

103D CONGRESS  
1ST SESSION

# S. 1517

To establish a marine biotechnology program within the National Sea Grant College Program, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

OCTOBER 5 (legislative day, SEPTEMBER 27), 1993

Mr. HOLLINGS (for himself, Mr. PELL, Mr. KERRY, and Mr. STEVENS) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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# A BILL

To establish a marine biotechnology program within the National Sea Grant College Program, and for other purposes.

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

3 **SECTION 1. SHORT TITLE.**

4       This Act may be cited as the "Marine Biotechnology  
5 Investment Act of 1993".

6 **SEC. 2. FINDINGS.**

7       The Congress finds and declares the following:

8           (1) Throughout human history, the oceans and  
9       Great Lakes have been an important source of food  
10       and a wealth of other natural products.

12 (4) The United States currently is a world leader  
13 in marine biotechnology, a position with the potential  
14 for contributing to business and manufacturing  
15 innovations, creation of new jobs, and stimulation  
16 of private sector investment.

## 6 SEC. 3. DEFINITIONS.

7 As used in this Act—

13 (2) The term “Director” means the Director of  
14 the Office of Science and Technology Policy.

19 (A) identifying, isolating, developing, and  
20 enhancing products that are derived from the  
21 marine environment:

22 (B) developing and applying techniques to  
23 conserve, manage, and protect marine and  
24 coastal resources; and

(C) monitoring human health and treating disease.

3 (4) The term “release of organisms” means the  
4 intentional or accidental release, from a contained  
5 research facility into the surrounding environment,  
6 of a living marine or other aquatic organism in  
7 which the genetic material has been purposely al-  
8 tered at the molecular or cellular level in a way that  
9 could not result from the natural reproductive proc-  
10 ess of that organism.

15 (6) The term “Strategy” means the National  
16 Marine Biotechnology Strategy developed under sec-  
17 tion 4, or any revision thereof.

18 SEC. 4. NATIONAL MARINE BIOTECHNOLOGY STRATEGY.

19 (a) IN GENERAL.—The Director, through the Council  
20 and its Committee on Life Sciences and Health, shall de-  
21 velop a National Marine Biotechnology Strategy for the  
22 establishment and implementation of a comprehensive re-  
23 search and development effort to assist the Nation in un-  
24 derstanding and using marine biotechnology. The Director  
25 shall submit the Strategy to the President and Congress

1 within one year after the date of enactment of this Act  
2 and shall submit a revised Strategy at least once every  
3 three years thereafter.

4 (b) ELEMENTS OF THE STRATEGY.—The Strategy  
5 shall—

6 (1) establish, for the ten-year period beginning  
7 in the year the Strategy is submitted, goals and pri-  
8 orities for a coordinated Federal effort in marine  
9 biotechnology;

10 (2) describe specific activities to achieve such  
11 goals and priorities, including—

12 (A) basic and applied research initiatives;  
13 (B) essential infrastructure development;  
14 (C) education and training programs; and  
15 (D) development of partnerships among  
16 government agencies, industry, and academia to  
17 translate research findings into practical use;

18 (3) set forth the role of each participating Fed-  
19 eral agency and department, identifying and ad-  
20 dressing (consistent with the responsibilities estab-  
21 lished in this Act) relevant programs and activities  
22 of such agencies and departments that would con-  
23 tribute to the effort;

8 (A) guidelines and performance standards  
9 that are necessary for the safe conduct of such  
10 activities and for preventing significant environ-  
11 mental risk; and

12 (B) procedures to ensure compliance with  
13 such guidelines and performance standards.

14 (c) CONSULTATION.—In developing and revising the  
15 Strategy, the Director—

16 (1) shall consult with Federal, State, academic,  
17 commercial, and environmental entities involved in  
18 marine biotechnology;

5 (B) identify existing laws, regulations,  
6 guidelines, and protocols that apply to release  
7 of organisms;

8 (C) examine and evaluate the adequacy of  
9 oversight by each Federal agency or department  
10 supporting activities that may involve release of  
11 organisms; and

12 (D) recommend (for the conduct and over-  
13 sight of activities that may involve release of or-  
14 ganisms) regulations, guidelines, performance  
15 standards, and procedures to assess and mini-  
16 mize the environmental risk associated with  
17 such release.

