

Union Calendar No. 537

106TH CONGRESS
2D SESSION

H. R. 1795

[Report No. 106-889]

To amend the Public Health Service Act to establish the National Institute of Biomedical Imaging and Engineering.

IN THE HOUSE OF REPRESENTATIVES

MAY 13, 1999

Mr. BURR of North Carolina (for himself and Ms. ESHOO) introduced the following bill; which was referred to the Committee on Commerce

SEPTEMBER 26, 2000

Additional sponsors: Mr. GREENWOOD, Mr. BENTSEN, Mr. McNULTY, Mr. FROST, Mr. GARY MILLER of California, Mr. EHLERS, Mr. RAHALL, Mr. BALDACCI, Mr. LANTOS, Mr. DAVIS of Florida, Mr. THOMPSON of California, Mr. PRICE of North Carolina, Mr. BARTON of Texas, Mr. TRAFICANT, Mr. TAYLOR of North Carolina, Mr. BACHUS, Mrs. MORELLA, Mr. BOUCHER, Mr. LOBIONDO, Mr. GREEN of Texas, Mr. GUTIERREZ, Mr. FILNER, Mr. OBERSTAR, Mrs. JOHNSON of Connecticut, Mr. HORN, Mr. VENTO, Mr. BLAGOJEVICH, Mr. ISAKSON, Ms. SCHAKOWSKY, Mr. POMEROY, Ms. RIVERS, Mr. CAPUANO, Mr. WATT of North Carolina, Mr. BALLENGER, Mr. WELDON of Pennsylvania, Mrs. MINK of Hawaii, Mr. BILBRAY, Mr. PETERSON of Pennsylvania, Mr. MCINTYRE, Mr. SHAYS, Mr. CLAY, Mr. HALL of Ohio, Mr. WU, Mr. SANDERS, Mr. MALONEY of Connecticut, Mrs. THURMAN, Mr. CLEMENT, Mr. PASTOR, Mr. McDERMOTT, Mr. KLECZKA, Mr. JEFFERSON, Mr. DAVIS of Illinois, Mr. LIPINSKI, Mr. GILCHREST, Mr. DEUTSCH, Mr. WEINER, Mr. MATSUI, Mr. GEKAS, Mr. KENNEDY of Rhode Island, Mr. CANADY of Florida, Mr. SANDLIN, Mr. SENSENBRENNER, Mr. SMITH of Texas, Mr. WEXLER, Mr. FATTAH, Mr. ABERCROMBIE, Mrs. MALONEY of New York, Mr. LATOURETTE, Mr. BRADY of Pennsylvania, Mr. COOK, Mr. TOWNS, Ms. PELOSI, Mrs. MCCARTHY of New York, Ms. BERKLEY, Mrs. MYRICK, Mr. BORSKI, Mr. HAYWORTH, Mr. MOAKLEY, Ms. STABENOW, Ms. LEE, Mr. ETHERIDGE, Mr. SMITH of New Jersey, Mr. KILDEE, Mr. RODRIGUEZ, Mr. ROTHMAN, Mr. COBLE, Mr. JONES of North Carolina, Mr. GONZALEZ, Mr. MCGOVERN, Mr. MORAN of Virginia, Mr. BONIOR,

