109TH CONGRESS 2D SESSION

H. R. 5106

To amend the National Science Foundation Authorization Act of 2002 to authorize grants for Partnerships for Access to Laboratory Science (PALS).

IN THE HOUSE OF REPRESENTATIVES

APRIL 5, 2006

Mr. HINOJOSA introduced the following bill; which was referred to the Committee on Science, and in addition to the Committee on Education and the Workforce, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To amend the National Science Foundation Authorization Act of 2002 to authorize grants for Partnerships for Access to Laboratory Science (PALS).

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. AUTHORIZATION OF APPROPRIATIONS.
- 4 Section 5(e) of the National Science Foundation Au-
- 5 thorization Act of 2002 (116 Stat. 3039) is amended to
- 6 read as follows:
- 7 "(e) FISCAL YEAR 2007.—

1	"(1) In general.—There are authorized to be
2	appropriated to the Foundation \$9,839,262,000 for
3	fiscal year 2007.
4	"(2) Specific allocation.—Of the amounts
5	appropriated pursuant to paragraph (1),
6	\$50,000,000 shall be for the Partnerships for Access
7	to Laboratory Sciences described in section 10A.".
8	SEC. 2. AUTHORIZATION FOR PARTNERSHIPS FOR ACCESS
9	TO LABORATORY SCIENCES.
10	Section 8 of the National Science Foundation Au-
11	thorization Act of 2002 (116 Stat. 3043) is amended by
12	adding at the end the following new paragraph:
13	"(12) Partnerships for access to labora-
14	TORY SCIENCE (PALS).—The partnerships for access
15	to laboratory science described in section 10A.".
16	SEC. 3. PARTNERSHIPS FOR ACCESS TO LABORATORY
17	SCIENCE DESCRIBED.
18	The National Science Foundation Authorization Act
19	of 2002 (42 U.S.C. 1861 note) is amended by inserting
20	after section 10 the following new section:
21	"SEC. 10A. PARTNERSHIPS FOR ACCESS TO LABORATORY
22	SCIENCE (PALS).
23	"(a) Program Authorized.—
24	"(1) In general.—

1	"(A) AUTHORITY TO MAKE GRANTS.—The
2	Director shall carry out a program to award
3	grants to high-need local educational agencies
4	to establish partnerships for access to labora-
5	tory science to improve laboratories and provide
6	instrumentation as part of a comprehensive
7	program to enhance the quality of mathematics,
8	science, engineering, and technology instruction
9	at the secondary school level.
10	"(B) Criteria for awarding grants.—
11	Grants shall be awarded under this section on
12	a competitive, merit-reviewed basis.
13	"(2) Partnerships.—In order to be eligible to
14	receive a grant under this section, a high-need local
15	educational agency shall enter into a partnership
16	that—
17	"(A) includes an institution of higher edu-
18	cation or a community college;
19	"(B) includes a business or eligible non-
20	profit organization; and
21	"(C) may include a State educational agen-
22	cy, other public agency, National Laboratory, or
23	community-based organization.
24	"(3) Federal share.—The Federal share of
25	the cost of activities carried out using amounts from

- 1 a grant under this section shall not exceed 33 per-2 cent.
 - "(4) DURATION.—A high-need local educational agency that receives approval of a grant application submitted under this section shall be eligible to receive grants under this section for activities described in the application for a period of 3 fiscal years.
 - "(5) Plan Required.—In order to be eligible for a grant under this section, a high-need local educational agency shall submit to the Director a plan, developed in consultation with teachers, science administrators, scientists, education researchers, and other individuals with expertise in laboratory science and classroom instruction, for carrying out the program under this section. Such plan shall—
 - "(A) describe how the proposed laboratory improvements and instrumentation are consistent with State mathematics and science academic achievement standards;
 - "(B) describe how the proposed laboratory improvement and instrumentation are part of a comprehensive program to enhance the quality of mathematics, science, engineering, and tech-

