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108TH CONGRESS
1ST SESSION

H. R. 766

To provide for a National Nanotechnology Research and Development Program, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 13, 2003

Mr. BOEHLERT (for himself, Mr. HONDA, Mr. EHLERS, Mr. HALL, Mr. SMITH of Michigan, Mr. GORDON, Mrs. BIGGERT, Ms. EDDIE BERNICE JOHNSON of Texas, Mr. BARTLETT of Maryland, Ms. LOFGREN, Mr. GUTKNECHT, and Mr. BISHOP of New York) introduced the following bill; which was referred to the Committee on Science

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A BILL

To provide for a National Nanotechnology Research and Development Program, and for other purposes.

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 ''Nanotechnology Research and Development Act of 2003''.

SEC. 2. DEFINITIONS.

In this Act—

(1) the term ''advanced technology user facility'' means a nanotechnology research and develop-

ment facility supported, in whole or in part, by Federal funds that is open to all United States researchers on a competitive, merit-reviewed basis;

(2) the term ''Advisory Committee'' means the advisory committee established under section 5;

(3) the term ''Director'' means the Director of the Office of Science and Technology Policy;

(4) the term ''Interagency Committee'' means the interagency committee established under section 3(c);

(5) the term ''nanotechnology'' means science and engineering aimed at creating materials, devices, and systems at the atomic and molecular level;

(6) the term ''Program'' means the National Nanotechnology Research and Development Program described in section 3; and

(7) the term ''program component area'' means a major subject area established under section 3(c)(2) under which is grouped related individual projects and activities carried out under the Program.

SEC. 3. NATIONAL NANOTECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM.

(a) IN GENERAL.—The President shall implement a National Nanotechnology Research and Development Pro-

gram to promote Federal nanotechnology research, development, demonstration, education, technology transfer, and commercial application activities as necessary to ensure continued United States leadership in nanotechnology research and development and to ensure effective coordination of nanotechnology research and development across Federal agencies and across scientific and engineering disciplines.

(b) PROGRAM ACTIVITIES.—The activities of the Program shall be designed to—

(1) provide sustained support for nanotechnology research and development through—

(A) grants to individual investigators and interdisciplinary teams of investigators; and

(B) establishment of interdisciplinary research centers and advanced technology user facilities;

(2) ensure that solicitation and evaluation of proposals under the Program encourage interdisciplinary research;

(3) expand education and training of undergraduate and graduate students in interdisciplinary nanotechnology science and engineering;

(4) accelerate the commercial application of nanotechnology innovations in the private sector; and

(5) ensure that societal and ethical concerns will be addressed as the technology is developed by—

(A) establishing a research program to identify societal and ethical concerns related to nanotechnology, and ensuring that the results of such research are widely disseminated; and

(B) integrating, insofar as possible, research on societal and ethical concerns with nanotechnology research and development.

(c) INTERAGENCY COMMITTEE.—The President shall establish or designate an interagency committee on nanotechnology research and development, chaired by the Director, which shall include representatives from the National Science Foundation, the Department of Energy, the National Aeronautics and Space Administration, the National Institute of Standards and Technology, the Environmental Protection Agency, and any other agency that the President may designate. The Interagency Committee, which shall also include a representative from the Office of Management and Budget, shall oversee the planning, management, and coordination of the Program. The Interagency Committee shall—

(1) establish goals and priorities for the Program;

(2) establish program component areas, with specific priorities and technical goals, that reflect the goals and priorities established for the Program;

(3) develop, within 6 months after the date of enactment of this Act, and update annually, a strategic plan to meet the goals and priorities established under paragraph (1) and to guide the activities of the program component areas established under paragraph (2);

(4) consult with academic, State, industry, and other appropriate groups conducting research on and using nanotechnology, and the Advisory Committee; and

(5) propose a coordinated interagency budget for the Program that will ensure the maintenance of a balanced nanotechnology research portfolio and ensure that each agency and each program component area is allocated the level of funding required to meet the goals and priorities established for the Program.

SEC. 4. ANNUAL REPORT.

The Director shall prepare an annual report, to be submitted to the Committee on Science of the House of

Representatives and the Committee on Commerce, Science, and Transportation of the Senate at the time of the President's budget request to Congress, that includes—

(1) the Program budget, for the current fiscal year, for each agency that participates in the Program and for each program component area;

(2) the proposed Program budget, for the next fiscal year, for each agency that participates in the Program and for each program component area;

(3) an analysis of the progress made toward achieving the goals and priorities established for the Program; and

(4) an analysis of the extent to which the Program has incorporated the recommendations of the Advisory Committee.