Mr. RUSH, Mr. KUCINICH, Mr. COYNE, Mr. UDALL of Colorado, Mr. NORWOOD, Mr. HEFLEY, Mr. HAYES, Mr. LEWIS of Georgia, Mr. SPENCE, Mr. HOSTETTLER, Ms. WOOLSEY, Mrs. CLAYTON, Ms. KILPATRICK, Mr. GEJDENSON, Mr. DEAL of Georgia, Mr. RANGEL, Mr. LAFALCE, Mr. PICKERING, Mr. PAYNE, Ms. MILLENDER-MCDONALD, Mr. WYNN, Mr. PETERSON of Minnesota, Mr. NADLER, Mr. BARRETT of Wisconsin, Mr. ENGEL, Mr. COX, Mr. OWENS, Mr. ROMERO-BARCELO, Mr. WEYGAND, Mr. FORBES, Mr. HINCHEY, Mr. GOODLING, Mr. SAXTON, Mr. GOODE, Mr. CUMMINGS, Mr. LEACH, Mr. VITTER, Mr. SCHAFFER, Mr. WOLF, Ms. NORTON, Mr. NEAL of Massachusetts, Mr. TANCREDO, Mr. TALENT, Mr. PETRI, Mr. SHAW, Mr. OLVER, Mr. STARK, Mr. COMBEST, Mr. PALLONE, Mr. HOLT, Mrs. JONES of Ohio, Mr. CARDIN, Mr. CAMP, Ms. WATERS, Ms. LOFGREN, Mr. LAHOOD, Mr. BARCIA, Mr. BARTLETT of Maryland, Mr. GUTKNECHT, Mr. BLUMENAUER, Mr. MARKEY, Mr. MCINTOSH, Mr. BAKER, Ms. EDDIE BERNICE JOHNSON of Texas, Mr. TIERNEY, Mr. CAMPBELL, Mr. ANDREWS, Mr. MENENDEZ, Mr. SAWYER, Mr. GORDON, Mr. MCHUGH, Mr. PASCRELL, Mrs. KELLY, Mr. DEFazio, Mr. DOYLE, Mr. SHADEGG, Mr. EHRLICH, and Ms. DEGETTE

SEPTEMBER 26, 2000

Reported with amendments, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

[Strike out all after the enacting clause and insert the part printed in italic]

[For text of introduced bill, see copy of bill as introduced on May 13, 1999]

A BILL

To amend the Public Health Service Act to establish the National Institute of Biomedical Imaging and Engineering.

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 “National Institute of*
 5 *Biomedical Imaging and Bioengineering Establishment*
 6 *Act”.*

1 **SEC. 2. FINDINGS.**

2 *The Congress makes the following findings:*

3 (1) *Basic research in imaging, bioengineering,*
4 *computer science, informatics, and related fields is*
5 *critical to improving health care but is fundamentally*
6 *different from the research in molecular biology on*
7 *which the current national research institutes at the*
8 *National Institutes of Health (“NIH”) are based. To*
9 *ensure the development of new techniques and tech-*
10 *nologies for the 21st century, these disciplines there-*
11 *fore require an identity and research home at the*
12 *NIH that is independent of the existing institute*
13 *structure.*

14 (2) *Advances based on medical research promise*
15 *new, more effective treatments for a wide variety of*
16 *diseases, but the development of new, noninvasive im-*
17 *aging techniques for earlier detection and diagnosis of*
18 *disease is essential to take full advantage of such new*
19 *treatments and to promote the general improvement*
20 *of health care.*

21 (3) *The development of advanced genetic and*
22 *molecular imaging techniques is necessary to continue*
23 *the current rapid pace of discovery in molecular biol-*
24 *ogy.*

25 (4) *Advances in telemedicine, and teleradiology*
26 *in particular, are increasingly important in the de-*

1 *livery of high quality, reliable medical care to rural*
2 *citizens and other underserved populations. To fulfill*
3 *the promise of telemedicine and related technologies*
4 *fully, a structure is needed at the NIH to support*
5 *basic research focused on the acquisition, trans-*
6 *mission, processing, and optimal display of images.*

7 (5) *A number of Federal departments and agen-*
8 *cies support imaging and engineering research with*
9 *potential medical applications, but a central coordi-*
10 *nating body, preferably housed at the NIH, is needed*
11 *to coordinate these disparate efforts and facilitate the*
12 *transfer of technologies with medical applications.*

13 (6) *Several breakthrough imaging technologies,*
14 *including magnetic resonance imaging (“MRI”) and*
15 *computed tomography (“CT”), have been developed*
16 *primarily abroad, in large part because of the absence*
17 *of a home at the NIH for basic research in imaging*
18 *and related fields. The establishment of a central focus*
19 *for imaging and bioengineering research at the NIH*
20 *would promote both scientific advance and U.S. eco-*
21 *nomie development.*

22 (7) *At a time when a consensus exists to add sig-*
23 *nificant resources to the NIH in coming years, it is*
24 *appropriate to modernize the structure of the NIH to*
25 *ensure that research dollars are expended more effec-*

1 *tively and efficiently and that the fields of medical*
2 *science that have contributed the most to the detection,*
3 *diagnosis, and treatment of disease in recent years re-*
4 *ceive appropriate emphasis.*