1	nology instruction, including a description of
2	how the laboratory experiences—
3	"(i) are designed to produce clear
4	learning outcomes;
5	"(ii) are sequenced to complement the
6	classroom science instruction;
7	"(iii) are designed to integrate science
8	learning with science content; and
9	"(iv) will incorporate ongoing student
10	reflection and discussion;
11	"(C) describe professional development and
12	training activities for teachers and school per-
13	sonnel who will be working in the laboratory fa-
14	cilities;
15	"(D) provide assurances that all safety re-
16	quirements as required by State or local ordi-
17	nance or by the Director will be met;
18	"(E) describe how the laboratory and in-
19	strumentation will be maintained after the pe-
20	riod of financial assistance provided under the
21	grant; and
22	"(F) describe how assessment methods will
23	be used to expand the available research lit-
24	erature regarding the effect of laboratory

1	science on student understanding of scientific
2	concepts and student achievement.
3	"(6) Uses of funds.—Grants awarded under
4	this section—
5	"(A) shall be used to supplement and not
6	supplant existing programs or activities; and
7	"(B) shall be used for activities that draw
8	upon the expertise of all partners to improve
9	secondary science education by improving lab-
10	oratories and providing instrumentation as part
11	of a comprehensive program to enhance the
12	quality of mathematics, science, engineering,
13	and technology instruction at the secondary
14	school level in a manner that is consistent with
15	State mathematics and science student aca-
16	demic achievement standards, including—
17	"(i) development of a plan for labora-
18	tory improvement and instrumentation
19	that is consistent with State mathematics
20	and science academic achievement stand-
21	ards;
22	"(ii) purchase, rental, or leasing of
23	equipment, instrumentation, and other sci-
24	entific educational materials;

1	"(iii) maintenance, renovation, and
2	improvement of laboratory facilities;
3	"(iv) professional development and
4	training for teachers;
5	"(v) development of curricula and in-
6	structional programs designed to integrate
7	the laboratory experience with classroom
8	instruction;
9	"(vi) training in laboratory safety for
10	a school personnel;
11	"(vii) design and implementation of
12	hands-on laboratory experiences to encour-
13	age the interest of individuals identified in
14	section 33 or 34 of the Science and Engi-
15	neering Equal Opportunities Act (42
16	U.S.C. 1885a or 1885b) in mathematics,
17	science, engineering, and technology and
18	help prepare such individuals to pursue
19	postsecondary studies in these fields;
20	"(viii) development of tools to evaluate
21	activities funded under this subsection; and
22	"(ix) any other activities the Director
23	determines will accomplish the goals of this
24	subsection.

1	"(7) Limitation on use of funds.—Grants
2	awarded under this section shall not be used for con-
3	struction of new facilities.
4	"(b) Selection Process.—
5	"(1) APPLICATION.—A high-need local edu-
6	cational agency seeking a grant under this section
7	shall submit an application to the Director at such
8	time, in such manner, and containing such informa-
9	tion as the Director may require. The application
10	shall include, at a minimum—
11	"(A) a description of the partnership en-
12	tered into under subsection (a)(2) and the role
13	that each member will play in implementing the
14	proposal;
15	"(B) the plan described in subsection
16	(a)(5);
17	"(C) a description of each of the activities
18	to be carried out using amounts from the grant,
19	together with—
20	"(i) a description of how such activi-
21	ties will be aligned with State mathematics
22	and science student academic achievement
23	standards and with other activities that
24	promote student achievement in mathe-
25	matics and science;

1	"(ii) a description of how such activi-
2	ties will be based on a review of relevant
3	research, including best practices;
4	"(iii) a description of why such activi-
5	ties are expected to improve student per-
6	formance and strengthen the quality of
7	mathematics and science instruction;
8	"(iv) a description of any activities
9	that will encourage the interest of individ-
10	uals identified in section 33 or 34 of the
11	Science and Engineering Equal Opportuni-
12	ties Act (42 U.S.C. 1885a or 1885b) in
13	mathematics, science, engineering, and
14	technology and how such activities will help
15	prepare such individuals to pursue postsec-
16	ondary studies in these fields; and
17	"(v) a description of how changes in
18	student achievement will be assessed;
19	"(D) a description of how the partnership
20	will assess its success; and
21	"(E) a description of how programmatic
22	assessments will be made available to the larger
23	research community