SEC. 5. ADVISORY COMMITTEE.

(a) IN GENERAL.—The President shall establish an advisory committee on nanotechnology consisting of non-Federal members, including representatives of research and academic institutions and industry, who are qualified to provide advice and information on nanotechnology research, development, demonstration, education, technology transfer, commercial application, and societal and ethical concerns. The recommendations of the Advisory Com-

mittee shall be considered by Federal agencies in implementing the Program.

(b) ASSESSMENT.—The Advisory Committee shall assess—

(1) trends and developments in nanotechnology science and engineering;

(2) progress made in implementing the Program;

(3) the need to revise the Program;

(4) the balance among the components of the Program, including funding levels for the program component areas;

(5) whether the program component areas, priorities, and technical goals developed by the Interagency Committee are helping to maintain United States leadership in nanotechnology;

(6) the management, coordination, implementation, and activities of the Program; and

(7) whether societal and ethical concerns are adequately addressed by the Program.

(c) REPORTS.—The Advisory Committee shall report not less frequently than once every 2 fiscal years to the President and to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate on its findings

of the assessment carried out under subsection (b), its recommendations for ways to improve the Program, and the concerns assessed under subsection (b)(7). The first report shall be due within 1 year after the date of enactment of this Act.

(d) FEDERAL ADVISORY COMMITTEE ACT APPLICATION.—Section 14 of the Federal Advisory Committee Act shall not apply to the Advisory Committee.

SEC. 6. NATIONAL NANOTECHNOLOGY COORDINATION OFFICE.

The President shall establish a National Nanotechnology Coordination Office, with full-time staff, which shall—

(1) provide technical and administrative support to the Interagency Committee and the Advisory Committee;

(2) serve as a point of contact on Federal nanotechnology activities for government organizations, academia, industry, professional societies, and others to exchange technical and programmatic information; and

(3) conduct public outreach, including dissemination of findings and recommendations of the Interagency Committee and the Advisory Committee, as appropriate.

SEC. 7. AUTHORIZATION OF APPROPRIATIONS.

(a) NATIONAL SCIENCE FOUNDATION.—There are authorized to be appropriated to the National Science Foundation for carrying out this Act—

(1) $350,000,000 for fiscal year 2004;

(2) $385,000,000 for fiscal year 2005; and

(3) $424,000,000 for fiscal year 2006.

(b) DEPARTMENT OF ENERGY.—There are authorized to be appropriated to the Secretary of Energy for carrying out this Act—

(1) $197,000,000 for fiscal year 2004;

(2) $217,000,000 for fiscal year 2005; and

(3) $239,000,000 for fiscal year 2006.

(c) NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.—There are authorized to be appropriated to the National Aeronautics and Space Administration for carrying out this Act—

(1) $31,000,000 for fiscal year 2004;

(2) $34,000,000 for fiscal year 2005; and

(3) $37,000,000 for fiscal year 2006.

(d) NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.—There are authorized to be appropriated to the National Institute of Standards and Technology for carrying out this Act—

(1) $62,000,000 for fiscal year 2004;

(2) $68,000,000 for fiscal year 2005; and

(3) $75,000,000 for fiscal year 2006.

(e) ENVIRONMENTAL PROTECTION AGENCY.—There are authorized to be appropriated to the Environmental Protection Agency for carrying out this Act—

(1) $5,000,000 for fiscal year 2004;

(2) $5,500,000 for fiscal year 2005; and

(3) $6,000,000 for fiscal year 2006.

SEC. 8. EXTERNAL REVIEW OF THE NATIONAL NANOTECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM.

Not later than 6 months after the date of enactment of this Act, the Director shall enter into an agreement with the National Academy of Sciences to conduct periodic reviews of the Program. The reviews shall be conducted once every 3 years during the 10-year period following the enactment of this Act. The reviews shall include—

(1) an evaluation of the technical achievements of the Program;

(2) recommendations for changes in the Program;

(3) an evaluation of the relative position of the United States with respect to other nations in nanotechnology research and development;

(4) an evaluation of the Program's success in transferring technology to the private sector;

(5) an evaluation of whether the Program has been successful in fostering interdisciplinary research and development; and

(6) an evaluation of the extent to which the Program has adequately considered societal and ethical concerns.

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