

106TH CONGRESS  
1ST SESSION

# H. R. 1795

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

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## 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

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## 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 Engineering Establishment Act”.

6       **SEC. 2. FINDINGS.**

7       The Congress makes the following findings:

8               (1) Basic research in imaging, bioengineering,  
9       computer science, informatics, and related fields is  
10       critical to improving health care but is fundamen-

1 tally different from the research in molecular biology  
2 on which the current national research institutes at  
3 the National Institutes of Health (“NIH”) are  
4 based. To ensure the development of new techniques  
5 and technologies for the 21st century, these dis-  
6 ciplines therefore require an identity and research  
7 home at the NIH that is independent of the existing  
8 institute structure.

9 (2) Advances based on medical research prom-  
10 ise new, more effective treatments for a wide variety  
11 of diseases, but the development of new, noninvasive  
12 imaging techniques for earlier detection and diag-  
13 nosis of disease is essential to take full advantage of  
14 such new treatments and to promote the general im-  
15 provement of health care.

16 (3) The development of advanced genetic and  
17 molecular imaging techniques is necessary to con-  
18 tinue the current rapid pace of discovery in molec-  
19 ular biology.

20 (4) Advances in telemedicine, and teleradiology  
21 in particular, are increasingly important in the deliv-  
22 ery of high quality, reliable medical care to rural  
23 citizens and other underserved populations. To fulfill  
24 the promise of telemedicine and related technologies  
25 fully, a structure is needed at the NIH to support

1 basic research focused on the acquisition, trans-  
2 mission, processing, and optimal display of images.

3 (5) A number of Federal departments and  
4 agencies support imaging and engineering research  
5 with potential medical applications, but a central co-  
6 ordinating body, preferably housed at the NIH, is  
7 needed to coordinate these disparate efforts and fa-  
8 cilitate the transfer of technologies with medical ap-  
9 plications.

10 (6) Several breakthrough imaging technologies,  
11 including magnetic resonance imaging (“MRI”) and  
12 computed tomography (“CT”), have been developed  
13 primarily abroad, in large part because of the ab-  
14 sence of a home at the NIH for basic research in  
15 imaging and related fields. The establishment of a  
16 central focus for imaging and bioengineering re-  
17 search at the NIH would promote both scientific ad-  
18 vance and U.S. economic development.

19 (7) At a time when a consensus exists to add  
20 significant resources to the NIH in coming years, it  
21 is appropriate to modernize the structure of the  
22 NIH to ensure that research dollars are expended  
23 more effectively and efficiently and that the fields of  
24 medical science that have contributed the most to

1 the detection, diagnosis, and treatment of disease in  
2 recent years receive appropriate emphasis.

3 (8) The establishment of a National Institute of  
4 Biomedical Imaging and Engineering at the NIH  
5 would accelerate the development of new tech-  
6 nologies with clinical and research applications, im-  
7 prove coordination and efficiency at the NIH and  
8 throughout the Federal government, reduce duplica-  
9 tion and waste, lay the foundation for a new medical  
10 information age, promote economic development, and  
11 provide a structure to train the young researchers  
12 who will make the pathbreaking discoveries of the  
13 next century.

14 **SEC. 3. ESTABLISHMENT OF NATIONAL INSTITUTE OF BIO-**  
15 **MEDICAL IMAGING AND ENGINEERING.**

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

19 “Subpart 18—National Institute of Biomedical Imaging  
20 and Engineering

21 “PURPOSE OF THE INSTITUTE

22 “SEC. 464z. (a) The general purpose of the National  
23 Institute of Biomedical Imaging and Engineering (in this  
24 section referred to as the ‘Institute’) is the conduct and  
25 support of research, training, the dissemination of health

1 information, and other programs with respect to bio-  
2 medical imaging, biomedical engineering, and associated  
3 technologies and modalities with biomedical applications  
4 (in this section referred to as ‘biomedical imaging and en-  
5 gineering’).

6 “(b)(1) The Director of the Institute, with the advice  
7 of the Institute’s advisory council, shall establish a Na-  
8 tional Biomedical Imaging and Engineering Program (in  
9 this section referred to as the ‘Program’).

10 “(2) Activities under the Program shall include the  
11 following with respect to biomedical imaging and engineer-  
12 ing:

13 “(A) Research into the development of new  
14 techniques and devices.

15 “(B) Related research in physics, engineering,  
16 mathematics, computer science, and other dis-  
17 ciplines.

18 “(C) Technology assessments and outcomes  
19 studies to evaluate the effectiveness of biologics, ma-  
20 terials, processes, devices, procedures, and  
21 informatics.

22 “(D) Research in screening for diseases and  
23 disorders.

1           “(E) The advancement of existing imaging and  
2           engineering modalities, including imaging, biomate-  
3           rials, and informatics.

4           “(F) The development of target-specific agents  
5           to enhance images and to identify and delineate dis-  
6           ease.

7           “(G) The development of advanced engineering  
8           and imaging technologies and techniques for re-  
9           search from the molecular and genetic to the whole  
10          organ and body levels.

11          “(H) The development of new techniques and  
12          devices for more effective interventional procedures  
13          (such as image-guided interventions).

