

106TH CONGRESS  
2D SESSION

# H. R. 1795

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## AN ACT

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



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## AN ACT

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

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “National Institute of  
3 Biomedical Imaging and Bioengineering Establishment  
4 Act”.

5 **SEC. 2. FINDINGS.**

6 The Congress makes the following findings:

7 (1) Basic research in imaging, bioengineering,  
8 computer science, informatics, and related fields is  
9 critical to improving health care but is fundamen-  
10 tally different from the research in molecular biology  
11 on which the current national research institutes at  
12 the National Institutes of Health (“NIH”) are  
13 based. To ensure the development of new techniques  
14 and technologies for the 21st century, these dis-  
15 ciplines therefore require an identity and research  
16 home at the NIH that is independent of the existing  
17 institute structure.

18 (2) Advances based on medical research prom-  
19 ise new, more effective treatments for a wide variety  
20 of diseases, but the development of new, noninvasive  
21 imaging techniques for earlier detection and diag-  
22 nosis of disease is essential to take full advantage of  
23 such new treatments and to promote the general im-  
24 provement of health care.

25 (3) The development of advanced genetic and  
26 molecular imaging techniques is necessary to con-

1       tinue the current rapid pace of discovery in molec-  
2       ular biology.

3               (4) Advances in telemedicine, and teleradiology  
4       in particular, are increasingly important in the deliv-  
5       ery of high quality, reliable medical care to rural  
6       citizens and other underserved populations. To fulfill  
7       the promise of telemedicine and related technologies  
8       fully, a structure is needed at the NIH to support  
9       basic research focused on the acquisition, trans-  
10      mission, processing, and optimal display of images.

11              (5) A number of Federal departments and  
12      agencies support imaging and engineering research  
13      with potential medical applications, but a central co-  
14      ordinating body, preferably housed at the NIH, is  
15      needed to coordinate these disparate efforts and fa-  
16      cilitate the transfer of technologies with medical ap-  
17      plications.

18              (6) Several breakthrough imaging technologies,  
19      including magnetic resonance imaging (“MRI”) and  
20      computed tomography (“CT”), have been developed  
21      primarily abroad, in large part because of the ab-  
22      sence of a home at the NIH for basic research in  
23      imaging and related fields. The establishment of a  
24      central focus for imaging and bioengineering re-

1 search at the NIH would promote both scientific ad-  
2 vance and United States economic development.

3 (7) At a time when a consensus exists to add  
4 significant resources to the NIH in coming years, it  
5 is appropriate to modernize the structure of the  
6 NIH to ensure that research dollars are expended  
7 more effectively and efficiently and that the fields of  
8 medical science that have contributed the most to  
9 the detection, diagnosis, and treatment of disease in  
10 recent years receive appropriate emphasis.

11 (8) The establishment of a National Institute of  
12 Biomedical Imaging and Bioengineering at the NIH  
13 would accelerate the development of new tech-  
14 nologies with clinical and research applications, im-  
15 prove coordination and efficiency at the NIH and  
16 throughout the Federal Government, reduce duplica-  
17 tion and waste, lay the foundation for a new medical  
18 information age, promote economic development, and  
19 provide a structure to train the young researchers  
20 who will make the pathbreaking discoveries of the  
21 next century.

1 **SEC. 3. ESTABLISHMENT OF NATIONAL INSTITUTE OF BIO-**  
2 **MEDICAL IMAGING AND BIOENGINEERING.**

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

6 “Subpart 18—National Institute of Biomedical Imaging  
7 and Bioengineering

8 “PURPOSE OF THE INSTITUTE

9 “SEC. 464z. (a) The general purpose of the National  
10 Institute of Biomedical Imaging and Bioengineering (in  
11 this section referred to as the ‘Institute’) is the conduct  
12 and support of research, training, the dissemination of  
13 health information, and other programs with respect to  
14 biomedical imaging, biomedical engineering, and associ-  
15 ated technologies and modalities with biomedical applica-  
16 tions (in this section referred to as ‘biomedical imaging  
17 and bioengineering’).

18 “(b)(1) The Director of the Institute, with the advice  
19 of the Institute’s advisory council, shall establish a Na-  
20 tional Biomedical Imaging and Bioengineering Program  
21 (in this section referred to as the ‘Program’).

22 “(2) Activities under the Program shall include the  
23 following with respect to biomedical imaging and bio-  
24 engineering:

25 “(A) Research into the development of new  
26 techniques and devices.

1           “(B) Related research in physics, engineering,  
2           mathematics, computer science, and other dis-  
3           ciplines.

4           “(C) Technology assessments and outcomes  
5           studies to evaluate the effectiveness of biologics, ma-  
6           terials, processes, devices, procedures, and  
7           informatics.

8           “(D) Research in screening for diseases and  
9           disorders.

10          “(E) The advancement of existing imaging and  
11          bioengineering modalities, including imaging, bio-  
12          materials, and informatics.

13          “(F) The development of target-specific agents  
14          to enhance images and to identify and delineate dis-  
15          ease.

16          “(G) The development of advanced engineering  
17          and imaging technologies and techniques for re-  
18          search from the molecular and genetic to the whole  
19          organ and body levels.

