S. 2922

To amend the Public Health Service Act to provide for the expansion, intensification, and coordination of the activities of the National Heart, Lung, and Blood Institute with respect to research on pulmonary hypertension.

IN THE SENATE OF THE UNITED STATES

October 7, 2004

Mr. Cornyn introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

A BILL

- To amend the Public Health Service Act to provide for the expansion, intensification, and coordination of the activities of the National Heart, Lung, and Blood Institute with respect to research on pulmonary hypertension.
 - 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. SHORT TITLE.
 - 4 This Act may be cited as the "Pulmonary Hyper-
 - 5 tension Research Act of 2004".
 - 6 SEC. 2. FINDINGS.
- 7 The Congress finds as follows:

- (1) In order to take full advantage of the tremendous potential for finding a cure or effective treatment, the Federal investment in pulmonary hypertension must be expanded, and coordination among the national research institutes of the National Institutes of Health must be strengthened.
 - (2) Primary, or unexplained, pulmonary hypertension ("PPH") is a rare lung disorder which occurs for no apparent reason. It has been historically chronic and incurable with a poor survival rate.
 - (3) In the United States it has been estimated that 300 new cases of PPH are diagnosed each year, or about two persons per million population per year; the greatest number are reported in women between the ages of 21 and 40. While at one time the disease was thought to occur among young women almost exclusively; we now know, however, that men and women in all age ranges, from very young children to elderly people, can develop PPH. It also affects people of all racial and ethnic origins equally.
 - (4) The low prevalence of PPH makes learning more about the disease extremely difficult. Studies of PPH also have been difficult because a good animal model of the disease has not been available.

- 1 (5) In about 6 to 10 percent of cases, PPH is familial.
- 3 (6) In the more advanced stages of PPH, the 4 patient is able to perform only minimal activity and 5 has symptoms even when resting. The disease may 6 worsen to the point where the patient is completely 7 bedridden.
 - (7) PPH remains a diagnosis of exclusion and is rarely picked up in a routine medical examination. Even in its later stages, the signs of the disease can be confused with other conditions affecting the heart and lungs.
 - (8) In 1981, the National Heart, Lung, and Blood Institute established the first PPH-patient registry in the world. The registry followed 194 people with PPH over a period of at least 1 year and, in some cases, for as long as 7.5 years. Much of what we know about the illness today stems from this study.
 - (9) Because we still do not understand the cause or have a cure for PPH, basic research studies are focusing on the possible involvement of immunologic and genetic factors in the cause and progression of PPH, looking at agents that cause narrowing of the pulmonary blood vessels, and iden-

1	tifying factors that cause growth of smooth muscle
2	and formation of scar tissue in the vessel walls.
3	(10) Secondary pulmonary hypertension
4	("SPH") means the cause is known. Common
5	causes of SPH are the breathing disorders emphy-
6	sema and bronchitis. Other less frequent causes are
7	the inflammatory or collagen vascular diseases such
8	as scleroderma, CREST syndrome or systemic lupus
9	erythematosus ("SLE"). Other causes include con-
10	genital heart diseases that cause shunting of extra
11	blood through the lungs like ventricular and atrial
12	septal defects, chronic pulmonary thromboembolism,
13	HIV infection, liver disease and certain diet drugs.
14	SEC. 3. EXPANSION, INTENSIFICATION, AND COORDINA-
15	TION OF ACTIVITIES OF NATIONAL HEART,
16	LUNG, AND BLOOD INSTITUTE WITH RESPECT
17	TO RESEARCH ON PULMONARY HYPER-
18	TENSION.
19	Subpart 2 of part C of title IV of the Public Health
20	Service Act (42 U.S.C. 285b et seq.) is amended by insert-
21	ing after section 424B the following:
22	"PULMONARY HYPERTENSION
23	"Sec. 424C. (a) In General.—
24	"(1) Expansion of activities.—The Director
25	of the Institute shall expand, intensify, and coordi-