18 SEC. 5. NATIONAL OCEANIC AND ATMOSPHERIC ADMINIS-  
19 TRATION.

20 (a) IN GENERAL.—The Secretary of Commerce, in  
21 consultation with the Council, shall, within the National  
22 Oceanic and Atmospheric Administration, maintain a bal-  
23 anced program of marine biotechnology activities, com-  
24 prised of—

5 (2) research conducted under agreements with  
6 academic institutions for the purposes of developing  
7 and applying marine biotechnology to the manage-  
8 ment, conservation, and use of living marine re-  
9 sources; and

10 (3) marine forensics, biotoxins, and  
11 microbiological research on new methods for ensur-  
12 ing the safety of seafood, implementing and enforc-  
13 ing marine environmental statutes, and addressing  
14 coastal pollution.

15 (b) RESTRICTION RELATING TO RELEASE OF ORGA-  
16 NISMS.—The Secretary of Commerce shall not conduct ac-  
17 tivities (including the award of a grant or contract) that  
18 may involve release of organisms, unless such activities—

19 (1) have been reviewed and approved under  
20 other applicable Federal law; or

21 (2) are found by the Secretary of Commerce,  
22 based on a written assessment, to pose no significant  
23 environmental risk.

24 (c) AUTHORIZATION OF APPROPRIATIONS.—In addi-  
25 tion to the sums authorized to be appropriated under sec-

1 tion 212 of the National Sea Grant College Program Act  
2 (33 U.S.C. 1131), there are authorized to be appropriated  
3 to the Secretary of Commerce, to enable the National Oce-  
4 anic and Atmospheric Administration to carry out this  
5 Act, not to exceed \$12,000,000 for each of the fiscal years  
6 1994, 1995, 1996, and 1997.

7 **SEC. 6. SEA GRANT MARINE BIOTECHNOLOGY PROGRAM.**

8 (a) ESTABLISHMENT.—The National Sea Grant Col-  
9 lege Program Act (33 U.S.C. 1121 et seq.) is amended  
10 by inserting immediately after section 205 the following  
11 new section:

12 **“SEC. 206. MARINE BIOTECHNOLOGY PROGRAM.**

13 “(a) MARINE BIOTECHNOLOGY PROGRAM.—Subject  
14 to the availability of appropriations under section 212(d),  
15 the national sea grant college program provided for under  
16 section 204 shall include a marine biotechnology program  
17 under which the Secretary, acting through the Director,  
18 shall—

19 “(1) make grants and enter into contracts in  
20 accordance with this section; and

21 “(2) engage in other activities authorized under  
22 this Act;

23 to further research, development, education, technology  
24 transfer, and risk assessment in marine biotechnology.

1       “(b) ADMINISTRATION.—In carrying out the marine  
2 biotechnology program, the Secretary shall—

3           “(1) coordinate the relevant activities of the di-  
4 rectors of the sea grant colleges and the Marine Bio-  
5 technology Review Panel established under sub-  
6 section (d); and

7           “(2) provide general oversight of the review  
8 process under subsection (d)(1) to ensure that the  
9 marine biotechnology program produces the highest  
10 quality research, development, education, and tech-  
11 nology transfer.

12       “(c) GRANTS AND CONTRACTS.—

13           “(1) APPLICATIONS.—Applications for grants  
14 and contracts under this section shall be—

15           “(A) made in such form and manner, and  
16 include such content and submissions, as the  
17 Secretary shall by regulation prescribe;

18           “(B) forwarded through the appropriate  
19 directors of sea grant colleges to the National  
20 Sea Grant Office; and

21           “(C) reviewed by the Marine Biotechnology  
22 Review Panel in accordance with subsection (d).

23           “(2) TERMS AND CONDITIONS.—Any reference  
24 in subsection (d) of section 205 or in the last sen-  
25 tence of subsection (a) of section 205 to grants and

1 contracts provided for under that section shall be  
2 treated, as the context requires, as including any  
3 grant applied for or made, or contract applied for or  
4 entered into, under this section.

