.

(b) ESTABLISHMENT.—The Secretary shall establish a graduate fellowship program for eligible students pursuing a doctoral degree in a mission area of the Department.

(c) SELECTION.—

(1) IN GENERAL.—The Secretary shall award fellowships to eligible students under this section through a competitive merit review process (involv-

ing written and oral interviews) that will result in a wide distribution of awards throughout the United States.

(2) CRITERIA.—The Secretary shall establish selection criteria for awarding fellowships under this section that require an eligible student to—

(A) pursue a field of science or engineering of importance to the mission area of the Department;

(B) rank in the upper 10 percent of the class of the eligible student;

(C) demonstrate to the Secretary—

(i) the capacity to understand technical topics related to the fellowship that can be derived from the first principles of the technical topics;

(ii) imagination and creativity;

(iii) leadership skills in organizations or intellectual endeavors, demonstrated through awards and past experience; and

(iv) excellent verbal and communication skills to explain, defend, and demonstrate an understanding of technical subjects related to the fellowship; and

(D) be a citizen or legal permanent resident of the United States.

(d) AWARDS.—

(1) AMOUNT.—A fellowship awarded under this section shall—

(A) provide an annual living stipend; and

(B) cover—

(i) graduate tuition at an institution of higher education; and

(ii) incidental expenses associated with curricula and research at the institution of higher education (including books, computers and software).

(2) DURATION.—A fellowship awarded under this section shall be for a period of not greater than 5 years.

(3) PORTABILITY.—A fellowship awarded under this section shall be portable with the fellow.

(e) ADMINISTRATION.—The Secretary (acting through the Director of Mathematics, Science, and Engineering Education)—

(1) shall administer the program established under this section; and,

(2) may enter into a contract with a nonprofit entity to administer the program, including the selection and award of fellowships.

(f) AUTHORIZATION OF APPROPRIATIONS.—

(1) FELLOWSHIPS.—There are authorized to be appropriated to award fellowships under this section—

(A) $9,300,000 for 200 fellowships for fiscal year 2008;

(B) $14,500,000 for 300 fellowships for fiscal year 2009 (including non-expiring fellowships for prior fiscal years);

(C) $25,000,000 for 500 fellowships for fiscal year 2010 (including non-expiring fellowships for prior fiscal years); and

(D) $35,500,000 for 700 fellowships for fiscal year 2011 (including non-expiring fellowships for prior fiscal years).

(2) ADMINISTRATION.—There are authorized to be appropriated for administrative expenses incurred in carrying out this section—

(A) $1,000,000 for fiscal year 2008;

(B) $1,500,000 for fiscal year 2009;

(C) $2,500,000 for fiscal year 2010; and

(D) $3,500,000 for fiscal year 2011.