1	"(2) Review of Applications.—In evaluating
2	the applications submitted under paragraph (1), the
3	Director shall consider, at a minimum—
4	"(A) the ability of the partnership to carry
5	out effectively the proposed programs;
6	"(B) the degree to which activities carried
7	out by the partnership are based on relevant re-
8	search, including best practices, and are likely
9	to result in increased student achievement;
10	"(C) the degree to which such activities
11	are aligned with State mathematics and science
12	student academic achievement standards;
13	"(D) the likelihood that the partnership
14	will demonstrate activities that can be widely
15	implemented as part of larger scale reform ef-
16	forts; and
17	"(E) the extent to which the activities will
18	encourage the interest of individuals identified
19	in section 33 or 34 of the Science and Engi-
20	neering Equal Opportunities Act (42 U.S.C.
21	1885a or 1885b) in mathematics, science, engi-
22	neering, and technology and will help prepare
23	such individuals to pursue postsecondary stud-
24	ies in these fields.
25	"(c) Accountability and Dissemination.—

"(1) Assessment required.—The Director shall evaluate the program established under this section. At a minimum, such evaluation shall—

"(A) use a common set of benchmarks and assessment tools to identify best practices and materials developed and demonstrated by the partnerships; and

"(B) to the extent practicable, compare the effectiveness of practices and materials developed and demonstrated by the partnerships authorized under this section with those of partnerships funded by other State or Federal agencies.

"(2) Dissemination.—

"(A) DISSEMINATION OF RESULTS.—The Director shall make the results of the evaluation required under paragraph (1) available to the public and shall provide such results to the Committee on Science and the Committee on Education and the Workforce of the House of Representatives, and to the Committee on Commerce, Science, and Transportation and the Committee on Health, Education, Labor, and Pensions of the Senate.

1	"(B) Dissemination of materials.—
2	The Director shall make widely available to the
3	public materials developed under the program
4	established under this section that are dem-
5	onstrated to be effective.
6	"(d) Technical Assistance and Coordina-
7	TION.—
8	"(1) Technical assistance.—At the request
9	of a high-need local educational agency, the Director
10	shall provide the agency with technical assistance in
11	meeting any requirements of this section, including
12	providing advice from experts on how to develop—
13	"(A) a quality application for a grant; and
14	"(B) quality activities from funds received
15	from a grant under this section.
16	"(2) Annual meeting.—The Director, in con-
17	sultation with the Secretary of Education, shall con-
18	vene an annual meeting of the high-need local edu-
19	cational agencies that are recipients of a grant
20	under this section to foster greater national collabo-
21	ration.
22	"(3) Report on Coordination.—The Direc-
23	tor, in consultation with the Secretary of Education,
24	shall provide to the Committee on Science and the
25	Committee on Education and the Workforce of the

- 1 House of Representatives, and to the Committee on 2 Commerce, Science, and Transportation and the 3 Committee on Health, Education, Labor, and Pensions of the Senate, an annual report describing how 5 the program authorized under this section has been 6 and will be coordinated with the program authorized 7 under part B of title II of the Elementary and Sec-8 ondary Education Act of 1965 (20 U.S.C. 6601 et 9 seq.). The report required by this paragraph shall be 10 submitted concurrently with the President's annual 11 budget request. 12 "(e) Definitions.—In this section, the following 13 definitions apply: 14 "(1) High-need local educational agen-15 CY.—The term 'high-need local educational agency' 16 includes a local educational agency eligible to receive 17 a grant under the Rural and Low-Income School 18 Program authorized by section 6221 of the Elemen-
 - "(2) National Laboratory.—The term 'National Laboratory' has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801)."

tary and Secondary Education Act of 1965 (20

U.S.C. 7351).

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