5 “(3) AWARDING OF GRANTS AND CON-  
6 TRACTS.—The Secretary shall award grants and  
7 contracts under this section on the basis of the rec-  
8 ommendations for award made by the Marine Bio-  
9 technology Review Panel under subsection (d).

10 “(d) MARINE BIOTECHNOLOGY REVIEW PANEL.—

11 “(1) ESTABLISHMENT AND DUTIES.—Subject  
12 to the availability of appropriations under section  
13 212(c), the Director, in consultation with the direc-  
14 tors of the sea grant colleges, shall convene a panel,  
15 to be known as the Marine Biotechnology Review  
16 Panel, that shall—

17 “(A) review, on a competitive basis, the ap-  
18 plications made under this section for grants  
19 and contracts to determine their respective sci-  
20 entific, technical, educational, and commercial  
21 merits and likely contributions toward achieving  
22 the purposes of this section; and

23 “(B) on the basis of the review under sub-  
24 paragraph (A), and with due regard for the  
25 overall balance and coordination of the marine

1           biotechnology program, make recommendations  
2           to the Secretary regarding the awarding of  
3           grants and contracts under this section.

4           “(2) MEMBERSHIP.—The Marine Biotechnology  
5           Review Panel shall—

6               “(A) consist of not more than fifteen indi-  
7           viduals with scientific or technical expertise in  
8           marine biotechnology or relevant related fields,  
9           including at least one qualified individual with  
10           expertise in marine or freshwater ecological risk  
11           assessment;

12           “(B) reflect a balance among areas of ex-  
13           pertise consistent with the purposes of this sec-  
14           tion;

15           “(C) not include Federal employees or di-  
16           rectors of sea grant colleges; and

17           “(D) reflect geographic balance, consistent  
18           with the primary objectives of a high level of ex-  
19           pertise and balance among areas of expertise.

20           “(3) ALLOWANCES.—Each member of the Ma-  
21           rine Biotechnology Review Panel shall receive travel  
22           expenses, including per diem in lieu of subsistence,  
23           in accordance with sections 5702 and 5703 of title  
24           5, United States Code.”.

1       (b) DEFINITIONS.—(1) Section 203 of the National  
2 Sea Grant College Program Act (33 U.S.C. 1122) is  
3 amended by redesignating paragraphs (6) through (15) as  
4 paragraphs (7) through (16), respectively, and by insert-  
5 ing after paragraph (5) the following new paragraph:

6               “(6) The term ‘marine biotechnology’ means  
7 the application of molecular and cellular techniques  
8 to marine and other aquatic organisms for the pur-  
9 poses of—

10               “(A) identifying, isolating, developing, and  
11 enhancing products that are derived from the  
12 marine environment;

13               “(B) developing and applying techniques to  
14 conserve, manage, and protect marine and  
15 coastal resources; and

16               “(C) monitoring human health and treat-  
17 ing disease.”.

18       (2) Section 203(4) of the National Sea Grant College  
19 Program Act (33 U.S.C. 1122(4)) is amended by inserting  
20 “marine biotechnology,” immediately after “marine tech-  
21 nology.”.

22       (c) AUTHORIZATION OF APPROPRIATIONS.—Section  
23 212 of the National Sea Grant College Program Act (33  
24 U.S.C. 1131) is amended—

4 (2) by redesignating subsections (c), (d), and  
5 (e) as subsection (d), (e), and (f), respectively; and

6 (3) by inserting immediately after subsection

7 (b) the following new subsection:

8        "(c) MARINE BIOTECHNOLOGY PROGRAM.—

8 (c) MARINE BIOTECHNOLOGY PROGRAM.—

9               “(1) GRANTS AND CONTRACTS.—There is au-  
10              thorized to be appropriated to carry out the provi-  
11              sions of section 206 (other than for administration)  
12              an amount—

17               “(2) ADMINISTRATION.—There is authorized to  
18       be appropriated for the administration of section  
19       206, an amount—