14          “(3)(A) With respect to the Program, the Director  
15          of the Institute shall prepare and transmit to the Sec-  
16          retary and the Director of NIH a plan to initiate, expand,  
17          intensify, and coordinate activities of the Institute with re-  
18          spect to biomedical imaging and engineering. The plan  
19          shall include such comments and recommendations as the  
20          Director of the Institute determines appropriate. The Di-  
21          rector of the Institute shall periodically review and revise  
22          the plan and shall transmit any revisions of the plan to  
23          the Secretary and the Director of NIH.

1 “(B) The plan under subparagraph (A) shall include  
2 the recommendations of the Director of the Institute with  
3 respect to the following:

4 “(i) Where appropriate, the consolidation of  
5 programs of the National Institutes of Health for  
6 the express purpose of enhancing support of activi-  
7 ties regarding basic biomedical imaging and engi-  
8 neering research.

9 “(ii) The coordination of the activities of the  
10 Institute with related activities of the other agencies  
11 of the National Institutes of Health and with related  
12 activities of other Federal agencies.

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

15 “(1) The number of members appointed by the  
16 Secretary shall be 12.

17 “(2) Of such members—

18 “(A) 6 members shall be scientists, engi-  
19 neers, physicians, and other health professionals  
20 who represent disciplines in biomedical imaging  
21 and engineering and who are not officers or em-  
22 ployees of the United States; and

23 “(B) 6 members shall be scientists, engi-  
24 neers, physicians, and other health professionals  
25 who represent other disciplines and are knowl-

1           edgeable about the applications of biomedical  
2           imaging and engineering in medicine, and who  
3           are not officers or employees of the United  
4           States.

5           “(3) In addition to the ex officio members spec-  
6           ified in section 406(b)(2), the ex officio members of  
7           the advisory council shall include the Director of the  
8           Centers for Disease Control and Prevention, the Di-  
9           rector of the National Science Foundation, and the  
10          Director of the National Institute of Standards and  
11          Technology (or the designees of such officers).

12          “(d)(1) Subject to paragraph (2), for the purpose of  
13 carrying out this section:

14           “(A) For fiscal year 2000, there is authorized  
15           to be appropriated an amount equal to the amount  
16           obligated by the National Institutes of Health dur-  
17           ing fiscal year 1999 for biomedical imaging and en-  
18           gineering, except that such amount shall be adjusted  
19           to offset any inflation occurring after October 1,  
20           1998.

21           “(B) For each of the fiscal years 2001 and  
22           2002, there is authorized to be appropriated an  
23           amount equal to the amount appropriated under  
24           subparagraph (A) for fiscal year 2000, except that  
25           such amount shall be adjusted for the fiscal year in-

1       volved to offset any inflation occurring after October  
2       1, 1999.

3       “(2) The authorization of appropriations for a fiscal  
4       year under paragraph (1) is hereby reduced by the amount  
5       of any appropriation made for such year for the conduct  
6       or support by any other national research institute of any  
7       program with respect to biomedical imaging and engineer-  
8       ing.”.

9       (b) USE OF EXISTING RESOURCES.—In providing for  
10      the establishment of the National Institute of Biomedical  
11      Imaging and Engineering pursuant to the amendment  
12      made by subsection (a), the Director of the National Insti-  
13      tutes of Health (referred to in this subsection as  
14      “NIH”)—

15           (1) may transfer to the National Institute of  
16      Biomedical Imaging and Engineering such personnel  
17      of NIH as the Director determines to be appro-  
18      priate;

19           (2) may, for quarters for such Institute, utilize  
20      such facilities of NIH as the Director determines to  
21      be appropriate; and

22           (3) may obtain administrative support for the  
23      Institute from the other agencies of NIH, including  
24      the other national research institutes.

1 (c) CONSTRUCTION OF FACILITIES.—None of the  
2 provisions of this Act or the amendments made by the Act  
3 may be construed as authorizing the construction of facili-  
4 ties, or the acquisition of land, for purposes of the estab-  
5 lishment or operation of the National Institute of Bio-  
6 medical Imaging and Engineering.

7 (d) DATE CERTAIN FOR ESTABLISHMENT OF ADVI-  
8 SORY COUNCIL.—Not later than 90 days after the effec-  
9 tive date of this Act under section 4, the Secretary of  
10 Health and Human Services shall complete the establish-  
11 ment of an advisory council for the National Institute of  
12 Biomedical Imaging and Engineering in accordance with  
13 section 406 of the Public Health Service Act and in ac-  
14 cordance with section 464z of such Act (as added by sub-  
15 section (a) of this section).

16 (e) CONFORMING AMENDMENT.—Section 401(b)(1)  
17 of the Public Health Service Act (42 U.S.C. 281(b)(1))  
18 is amended by adding at the end the following subpara-  
19 graph:

20 “(R) The National Institute of Biomedical Im-  
21 aging and Engineering.”.

22 **SEC. 4. EFFECTIVE DATE.**

23 This Act takes effect October 1, 1999, or upon the  
24 date of the enactment of this Act, whichever occurs later.

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