20          “(H) The development of new techniques and  
21          devices for more effective interventional procedures  
22          (such as image-guided interventions).

23          “(3)(A) With respect to the Program, the Director  
24          of the Institute shall prepare and transmit to the Sec-  
25          retary and the Director of NIH a plan to initiate, expand,

1 intensify, and coordinate activities of the Institute with re-  
2 spect to biomedical imaging and bioengineering. The plan  
3 shall include such comments and recommendations as the  
4 Director of the Institute determines appropriate. The Di-  
5 rector of the Institute shall periodically review and revise  
6 the plan and shall transmit any revisions of the plan to  
7 the Secretary and the Director of NIH.

8       “(B) The plan under subparagraph (A) shall include  
9 the recommendations of the Director of the Institute with  
10 respect to the following:

11           “(i) Where appropriate, the consolidation of  
12 programs of the National Institutes of Health for  
13 the express purpose of enhancing support of activi-  
14 ties regarding basic biomedical imaging and bio-  
15 engineering research.

16           “(ii) The coordination of the activities of the  
17 Institute with related activities of the other agencies  
18 of the National Institutes of Health and with related  
19 activities of other Federal agencies.

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

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

24           “(2) Of such members—

1           “(A) six members shall be scientists, engi-  
2           neers, physicians, and other health professionals  
3           who represent disciplines in biomedical imaging  
4           and bioengineering and who are not officers or  
5           employees of the United States; and

6           “(B) six members shall be scientists, engi-  
7           neers, physicians, and other health professionals  
8           who represent other disciplines and are knowl-  
9           edgeable about the applications of biomedical  
10          imaging and bioengineering in medicine, and  
11          who are not officers or employees of the United  
12          States.

13          “(3) In addition to the ex officio members spec-  
14          ified in section 406(b)(2), the ex officio members of  
15          the advisory council shall include the Director of the  
16          Centers for Disease Control and Prevention, the Di-  
17          rector of the National Science Foundation, and the  
18          Director of the National Institute of Standards and  
19          Technology (or the designees of such officers).

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

22                 “(A) For fiscal year 2001, there is authorized  
23                 to be appropriated an amount equal to the amount  
24                 obligated by the National Institutes of Health dur-  
25                 ing fiscal year 2000 for biomedical imaging and bio-

1        engineering, except that such amount shall be ad-  
2        justed to offset any inflation occurring after October  
3        1, 1999.

4            “(B) For each of the fiscal years 2002 and  
5        2003, there is authorized to be appropriated an  
6        amount equal to the amount appropriated under  
7        subparagraph (A) for fiscal year 2001, except that  
8        such amount shall be adjusted for the fiscal year in-  
9        volved to offset any inflation occurring after October  
10       1, 2000.

11        “(2) The authorization of appropriations for a fiscal  
12       year under paragraph (1) is hereby reduced by the amount  
13       of any appropriation made for such year for the conduct  
14       or support by any other national research institute of any  
15       program with respect to biomedical imaging and bio-  
16       engineering.”.

17        (b) USE OF EXISTING RESOURCES.—In providing for  
18       the establishment of the National Institute of Biomedical  
19       Imaging and Bioengineering pursuant to the amendment  
20       made by subsection (a), the Director of the National Insti-  
21       tutes of Health (referred to in this subsection as  
22       “NIH”)—

23            (1) may transfer to the National Institute of  
24        Biomedical Imaging and Bioengineering such per-

1       sonnel of NIH as the Director determines to be ap-  
2       propriate;

3               (2) may, for quarters for such Institute, utilize  
4       such facilities of NIH as the Director determines to  
5       be appropriate; and

6               (3) may obtain administrative support for the  
7       Institute from the other agencies of NIH, including  
8       the other national research institutes.

9       (c) CONSTRUCTION OF FACILITIES.—None of the  
10      provisions of this Act or the amendments made by the Act  
11      may be construed as authorizing the construction of facili-  
12      ties, or the acquisition of land, for purposes of the estab-  
13      lishment or operation of the National Institute of Bio-  
14      medical Imaging and Bioengineering.

15      (d) DATE CERTAIN FOR ESTABLISHMENT OF ADVI-  
16      SORY COUNCIL.—Not later than 90 days after the effec-  
17      tive date of this Act under section 4, the Secretary of  
18      Health and Human Services shall complete the establish-  
19      ment of an advisory council for the National Institute of  
20      Biomedical Imaging and Bioengineering in accordance  
21      with section 406 of the Public Health Service Act and in  
22      accordance with section 464z of such Act (as added by  
23      subsection (a) of this section).

24      (e) CONFORMING AMENDMENT.—Section 401(b)(1)  
25      of the Public Health Service Act (42 U.S.C. 281(b)(1))

1 is amended by adding at the end the following subpara-  
2 graph:

3           “(R) The National Institute of Biomedical Im-  
4           aging and Bioengineering.”.

5 **SEC. 4. EFFECTIVE DATE.**

6           This Act takes effect October 1, 2000, or upon the  
7 date of the enactment of this Act, whichever occurs later.

          Passed the House of Representatives September 27,  
2000.

Attest:

*Clerk.*