1	nate the activities of the Institute with respect to re-
2	search on pulmonary hypertension.
3	"(2) Coordination with other insti-
4	TUTES.—The Director of the Institute shall coordi-
5	nate the activities of the Director under paragraph
6	(1) with similar activities conducted by other na-
7	tional research institutes and agencies of the Na-
8	tional Institutes of Health to the extent that such
9	Institutes and agencies have responsibilities that are
10	related to pulmonary hypertension.
11	"(b) Centers of Excellence.—
12	"(1) In general.—In carrying out subsection
13	(a), the Director of the Institute shall make grants
14	to, or enter into contracts with, public or nonprofit
15	private entities for the development and operation of
16	centers to conduct research on pulmonary hyper-
17	tension.
18	"(2) Research, Training, and Information
19	AND EDUCATION.—
20	"(A) In general.—With respect to pul-
21	monary hypertension, each center assisted
22	under paragraph (1) shall—
23	"(i) conduct basic and clinical re-
24	search into the cause, diagnosis, early de-

1	tection, prevention, control, and treatment
2	of such disease;
3	"(ii) conduct training programs for
4	scientists and health professionals;
5	"(iii) conduct programs to provide in-
6	formation and continuing education to
7	health professionals; and
8	"(iv) conduct programs for the dis-
9	semination of information to the public.
10	"(B) STIPENDS FOR TRAINING OF HEALTH
11	PROFESSIONALS.—A center under paragraph
12	(1) may use funds under such paragraph to
13	provide stipends for scientists and health pro-
14	fessionals enrolled in programs described in
15	subparagraph (A)(ii).
16	"(3) Coordination of Centers; reports.—
17	The Director shall, as appropriate, provide for the
18	coordination of information among centers under
19	paragraph (1) and ensure regular communication
20	between such centers, and may require the periodic
21	preparation of reports on the activities of the centers
22	and the submission of the reports to the Director.
23	"(4) Organization of centers.—Each cen-
24	ter under paragraph (1) shall use the facilities of a
25	single institution, or be formed from a consortium of

1 cooperating institutions, meeting such requirements 2 as may be prescribed by the Director.

"(5) Number of centers; duration of support.—The Director shall, subject to the extent of amounts made available in appropriations Acts, provide for the establishment of not less than three centers under paragraph (1). Support of such a center may be for a period not exceeding 5 years. Such period may be extended for one or more additional periods not exceeding 5 years if the operations of such center have been reviewed by an appropriate technical and scientific peer review group established by the Director and if such group has recommended to the Director that such period should be extended.

"(c) Data System; Clearinghouse.—

"(1) Data system.—The Director of the Institute shall establish a data system for the collection, storage, analysis, retrieval, and dissemination of data derived from patient populations with pulmonary hypertension, including where possible, data involving general populations for the purpose of identifying individuals at risk of developing such condition.

"(2) CLEARINGHOUSE.—The Director of the Institute shall establish an information clearinghouse

- 1 to facilitate and enhance, through the effective dis-
- 2 semination of information, knowledge and under-
- 3 standing of pulmonary hypertension by health pro-
- 4 fessionals, patients, industry, and the public.
- 5 "(d) Public Input.—In carrying out subsection (a),
- 6 the Director of the Institute shall provide for means
- 7 through which the public can obtain information on the
- 8 existing and planned programs and activities of the Na-
- 9 tional Institutes of Health with respect to primary hyper-
- 10 tension and through which the Director can receive com-
- 11 ments from the public regarding such programs and ac-
- 12 tivities.
- 13 "(e) Reports.—The Director of the Institute shall
- 14 prepare biennial reports on the activities conducted and
- 15 supported under this section, and shall include such re-
- 16 ports in the biennial reports prepared by the Director
- 17 under section 407.
- 18 "(f) AUTHORIZATION OF APPROPRIATIONS.—For the
- 19 purpose of carrying out this section, there are authorized
- 20 to be appropriated such sums as may be necessary up to
- 21 \$25,000,000 for each of the fiscal years 2005 through
- 22 2009. Such authorizations of appropriations are in addi-
- 23 tion to any other authorization of appropriations that is
- 24 available for such purpose.".