5 *(8) The establishment of a National Institute of*
6 *Biomedical Imaging and Bioengineering at the NIH*
7 *would accelerate the development of new technologies*
8 *with clinical and research applications, improve co-*
9 *ordination and efficiency at the NIH and throughout*
10 *the Federal government, reduce duplication and*
11 *waste, lay the foundation for a new medical informa-*
12 *tion age, promote economic development, and provide*
13 *a structure to train the young researchers who will*
14 *make the pathbreaking discoveries of the next century.*

15 **SEC. 3. ESTABLISHMENT OF NATIONAL INSTITUTE OF BIO-**
16 **MEDICAL IMAGING AND BIOENGINEERING.**

17 *(a) IN GENERAL.—Part C of title IV of the Public*
18 *Health Service Act (42 U.S.C. 285 et seq.) is amended by*
19 *adding at the end the following subpart:*

20 *“Subpart 18—National Institute of Biomedical Imaging*
21 *and Bioengineering*

22 *“PURPOSE OF THE INSTITUTE*

23 *“SEC. 464z. (a) The general purpose of the National*
24 *Institute of Biomedical Imaging and Bioengineering (in*
25 *this section referred to as the ‘Institute’) is the conduct and*

1 *support of research, training, the dissemination of health*
2 *information, and other programs with respect to biomedical*
3 *imaging, biomedical engineering, and associated tech-*
4 *nologies and modalities with biomedical applications (in*
5 *this section referred to as ‘biomedical imaging and bio-*
6 *engineering’).*

7 “(b)(1) *The Director of the Institute, with the advice*
8 *of the Institute’s advisory council, shall establish a National*
9 *Biomedical Imaging and Bioengineering Program (in this*
10 *section referred to as the ‘Program’).*

11 “(2) *Activities under the Program shall include the fol-*
12 *lowing with respect to biomedical imaging and bio-*
13 *engineering:*

14 “(A) *Research into the development of new tech-*
15 *niques and devices.*

16 “(B) *Related research in physics, engineering,*
17 *mathematics, computer science, and other disciplines.*

18 “(C) *Technology assessments and outcomes stud-*
19 *ies to evaluate the effectiveness of biologics, materials,*
20 *processes, devices, procedures, and informatics.*

21 “(D) *Research in screening for diseases and dis-*
22 *orders.*

23 “(E) *The advancement of existing imaging and*
24 *bioengineering modalities, including imaging, bio-*
25 *materials, and informatics.*

1 “(F) *The development of target-specific agents to*
2 *enhance images and to identify and delineate disease.*

3 “(G) *The development of advanced engineering*
4 *and imaging technologies and techniques for research*
5 *from the molecular and genetic to the whole organ*
6 *and body levels.*

7 “(H) *The development of new techniques and de-*
8 *VICES for more effective interventional procedures (such*
9 *as image-guided interventions).*

10 “(3)(A) *With respect to the Program, the Director of*
11 *the Institute shall prepare and transmit to the Secretary*
12 *and the Director of NIH a plan to initiate, expand, inten-*
13 *sify, and coordinate activities of the Institute with respect*
14 *to biomedical imaging and bioengineering. The plan shall*
15 *include such comments and recommendations as the Direc-*
16 *tor of the Institute determines appropriate. The Director*
17 *of the Institute shall periodically review and revise the plan*
18 *and shall transmit any revisions of the plan to the Sec-*
19 *retary and the Director of NIH.*

20 “(B) *The plan under subparagraph (A) shall include*
21 *the recommendations of the Director of the Institute with*
22 *respect to the following:*

23 “(i) *Where appropriate, the consolidation of pro-*
24 *grams of the National Institutes of Health for the ex-*
25 *press purpose of enhancing support of activities re-*

1 *garding basic biomedical imaging and bioengineering*
2 *research.*

3 *“(i) The coordination of the activities of the In-*
4 *stitute with related activities of the other agencies of*
5 *the National Institutes of Health and with related ac-*
6 *tivities of other Federal agencies.*

7 *“(c) The establishment under section 406 of an advi-*
8 *sory council for the Institute is subject to the following:*

9 *“(1) The number of members appointed by the*
10 *Secretary shall be 12.*

11 *“(2) Of such members—*

12 *“(A) 6 members shall be scientists, engi-*
13 *neers, physicians, and other health professionals*
14 *who represent disciplines in biomedical imaging*
15 *and bioengineering and who are not officers or*
16 *employees of the United States; and*

17 *“(B) 6 members shall be scientists, engi-*
18 *neers, physicians, and other health professionals*
19 *who represent other disciplines and are knowl-*
20 *edgeable about the applications of biomedical im-*
21 *aging and bioengineering in medicine, and who*
22 *are not officers or employees of the United*
23 *States.*

24 *“(3) In addition to the ex officio members speci-*
25 *fied in section 406(b)(2), the ex officio members of the*

1 *advisory council shall include the Director of the Cen-*
2 *ters for Disease Control and Prevention, the Director*
3 *of the National Science Foundation, and the Director*
4 *of the National Institute of Standards and Technology*
5 *(or the designees of such officers).*

6 “(d)(1) *Subject to paragraph (2), for the purpose of*
7 *carrying out this section:*

8 “(A) *For fiscal year 2001, there is authorized to*
9 *be appropriated an amount equal to the amount obli-*
10 *gated by the National Institutes of Health during fis-*
11 *cal year 2000 for biomedical imaging and bio-*
12 *engineering, except that such amount shall be ad-*
13 *justed to offset any inflation occurring after October*
14 *1, 1999.*

15 “(B) *For each of the fiscal years 2002 and 2003,*
16 *there is authorized to be appropriated an amount*
17 *equal to the amount appropriated under subpara-*
18 *graph (A) for fiscal year 2001, except that such*
19 *amount shall be adjusted for the fiscal year involved*
20 *to offset any inflation occurring after October 1, 2000.*

21 “(2) *The authorization of appropriations for a fiscal*
22 *year under paragraph (1) is hereby reduced by the amount*
23 *of any appropriation made for such year for the conduct*
24 *or support by any other national research institute of any*

1 *program with respect to biomedical imaging and bio-*
2 *engineering.”.*

3 **(b) USE OF EXISTING RESOURCES.**—*In providing for*
4 *the establishment of the National Institute of Biomedical*
5 *Imaging and Bioengineering pursuant to the amendment*
6 *made by subsection (a), the Director of the National Insti-*
7 *tutes of Health (referred to in this subsection as “NIH”)—*

8 (1) *may transfer to the National Institute of*
9 *Biomedical Imaging and Bioengineering such per-*
10 *sonnel of NIH as the Director determines to be appro-*
11 *priate;*

12 (2) *may, for quarters for such Institute, utilize*
13 *such facilities of NIH as the Director determines to*
14 *be appropriate; and*

15 (3) *may obtain administrative support for the*
16 *Institute from the other agencies of NIH, including*
17 *the other national research institutes.*

18 **(c) CONSTRUCTION OF FACILITIES.**—*None of the provi-*
19 *sions of this Act or the amendments made by the Act may*
20 *be construed as authorizing the construction of facilities,*
21 *or the acquisition of land, for purposes of the establishment*
22 *or operation of the National Institute of Biomedical Imag-*
23 *ing and Bioengineering.*

24 **(d) DATE CERTAIN FOR ESTABLISHMENT OF ADVI-**
25 **SORY COUNCIL.**—*Not later than 90 days after the effective*

1 *date of this Act under section 4, the Secretary of Health*
2 *and Human Services shall complete the establishment of an*
3 *advisory council for the National Institute of Biomedical*
4 *Imaging and Bioengineering in accordance with section*
5 *406 of the Public Health Service Act and in accordance*
6 *with section 464z of such Act (as added by subsection (a)*
7 *of this section).*

8 *(e) CONFORMING AMENDMENT.—Section 401(b)(1) of*
9 *the Public Health Service Act (42 U.S.C. 281(b)(1)) is*
10 *amended by adding at the end the following subparagraph:*

11 *“(R) The National Institute of Biomedical Imag-*
12 *ing and Bioengineering.”.*

13 **SEC. 4. EFFECTIVE DATE.**

14 *This Act takes effect October 1, 2000, or upon the date*
15 *of the enactment of this Act, whichever occurs later.*

Amend the title so as to read: “A bill to amend the Public Health Service Act to establish the National Institute of Biomedical Imaging and Bioengineering.”.

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